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        Os12g03290_1                     ------------------------------------------------------------------------------------------------------------------------
        'At3g54320 '                     ------------------------------------------------------------------------------------------------------------------------
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        Os2g40070                        MA-----------------------------SANNWLGFSLSGQENPQPHQD--SSPPAAIDVSGAGDFYGLPTSQPTAADAHLGVAGHHHNASYGIMEAFNRGAQEAQDWNMRGLDYN
        Os6g44750                        MD------------------------MDMSSAYPHHWLSFSLS-------------------------------------------------------NNYHHGLLEALSTTSAPPLG-
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        Os3g56050                        MA--------------SGNSSSSSGSMAATAGGVGGWLGFSLSPHMATYCAGGVDDVGHHHHHHVHQHQQQHGG----GLFYNPAAVASSFYYGGGHDAVVTSAAGGGSYYGAGFSSMPL
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        'ZMtuc03_08_11.12253_Zea '       ------------------------------------------------------------------------------------------------------------------------
        'ZMtuc02_12_23.7359_Zea '        ------------------------------------------------------------------------------------------------------------------------
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        'Barley1_18652_Hordeum '         ------------------------------------------------------------------------------------------------------------------------
        'gi|18476518_Hordeum '           ------------------------------------------------------------------------------------------------------------------------
        'TAtuc03_04_26.7877_Triticum '   ------------------------------------------------------------------------------------------------------------------------
        'atr01_4ms1_d10_Amborella '      ------------------------------------------------------------------------------------------------------------------------
        'gi|46395278_Pinus_PtAP2L2 '     ------------------------------------------------------------------------------------------------------------------------
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        'LEtuc02_10_21.9228_Lycopersico ------------------------------------------------------------------------------------------------------------------------
        'gi|5081555_Petunia '            ------------------------------------------------------------------------------------------------------------------------
        'LEtuc02_10_21.11399_Lycopersic ------------------------------------------------------------------------------------------------------------------------
        'gi|28894444_Antirrhinum_LIPLES ------------------------------------------------------------------------------------------------------------------------
        'gi|28894442_Antirrhinum_LIPLES ------------------------------------------------------------------------------------------------------------------------
        'gi|21717332_Malus '             ------------------------------------------------------------------------------------------------------------------------
        'gi|13173164_Pisum '             ------------------------------------------------------------------------------------------------------------------------
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        'At4g36920_APETALA2 '            ------------------------------------------------------------------------------------------------------------------------
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'GMtuc03_04_25.876_Glycine '      ------------------------------------------------------------------------------------------------------------
'At2g39250 '                      ------------------------------------------------------------------------------------------------------------
'At3g54990 '                      ------------------------------------------------------------------------------------------------------------
'At5g60120 '                      ------------------------------------------------------------------------------------------------------------
'At2g28550 '                      ------------------------------------------------------------------------------------------------------------
'gi|5360996_Hyacinthus '          ------------------------------------------------------------------------------------------------------------
'pam01_2ms1_c06_Persea '          ------------------------------------------------------------------------------------------------------------
'gi|5081557_Petunia '             ------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.28779_Glycine '    ------------------------------------------------------------------------------------------------------------
'GMtuc02_10_21.14413_Glycine '    ------------------------------------------------------------------------------------------------------------
'MTtuc03_04_26.7790_Medicago '    ------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '     ------------------------------------------------------------------------------------------------------------
'STtuc021023.12365_Solanum '      ------------------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '         ------------------------------------------------------------------------------------------------------------
'Barley1_08369_Hordeum '          ------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '     ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '    ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '    ------------------------------------------------------------------------------------------------------------
'SBtuc02_10_21.6764_Sorghum '     ------------------------------------------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '     ------------------------------------------------------------------------------------------------------------
'RAV2_gi30697755_At1g68840 '      ------------------------------------------------------------------------------------------------------------
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'At2g41710 '                      ------------------------------------------------------------------------------------------------------------
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Os8g34360                         ------------------------------------------------------------------------------------------------------------
Os12g03290                        ------------------------------------------------------------------------------------------------------------
Os12g03290_1                      ------------------------------------------------------------------------------------------------------------
'At3g54320 '                      ------------------------------------------------------------------------------------------------------------
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Os6g44750                        -------------------EEGPAEGAPKMEDFLGGL---------GGGGGAVAAAPAAAPE-----------------------------------DQLSCGELGSIAAG---------
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Os7g03250                        KSDGSLCIMEALRRTDQDHHG------PKLEDFLG---------------------AAQPAMALSLDNTSSFYYGGGGAAAAGHGQHGYLQACDLYGG-------------PAAPSLVTA
Os3g12950                        KSDGSLCIMEGMMP----------SSSPKLEDFLG---------------------CGNGSG----------------HDPATYYSQGQE------------------AEDASRAAYQHH
Os3g07940                        HSDGSVHYDAPDWRHAEAK-------DPKLEDFMS---------------------VSYSNKSSSNLYGSSSSSSCGHADQIKYHHVHDVQAFSTPYFYGHGGSGVGIDINMNAPPAGCT
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'atr01_4ms1_d10_Amborella '      ------------------------------------------------------------------------------------------------------------
'gi|46395278_Pinus_PtAP2L2 '     ------------------------------------------------------------------MTVN---------------TSAASEIN-----------THSKGEQDTCITH
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'gi|5081555_Petunia '            ----------------------------MWDLNDSPD------------------------QRREINIDESEEG----------CSSHIELEPDDEKGKRV---GSFSTSSSSAIAI-DE
'LEtuc02_10_21.11399_Lycopersic ' ---------VTCNQISKNTLILILSTKEMWNLNDSPD-----------------------------------------------QTMEYESDEGITVRS---ESNSISSALLVVE-DG
'gi|28894444_Antirrhinum_LIPLES ' ----------------------------MWDLNDSPD-----------------------------------------------QIRTFDDLSSEG---RRVDYSSSSAVVI-ED
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'gi|21717332_Malus '             ----------------------------MWDLNDSPD-----------------------------------QRPRGEESEGCSSQKTSADGDEEKRKRV---GSVSNSSSSAVVIEED
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'GMtuc03_04_25.877_Glycine '     ------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '     ------------------------------------------------------------------------------------------------------------
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'At3g54990 '                     ----------------------------MLDLNLKIF-----------------------------------SSYNE-----------DQDRKVPLMISTTGEEESNSSSSSTTDSAA-
'At5g60120 '                     ----------------------------MLDLNLDVD-----------------------------------STESTQ---------NERDSITVKGVSLNQMDESVTSNSSVVNAEAS
'At2g28550 '                     ----------------------------YLDRQTSDN-----------------------------------SAGNR----------VEESGTSTSSVINADGDEDSCSTRAFT-----
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'GMtuc03_04_25.28779_Glycine '   ------------------------------------------------------------------------------------------------------------
'GMtuc02_10_21.14413_Glycine '   ------------------------------------------------------------------------------------------------------------
'MTtuc03_04_26.7790_Medicago '   ------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '    ------------------------------------------------------------------------------------------------------------
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'Barley1_08369_Hordeum '         ------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '    ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '   ------------------------------------------------------------------------------------------------------------
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'SBtuc02_10_21.6764_Sorghum '    ------------------------------------------------------------------------------------------------------------
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'wmi01_10ms3_e03_Welwitschia '   ---------------------------------------------------GTFMARG--------RRK-------------------------------------------
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Os12g03290                       ---------------------MAKRSSPDPASSSPSASSSPSSPSSSSSEDSSSPMSMPCKRRARPRTEKSTGKAK----------------------------RPKK-----ESKEVAD
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'TAtuc03_04_26.3851_Triticum '   ----------------------------------------------------------------------------------------------------------------
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'A5_gi42562576_RAP2.1_At1g46768 ' QPPQ-------EEVPNHVATR---KPYRGIRRR-KWGKWVAEIREPN--------K-RSRLWLGSYTTDIAAARAYDVAVFYLRGPS--ARLNFP-------------------------
'B2_gi30695605_RAP2.12_At1g5391 ' --------GDAEKSANRKRK----NQYRGIRQR-PWGKWAAEIRDPR--------E-GARIWLGTFKTAEEAARAYDAAARRIRGSK--AKVNFP-------------------------
'gi|18351137_Physcomitrella '     -------------------------RYRGVRQR-PWGKWAAEIRDPQ--------K-AARVWLGTFDTAEQAAMAYDTAAIRFRGLR--AKLNFP-------------------------
'B4_gi42562554_RAP2.6_At1g43160 ' ---------ECESSMSLERP----KKYRGVRQR-PWGKWAAEIRDPH--------K-ATRVWLGTFETAEAAARAYDAAALRFRGSK--AKLNFP-------------------------
'A1_gi18416558_DREB1A_At4g25480 ' ---PAGRKKFRETRH---------PIYRGVRRR-NSGKWVCEVREPN--------K-KTRIWLGTFQTAEMAARAHDVAALALRGRS--ACLNFA-------------------------
'B1_gi2281634_RAP2.5 '            --TNQTHNNAKE------------IRYRGVRKR-PWGRYAAEIRDPG--------K-KTRVWLGTFDTAEEAARAYDTAARDFRGAK--AKTNFP-------------------------
'A3_gi18405311_ABI4_At2g40220 '   GKGGPDNSK---------------FRYRGVRQR-SWGKWVAEIREPR--------K-RTRKWLGTFATAEDAARAYDRAAVYLYGSR--AQLNLT-------------------------
'A6_gi2281632_RAP2.4 '            SGVPSKPT----------------KLYRGVRQR-HWGKWVAEIRLPR--------N-RTRLWLGTFDTAEEAALAYDKAAYKLRGDF--ARLNFP-------------------------
'B1_gi42562651_AtERF3_At1g50640 ' TVVAAINGSVKE------------IRFRGVRKR-PWGRFAAEIRDPW--------K-KARVWLGTFDSAEEAARAYDSAARNLRGPK--AKTNFP-------------------------
'B5_gi42566428_AF080120 '         VTVPVVVTTAT-------------RKFRGVRQR-PWGKWAAEIRDPS--------R-RVRVWLGTFDTAEEAAIVYDNAAIQLRGPN--AELNFP-------------------------

[                                 481       491       501       511       521       531       541       551       561       571       581       591       ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
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Os6g05340                         KSNGFSRGVSKYRGVARHHHNGRWEARIGRVFGNKYLYLGTYSTQEEAARAYDIAAIEYRGINAVTNFDLSTYIRWLKPPSSSSAAGTPHHHGG------------GMVVGADRVLAPAQ
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'ltu01_5ms4_a11_Liriodendron '    ------------------------------------------------------------------------------------------------------------
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'gi46395274__Pinus_PtANTL1 '      KSSGFSRGASVYRGVTRHHQHGRWQARIGRVAGNKDLYLGTFSTQEEAAEAYDIAAIKFRGISAVTNFDISKYDVQRICSSSTLIAGDLAKRNKEIEQSSEPSGDSPLQIEAAAPLQIEA
'gi|18356869_Physcomitrella '     KSSGFSRGASMYRGVTRHHQHGRWQARIGRVAGNKDLYLGTYSTQEEAAEAYDIAAIKYRGINAVTNFHISRY-------------------------------------------
'gi|21069051_Brassica '           KSSGFSRGASIYRGVTRHHQHGRWQARIGRVAGNKDLYLGTFGTQEEAAEAYDIAAIKFRGLTAVTNFDMNRYNVKAILESPSLPIGSAAKRLKEANRPVPSMMMISNNVSESENSASGW
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'ZMtuc02_12_23.7359_Zea '         ---------------------------------------------CLLQFGRAYDRAALRFNGREAVTNFEPSSYNAGDNNLRDTETEAIDDGDAIDLDLRISQPNVQDPKR----------
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'Barley1_18652_Hordeum '         QSTGFARGSSKYRGVT-LHKCGRWEARMGQLLGKKYIYLGLFDSEVEAARAYDRAAIRFNGRDAVTNFDSSSY--NGDATPDVENEAIVDADALDLDLRMSQPTAHDPKR----------
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'atr01_4ms1_d10_Amborella '      QSTGFSRGSSKYRGVT-LHKCGRWEARMGQYLGKKYIYLGLFDTEVEAARAYDKAAIRYNGREAITNFELSLYEGEIIGDG-------------------------------------
'gi|46395278_Pinus_PtAP2L2 '     QSNGFSRGSSKYRGVT-LHKCGRWEARMGQFLGKKYIYLGLFDYEIEAARAYDQAAIRCNGREAVTNFDPSVYQNDLLTEGI-D-QNLDLSLGISAPTLPDTTVSRDNKIGGSKVKTSTN
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'gi|5081555_Petunia '            QSTGFPRGSSKYRGVT-LHKCGRWEARMGQFLGKKYVYLGLFDTEVEAARAYDKAAIKCNGKDAVTNFDPSIYENELNSTE--S-TDSGADHNLDLSLGGSSSKKNN--------REFGD
'LEtuc02_10_21.11399_Lycopersic ' QSTGFPRGSSKYRGVT-LHKCGRWEARMGQFLGKKYVYLGLFDTEVEAARAYDKAAIKCNGKDAVTNFDRSIYENELNSTE--C-TDNATDHNLDLSLGGSS-------------QEMGD
'gi|28894444_Antirrhinum_LIPLES ' QSTGFPRGSSKYRGVT-LHKCGRWEARMGQFLGKKYVYLGLFDTENEAARAYDKAAIKCNGKEAVTNFDPSIYEDEFKTAE--S-SKSEGDHNLDLSLGNSSASKSS--------GRER-
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'gi|21717332_Malus '             QSTGFPRGSSKYRGVT-LHKCGRWEARMGQFLGKTYVYLGLFDTEVDAARAYDKAAIKCNGKEAVTNFDPSIYDNELNSSES-S-GVIAADHNLDLSLGSTNSKKNNQALGNDHHSQNVA
'gi|13173164_Pisum '             QSTGFPRGSSKYRGVT-LHKCGRWEARMGQFLGKKYVYLGLFDTEVEAARAYDKAAIKCNGKEAVTNFEPSIYDSELNTAE--P-ASSGSDHNLDLSLGNSSSKHMNN---TQSFGNNTS
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Os6g43220                        QGAGFVRGSSRFRGVT-LHKCGKWEARIGQLMGKKYVYLGLYDTEMEAAKAYDKAAIKCCGKEAVTNFDTQAYEDELNLQSWDS------ELDLELSLGC--------------------
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'gi|11181612_Picea '             QSTGFSRGSSKYRGVT-LHKCGRWEARMGQFLGKKYIYLGLFDSEEDAARAYDKAAIRCNGKDAVTNFDPSSYENEILEEGRESQTSTGFDQNLDLSLGIGHVTTQLKISPSYKSRVEED
'gi|46395276_Pinus_PtAP2L1 '     QSTGFPRGSSKFRGVT-LHKCGRWEARMGQFLGKKYVYLGLFDNEVEAARAYDKAAIRCNGREAVTNFSPELYESELALTEE-----KGRDPDLDLSLGNSTPKEGSLVS----------
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'GMtuc03_04_25.877_Glycine '     QINGSSR-SSTYKGAL-ALRKDAQGEPR--------------KAPFIGKTFYPNSSIKCDDGKVDASFKPCSYKGEIIANSSMAGTSHNLDLSLGISPSSKRLKNDYSGGYS--------
'GMtuc03_04_25.876_Glycine '     QINGISRRSSTYRGAL-ALRKDAQGEPR--------------MGPFVGMTCYPKPSINCDDGKAEASFKPCSYKGEIIVNSNMTGTCHNLDLSLGISPSS--------------------
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'At3g54990 '                     ESASFGRGSSKYKGLA-LQKC-------------------------------------TQFKTHDQIHLFQNRYHFVRHVIF-----------------------------------------
'At5g60120 '                     QSSGFSRNNSRYQGVA-LQKIGGWGA-Q--------------MEQLHGNMGCDKAAVQWKGREAASLIEPHASRMIPELMLSSTSTWESLFH----------------------------
'At2g28550 '                     QSTGFSRGSSKYRGVT-LHKCGRWEA-R--------------MGQFLGKKAYDKAAINTNGREAVTNFEMSSYQNEINSESNNSEIDLNLGISLSTGNAPKQNGRLFHFPSN--------
'gi|5360996_Hyacinthus '         QSTGFSRGSSKYRGVT-LHKCGHWEARMGQFLG---------------KKAYDKAAIKSSGREAVTNFEPSSYEREVLTEADSDAIGHDIDLNLRISQPNVSSPKRRDN-----------
'pam01_2ms1_c06_Persea '         QSTGFSRGSSKYRGVT-LHKCGRWEARMGQLLGKKYIYLGLFDSEIEAARAYDKAALQCNGREAVTNFEPSTYEGEIISEADTSGTASNLDLNLGISPPSVPAGDEYDNSVDYN------
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'GMtuc03_04_25.28779_Glycine '   HSTGFSRGSSKYRGVT-LHKCGRWEARMGQFLGKK---------------AYDKAAIKCNRREAVTNFEPSIYESEMKPEAINEGGSHDLDLNLGIATPGH--GPKENRGHLQF------
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'MTtuc03_04_26.7790_Medicago '   -----------------------CLEFITLKLSKLIKSLTQYVSLFPEIKAYDKAALKCNGREAVTNFEPSTYENEMKPGAINEGGSHNLDLNLGMATPGH--EPKENKGYCQF------
'STtuc02_10_23.1438_Solanum '    ----------------------------------------------LQIRAYDKAAIKTSGREAVTNFEPSTYEGETMSLPQSEGSQHDLDLNLRISTT----SSKENDRLGGS------
'STtuc021023.12365_Solanum '     -------------------------------------STNRYLPFYFMQIRAYDKAAIKCNGREAVTNFEPSTYEGETNSNPQSEGSQQDLDLNLGIATS----SPKEIERSSSF------
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'Barley1_08369_Hordeum '         ------------------------------------------------------YDKAAIKCNGREAVTNFEPSTYDAELLNEAAAEGADVDLNLSISQPTSQS---PKRDKSTLGL------
'HVtuc02_11_10.2029_Hordeum '    ------------------------------------------------------ARGNGREAVTNFEPSTYDAELLNEAAAEGADVDLNLSISQPTSQS---PKRDKSTLGL------
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'SPtuc02_10_22.3366_Solanum '    ------------------------------------------------------------------TNFEPSTYDGELLTEVSTEVAEVDLNLSISQPASQS---PKRDKSC?GL------
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'gi|18348070_Physcomitrella '    ------------------------------------------------------------------------------------------------------DSPP-------
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[                                601       611       621       631       641       651       661       671       681       691       701       711       ]
[                                |         |         |         |         |         |         |         |         |         |         |         |         ]
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'At3g54320 '                     ------------------------------------------------------------------------------------------------------------------------
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'gi|2098818_Zea_mays '           ------------------------------------------------------------------------------------------------------------------------
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'GMtuc03_04_25.877_Glycine '     ----------------FG----------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '     ------------------------------------------------------------------------------------------------------------------------
'At2g39250 '                     ------------------------------------------------------------------------------------------------------------------------
'At3g54990 '                     ------------------------------------------------------------------------------------------------------------------------
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'gi|5081557_Petunia '             ----------------------------------------------------------------------SEFQCASIGLPEYRGAMNSPCTTMGSKMPHG----RHLLWNGVNTSVFP
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'GMtuc02_10_21.14413_Glycine '    ------------------------------------------------------QSIP--YNMHPGRSSMMETNINSVIGDPSLKRLV-VTEERPSVWNAAYSTFFPN------------
'MTtuc03_04_26.7790_Medicago '    ------------------------------------------------------QTVPS-YNMHPGRNLKMETNVNSVIGDPSLKKLV-VTEQRPPMWNATFSSFFPNQ------------
'STtuc02_10_23.1438_Solanum '     ------------------------------------------------------RYHP--YDMQDATKPKMDKPGSVIVGSSHLKGLP-MMSQQAQLWTGIYSNFSSSF------------
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'Barley1_08369_Hordeum '          ------------------------------------------------------QLHHGSYEGSELKRPKVDAPPEMVAIPHRYPVLT----EHPPIWHGQSYPLFLNNE----------
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'A5_gi42562576_RAP2.1_At1g46768 ' AEVG-------------------ARVDALLAS-----------------------------------------------------------------AAPSMAHS----------------
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'A6_gi2281632_RAP2.4 '            TQKQDKS------TKSSKKREKKVSSPDLSEKV-----------------------------------------------------------KAEENSVSIGGSP----------------
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[                                 721       731       741       751       761       771       781       791       801       811       821       831       ]
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'GMtuc03_04_25.876_Glycine '    ----------------------------------------------------------------------------------------------------------------------
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'At3g54990 '                    ----------------------------------------------------------------------------------------------------------------------
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'MTtuc03_04_26.7790_Medicago '  QERAERIGIDPS------KGHPN--WGWQGHNQGTVS-PVPQF-----SSAASSGFSISATFPPNAIFQTQPINSIPQSLCFT-----PGSNASSQYYYQVKSSQAPP------------
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'A6_gi2281632_RAP2.4 '            -----PVTEFEESTAGSSP---------LSDLTFADPEEP-----PQWNET--FSLEKYPSYEIDWDSILA-----------------------------------------------
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'nad03_15ms1_h07_Nuphar '         ----------------------------------------------
'gi|38492172_Nicotiana '          ----------------------------------------------
'ltu01_5ms4_a11_Liriodendron '    ----------------------------------------------
'At4g37750_AINTEGUMENTA '         ----------------------------------------------
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'gi|21069051_Brassica '           ----------------------------------------------
'gi|21069053_Brassica '           ----------------------------------------------
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Os7g03250                         ----------------------------------------------
Os3g12950                         ----------------------------------------------
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'At5g57390 '                      ----------------------------------------------
'At5g17430 '                      ----------------------------------------------
'At1g51190 '                      ----------------------------------------------
'At3g20840 '                      ----------------------------------------------
'At5g10510 '                      ----------------------------------------------
'At5g65510 '                      ----------------------------------------------
'ltu01_16ms3_h06_Liriodendron '   ----------------------------------------------
'ZMtuc03_08_11.12253_Zea '        ----------------------------------------------
'ZMtuc02_12_23.7359_Zea '         ----------------------------------------------
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'gi|18476518_Hordeum '            ----------------------------------------------
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'gi|28894444_Antirrhinum_LIPLES ' ----------------------------------------------
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Os7g39110                         ----------------------------------------------
Os6g43220                         ----------------------------------------------
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        'gi|11181610_Picea_abies '        HSLNLSLG----------------------------------------
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        'GMtuc03_04_25.876_Glycine '      ------------------------------------------------
        'At2g39250 '                      ------------------------------------------------
        'At3g54990 '                      ------------------------------------------------
        'At5g60120 '                      ------------------------------------------------
        'At2g28550 '                      ------------------------------------------------
        'gi|5360996_Hyacinthus '          ------------------------------------------------
        'pam01_2ms1_c06_Persea '          ------------------------------------------------
        'gi|5081557_Petunia '             ------------------------------------------------
        'GMtuc03_04_25.28779_Glycine '    PPHKF-----------------------------------------
        'GMtuc02_10_21.14413_Glycine '    ------------------------------------------------
        'MTtuc03_04_26.7790_Medicago '    ------------------------------------------------
        'STtuc02_10_23.1438_Solanum '     ------------------------------------------------
        'STtuc021023.12365_Solanum '      ------------------------------------------------
        'nad03_31ms3_d04_Nuphar '         ------------------------------------------------
        'Barley1_08369_Hordeum '          ------------------------------------------------
        'HVtuc02_11_10.2029_Hordeum '     ------------------------------------------------
        'TAtuc03_04_26.3851_Triticum '    ------------------------------------------------
        'TAtuc03_04_26.3852_Triticum '    ------------------------------------------------
        'SBtuc02_10_21.6764_Sorghum '     ------------------------------------------------
        'SPtuc02_10_22.3366_Solanum '     ------------------------------------------------
        'RAV2_gi30697755_At1g68840 '      ------------------------------------------------
        'RAV1_gi42562037_At1g13260 '      ------------------------------------------------
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        'A4_gi7212005AC023628 '           ------------------------------------------------
        'gi|19789524_Physcomitrella '     ------------------------------------------------
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        'A2_gi30680919_DREB2A_At5g05410 ' ------------------------------------------------
        'A5_gi42562576_RAP2.1_At1g46768 ' ------------------------------------------------
        'B2_gi30695605_RAP2.12_At1g5391 ' ------------------------------------------------
        'gi|18351137_Physcomitrella '     ------------------------------------------------
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        'A1_gi18416558_DREB1A_At4g25480 ' ------------------------------------------------
        'B1_gi2281634_RAP2.5 '            ------------------------------------------------
        'A3_gi18405311_ABI4_At2g40220 '   ------------------------------------------------
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        Os12g03290                        ------------------------------------------------------------------------------------------------------------------------
        Os12g03290_1                      ------------------------------------------------------------------------------------------------------------------------
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        Os1g59780                         ------------------------------------------------------------------------------------------------------------------------
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        Os2g40070                         ATGGCT-----------------------------------------------------------------------------------------------TCTGCAAACAACTGGCTGGGCTTC
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        Os7g03250                         ATGACG-----------------------------------------------AACAGCAACAATGGCAATGGCGGCACGAACGCGGCGGCGAGT---------GGATGGCTGGGCTTC
        Os3g12950                         ATGTCG-------------------------------------------------------------------------------------------------------------TCTCCT
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        'At1g72570 '                      ATGAAG-------------------------------------------------------------------------------------------------AAATGGTTGGGATTT
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        'At5g17430 '                      ATGAAC-----------------------------------------------------------------------------------------------TCGATGAATAACTGGTTAGGCTTC
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        'ZMtuc02_12_23.7359_Zea '         ------------------------------------------------------------------------------------------------------------------------
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        'gi|18476518_Hordeum '            ------------------------------------------------------------------------------------------------------------------------
        'TAtuc03_04_26.7877_Triticum '    ------------------------------------------------------------------------------------------------------------------------
        'atr01_4ms1_d10_Amborella '       ------------------------------------------------------------------------------------------------------------------------
        'gi|46395278_Pinus_PtAP2L2 '      ------------------------------------------------------------------------------------------------------------------------
        Os4g55560                         ------------------------------------------------------------------------------------------------------------------------
        'LEtuc02_10_21.9228_Lycopersico ' ------------------------------------------------------------------------------------------------------------------------
        'gi|5081555_Petunia '             ------------------------------------------------------------------------------------------------------------------------
        'LEtuc02_10_21.11399_Lycopersic ' ------------------------------------------------------------------------------------------------------------------------
        'gi|28894444_Antirrhinum_LIPLES ' ------------------------------------------------------------------------------------------------------------------------
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        'gi|21717332_Malus '              ------------------------------------------------------------------------------------------------------------------------
        'gi|13173164_Pisum '              ------------------------------------------------------------------------------------------------------------------------
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'gi|46395276_Pinus_PtAP2L1 '      ------------------------------------------------------------------------------------------------------------
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'GMtuc03_04_25.876_Glycine '      ------------------------------------------------------------------------------------------------------------
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'At3g54990 '                      ------------------------------------------------------------------------------------------------------------
'At5g60120 '                      ------------------------------------------------------------------------------------------------------------
'At2g28550 '                      ------------------------------------------------------------------------------------------------------------
'gi|5360996_Hyacinthus '          ------------------------------------------------------------------------------------------------------------
'pam01_2ms1_c06_Persea '          ------------------------------------------------------------------------------------------------------------
'gi|5081557_Petunia '             ------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.28779_Glycine '    ------------------------------------------------------------------------------------------------------------
'GMtuc02_10_21.14413_Glycine '    ------------------------------------------------------------------------------------------------------------
'MTtuc03_04_26.7790_Medicago '    ------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '     ------------------------------------------------------------------------------------------------------------
'STtuc021023.12365_Solanum '      ------------------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '         ------------------------------------------------------------------------------------------------------------
'Barley1_08369_Hordeum '          ------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '     ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '    ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '    ------------------------------------------------------------------------------------------------------------
'SBtuc02_10_21.6764_Sorghum '     ------------------------------------------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '     ------------------------------------------------------------------------------------------------------------
'RAV2_gi30697755_At1g68840 '      ------------------------------------------------------------------------------------------------------------
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Os8g34360                         ------------------------------------------------------------------------------------------------------------
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Os12g03290_1                      ------------------------------------------------------------------------------------------------------------
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Os3g56050                        TCGCTGTCGCCGCACATGGCGACGTACTGCGCCGGCGGCGTCGACGATGTCGGCCACCACCACCACCACCACGTGCACCAGCATCAGCAGCAGCATGGAGGT------------GGGCTG
Os7g03250                        TCGCTGTCGCCTCACATGGCCTCCTCCACCATGGACGAACACCACCACGTGCACCACCACCAACAGCAACAGCAGCAGCAGCAGCAGCAGCAGCATCACCAGCAGCAGCAACATGGTTTG
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'At5g17430 '                     TCTCTCTCTCCTCATGATCAAAAT------------------------------------------------------------------CATCACCGTACGGATGTTGACTCCTCCACCACC
'At1g51190 '                     CCTCTATCA---------------------------------------------------------------------------------------CCAACTCACTCTTCTTTG
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'A6_gi2281632_RAP2.4 '            ------------------------------------------------------------------------------------------------------------
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Os12g03290                        ------------------------------------------------------------------------------------------------------------
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Os3g56050                         TTCTACAACCCTGCCGCCGTCGCCTCCTCCTCTACTACGGCGGCGGGCATGACGCCGTCGTCACCTCCGCGGCCGGCGGCGGATCGTACTATGGCGCCGGGTTCTCCTCCATGCCGCTC
Os7g03250                         TTCTTCCCTTCGGTGACCACCGCCGCCGCCGCCGCCGCGTATGGGCTCGCCGGCGACGTCGTGGCCGCCACCAATGGG---------TACTAC---TCCCAGCTCGCCTCCATGCCGCTC
Os3g12950                         TCACCTGGCTACTACTACGTCGGCGGCGCCTACGGAGACGGGACCAGCACCGCCGGCGTC---------------------------TACTAC---TCGCACCTCCCTGTCATGCCTATC
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'At1g51190 '                      CCGCCTCACATTCACTCTTCACAAAATTCTCATTTCAATCTAGGTTTGGTCAACGACAATATCGACAACCCTTTTCAAAACCAAGGATGGAATATGATCAATCCACATGGTGGAGGCGGC
'At3g20840 '                      ------------------------------------------------------------------------------------------ATGATCAATCCACACGGTGGAGGAGGA
'At5g10510 '                      ACAATCTTAACAACATTCGTAGACCCACAATCTCATCATTCTCAGAATCACATC----------------------------------------------------------
'At5g65510 '                      ACAACCTTATCTACTTTTTTCGAT------------CATTCTCAGACTCAGATT----------------------------------------------------------
'ltu01_16ms3_h06_Liriodendron '   ------------------------------------------------------------------------------------------------------------
'ZMtuc03_08_11.12253_Zea '        ------------------------------------------------------------------------------------------------------------
'ZMtuc02_12_23.7359_Zea '         ------------------------------------------------------------------------------------------------------------
Os7g13170                         ------------------------------------------------------------------------------------------------------------
'Barley1_18652_Hordeum '          ------------------------------------------------------------------------------------------------------------
'gi|18476518_Hordeum '            ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.7877_Triticum '    ------------------------------------------------------------------------------------------------------------
'atr01_4ms1_d10_Amborella '       ------------------------------------------------------------------------------------------------------------
'gi|46395278_Pinus_PtAP2L2 '      ------------------------------------------------------------------------------------------------------------
Os4g55560                         ------------------------------------------------------------------------------------------ATGGAGTCGTTCTCTTTCCACGTCTTTCCCCAC
'LEtuc02_10_21.9228_Lycopersico ' ------------------------------------------------------------------------------------------------------------
'gi|5081555_Petunia '             ------------------------------------------------------------------------------------------------------------
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'LEtuc02_10_21.11399_Lycopersic '  ------------------------------------------------------------------------------------------------------------
'gi|28894444_Antirrhinum_LIPLES '  ------------------------------------------------------------------------------------------------------------
'gi|28894442_Antirrhinum_LIPLES '  ------------------------------------------------------------------------------------------------------------
'gi|21717332_Malus '               ------------------------------------------------------------------------------------------------------------
'gi|13173164_Pisum '               ------------------------------------------------------------------------------------------------------------
'At5g67180 '                       ------------------------------------------------------------------------------------------------------------
'At4g36920_APETALA2 '              ------------------------------------------------------------------------------------------------------------
Os7g39110                          ------------------------------------------------------------------------------------------------------------
Os6g43220                          ------------------------------------------------------------------------------------------------------------
'gi|2098818_Zea_mays '             ------------------------------------------------------------------------------------------------------------
'gi|11181612_Picea '               ------------------------------------------------------------------------------------------------------------
'gi|46395276_Pinus_PtAP2L1 '       ------------------------------------------------------------------------------------------------------------
'gi|11181610_Picea_abies '         ------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.877_Glycine '       ------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '       ------------------------------------------------------------------------------------------------------------
'At2g39250 '                       ------------------------------------------------------------------------------------------------------------
'At3g54990 '                       ------------------------------------------------------------------------------------------------------------
'At5g60120 '                       ------------------------------------------------------------------------------------------------------------
'At2g28550 '                       ------------------------------------------------------------------------------------------------------------
'gi|5360996_Hyacinthus '           ------------------------------------------------------------------------------------------------------------
'pam01_2ms1_c06_Persea '           ------------------------------------------------------------------------------------------------------------
'gi|5081557_Petunia '              ------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.28779_Glycine '     ------------------------------------------------------------------------------------------------------------
'GMtuc02_10_21.14413_Glycine '     ------------------------------------------------------------------------------------------------------------
'MTtuc03_04_26.7790_Medicago '     ------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '      ------------------------------------------------------------------------------------------------------------
'STtuc021023.12365_Solanum '       ------------------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '          ------------------------------------------------------------------------------------------------------------
'Barley1_08369_Hordeum '           ------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '      ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '     ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '     ------------------------------------------------------------------------------------------------------------
'SBtuc02_10_21.6764_Sorghum '      ------------------------------------------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '      ------------------------------------------------------------------------------------------------------------
'RAV2_gi30697755_At1g68840 '       ------------------------------------------------------------------------------------------------------------
'RAV1_gi42562037_At1g13260 '       ------------------------------------------------------------------------------------------------------------
'A4_gi30690008_TINY_At5g25810 '    ------------------------------------------------------------------------------------------------------------
'A4_gi7212005AC023628 '            ------------------------------------------------------------------------------------------------------------
'gi|19789524_Physcomitrella '      ------------------------------------------------------------------------------------------------------------
'gi|18348070_Physcomitrella '      ------------------------------------------------------------------------------------------------------------
'A2_gi30680919_DREB2A_At5g05410 '  ------------------------------------------------------------------------------------------------------------
'A5_gi42562576_RAP2.1_At1g46768 '  ------------------------------------------------------------------------------------------------------------
'B2_gi30695605_RAP2.12_At1g5391 '  ------------------------------------------------------------------------------------------------------------
'gi|18351137_Physcomitrella '      ------------------------------------------------------------------------------------------------------------
'B4_gi42562554_RAP2.6_At1g43160 '  ------------------------------------------------------------------------------------------------------------
'A1_gi18416558_DREB1A_At4g25480 '  ------------------------------------------------------------------------------------------------------------
'B1_gi2281634_RAP2.5 '             ------------------------------------------------------------------------------------------------------------
'A3_gi18405311_ABI4_At2g40220 '    ------------------------------------------------------------------------------------------------------------
'A6_gi2281632_RAP2.4 '             ------------------------------------------------------------------------------------------------------------
'B1_gi42562651_AtERF3_At1g50640 '  ------------------------------------------------------------------------------------------------------------
'B5_gi42566428_AF080120 '          ------------------------------------------------------------------------------------------------------------

[                                  361       371       381       391       401       411       421       431       441       451       461       471       ]
[                                  |         |         |         |         |         |         |         |         |         |         |         |         ]
'At1g16060 '                       ------------------------------------------------------------------------------------------------------------
Os9g25600                          ------------------------------------------------------------------------------------------------------------
Os6g05340                          ------------------------------------------------------------------------------------------------------------
'wmi01_10ms3_e03_Welwitschia '     ------------------------------------------------------------------------------------------------------------
'nad03_15ms1_h07_Nuphar '          ------------------------------------------------------------------------------------------------------------
'gi|38492172_Nicotiana '           AAATCTGATGGCTCTCTTTGCATTATGGAAGCTCTCTCAAGATCTCATGCAGATGCTATGGTGCAAAGT---TCTTCTTCACCTAAGCTTGAGGACTTTTTAGGT---------------
'ltu01_5ms4_a11_Liriodendron '     ------------------------------------------------------------------------------------------------------------
'At4g37750_AINTEGUMENTA '          AGATCTGATGGTTCTCTTTGCTTAATGGAAGCTCTCAACAGATCTTCTCACTCGAATCACCATCAA------GATTCATCTCCAAAGGTGGAGGATTTCTTTGGG---------------
'gi46395274__Pinus_PtANTL1 '       CAGGTTCAGCTTGACCCAAATTCTAATGATACTATGTTTGCG-------------------------------------------------------------------
'gi|18356869_Physcomitrella '      ------------------------------------------------------------------------------------------------------------
'gi|21069051_Brassica '            AGAGACAACAATAGTCACTCCCGAGATTGGGACATCAATGGTTGTGCATGCAATAACATCCACAACGATGAGCAAGATGGACCAAAGCTTGAGAATTTCCTTGGC---------------
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'gi|21069053_Brassica '           AGAGACAACAATAGTCACTCCCGAGATTGGGACATCAATGGTAGTGCATGTAATAACATCCACAATGATGAGCAAGATGGACCAAAACTTGAGAATTTCCTTGGC---------------
'gi|18346002_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------
'eca01_6cs1_a05_eca01_13cs2_a02 ' ------------------------------------------------------------------------------------------------------------------
'At2g41710 '                      ------------------------------------------------------------------------------------------------------------------
'At1g79700 '                      ------------------------------------------------------------------------------------------------------------------
Os8g34360                         ------------------------------------------------------------------------------------------------------------------
Os12g03290                        ------------------------------------------------------------------------------------------------------------------
Os12g03290_1                      ------------------------------------------------------------------------------------------------------------------
'At3g54320 '                      ------------------------------------------------------------------------------------------------------------------
Os1g59780                         ------------------------------------------------------------------------------------------------------------------
Os11g19060                        GGCGGCGGC---------------------ACGGTGGCGGCCGCCGGCGGGGAG---------------GAGACGGCGGCGCCGAAGCTGGAGGACTTCCTCGGC---------------
Os2g40070                         GGCGGCGCCTCG------GAGCTGTCGATGCTCGTCGGCTCCAGCGGCGGCAAGAGGGCGGCGGCGGTGGAGGAGACCGAGCCGAAGCTGGAGGACTTCCTCGGCGGC------------
Os6g44750                         ------------------------------------------------------GAGGAGGGGCCAGCGGAGGGCGCTCCGAAGATGGAGGATTTCCTCGGCGGCCTA---------
Os1g67410                         GTCTGCTTCAACATCCCCCAAGATTGG---------------AGCATGAGGGGATCGGAGCTCTCGGCGCTCGTCGCCGAGCCGAAGCTGGAGGACTTCCTCGGCGGCATCTCCTTCTCG
Os3g56050                         AAGTCCGACGGCTCGCTCTGCATCATGGAGGCACTCCGGGGAGGCGACCAAGAACAGCAAGGGGTGGTGGTGTCGGCGTCGCCCAAGCTGGAGGATTTCCTAGGC---------------
Os7g03250                         AAGTCCGACGGCTCGCTCTGCATCATGGAGGCTCTCCGGAGAACCGATCAAGATCATCACGGG------------------CCCAAGCTTGAGGACTTCCTCGGC---------------
Os3g12950                         AAGTCCGATGGCTCCCTCTGCATCATGGAAGGCATGATGCCG-----------------------------TCGTCATCGCCAAAGCTCGAGGACTTCTTGGGG---------------
Os3g07940                         CACTCTGATGGATCTGTGCACTATGATGCTCCAGATTGGAGGCATGCAGAGGCCAAA---------------------GACCCCAAGCTTGAGGACTTCATGAGC---------------
'At1g72570 '                      CATCATGATGAAGACGTT-------------------------------------------------------------CCAAAGGTGGAAGATCTCCTCTCA---------------
'At5g57390 '                      TTCTCCACTTCTCCAGTCGAACGGCAAGATGGGTCACCGGGA-------------------------------------------------------------------------
'At5g17430 '                      AGAGACAATAATAGTCACTCCCGAGATTGGGACATCAATGGTGGTGCATGCAATAACATTAACAATAACGAACAAAATGGACCAAAGCTTGAGAATTTCCTCGGC---------------
'At1g51190 '                      ---GAAGGTGGAGAGGTT-------------------------------------------------------------CCAAAAGTGGCTGATTTCTTAGGA---------------
'At3g20840 '                      GATGAAGGAGGAGAGGTT-------------------------------------------------------------CCAAAAGTGGCCGATTTTCTCGGT---------------
'At5g10510 '                      ------------------------------------------------------------------------------CCAAAGCTCGAAGATTTTCTCGGT---------------
'At5g65510 '                      ------------------------------------------------------------------------------CCAAAGCTGGAAGATTTCCTCGGT---------------
'ltu01_16ms3_h06_Liriodendron '   ------------------------------------------------------------------------------------------------------------------
'ZMtuc03_08_11.12253_Zea '        ------------------------------------------------------------------------------------------------------------------
'ZMtuc02_12_23.7359_Zea '         ------------------------------------------------------------------------------------------------------------------
Os7g13170                         ------------------------------------------------------------------------------------------------------------------
'Barley1_18652_Hordeum '          ---------------------------------GCGCAGGGCCCTCTCCTCGTCCTCCTCCAGTCCTCATCCCCATGGCCACCACCACCGCCTCCACCCCCCACCACTACTTCTACTCCT
'gi|18476518_Hordeum '            ------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.7877_Triticum '    ------------------------------------------------------------------------------------------------------------------
'atr01_4ms1_d10_Amborella '       ------------------------------------------------------------------------------------------------------------------
'gi|46395278_Pinus_PtAP2L2 '      ------------------------------------------------------------------------------------------------------------------
Os4g55560                         ACTGCCAAGAGTCCAAGACCCAACAAGGGGGAGGACGGAGGAGGCGAGGCAGAGGCATCTCACCGAAGGGGGAAGGGCGACGCCATGTGGGACCTCAATGACTCGCCGGCG---------
'LEtuc02_10_21.9228_Lycopersico ' --------------------------------ATTGTTTTCTGTTTTTATAATTTGGATTGGGTATTTTTTGTAGAGAGAAAAATGTGGGATCTAAATGAATCAGAAGAA---------
'gi|5081555_Petunia '             ------------------------------------------------------------------------------ATGTGGGATCTAAATGATTCTCCAGAT---------
'LEtuc02_10_21.11399_Lycopersic ' ---------------------------GTCACTTGCAACCAAATATCGAAAAATACACTCATTTTAATTCTATCGACAAAAGAAATGTGGAATTTAAATGATTCCCCTGAT---------
'gi|28894444_Antirrhinum_LIPLES ' ------------------------------------------------------------------------------ATGTGGGATCTCAACGATTCGCCGGAT---------
'gi|28894442_Antirrhinum_LIPLES ' ------------------------------------------------------------------------------ATGTGGGATCTGAACGATTCACCGGAT---------
'gi|21717332_Malus '              ------------------------------------------------------------------------------ATGTGGGATCTCAATGACTCGCCTGAT---------
'gi|13173164_Pisum '              ------------------------------------------------------------------------------ATGTGGGATCTTAATGGTTCGCCGTCT---------
'At5g67180 '                      ------------------------------------------------------------------------------ATGTGGAACCTTAACGACTCACCCGAT---------
'At4g36920_APETALA2 '             ------------------------------------------------------------------------------ATGTGGGATCTAAACGACGCACCACAC---------
Os7g39110                         ------------------------------------------------------------------------------------------------------------------
Os6g43220                         ------------------------------------------------------------------------------------------------------------------
'gi|2098818_Zea_mays '            ------------------------------------------------------------------------------------------------------------------
'gi|11181612_Picea '              ------------------------------------------------------------------ATGATGACTGTAGACACTTCTAGTATTGAGCCGGTCGGGAAAATCGCCCCC
'gi|46395276_Pinus_PtAP2L1 '      ------------------------------------------------------------------------------------------------------ATGCCGGAGACTAACAAG
'gi|11181610_Picea_abies '        ------------------------------------------------------------------------------ATGTGGGATCTGAATCATATCCCGGAGGCTACCAAG
'GMtuc03_04_25.877_Glycine '      ------------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '      ------------------------------------------------------------------------------------------------------------------
'At2g39250 '                      ------------------------------------------------------------------------------ATGTTGGACCTCAACCTCGGAATCTTG---------
'At3g54990 '                      ------------------------------------------------------------------------------ATGTTGGATCTTAACCTAAAGATCTTT---------
'At5g60120 '                      ------------------------------------------------------------------------------ATGCTGGATCTCAATCTCGACGTCGAC---------
'At2g28550 '                      ------------------------------------------------------------------------------TACTTAGATCGGCAGACATCAGACAAC---------
'gi|5360996_Hyacinthus '          ------------------------------------------------------------------------------------------------------------------
'pam01_2ms1_c06_Persea '          ------------------------------------------------------------------------------------------------------------------
'gi|5081557_Petunia '             ------------------------------------------------------------------------------ATGTTTGACCTTAATCTTTGTTTCGAA---------
'GMtuc03_04_25.28779_Glycine '    ------------------------------------------------------------------------------------------------------------------
'GMtuc02_10_21.14413_Glycine '    ------------------------------------------------------------------------------------------------------------------
'MTtuc03_04_26.7790_Medicago '    ------------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '     ------------------------------------------------------------------------------------------------------------------
'STtuc021023.12365_Solanum '      ------------------------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '         ------------------------------------------------------------------------------------------------------------------
```

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'Barley1_08369_Hordeum '          ------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '     ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '    ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '    ------------------------------------------------------------------------------------------------------------
'SBtuc02_10_21.6764_Sorghum '     ------------------------------------------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '     ------------------------------------------------------------------------------------------------------------
'RAV2_gi30697755_At1g68840 '      ------------------------------------------------------------------------------------------------------------
'RAV1_gi42562037_At1g13260 '      ------------------------------------------------------------------------------------------------------------
'A4_gi30690008_TINY_At5g25810 '   ------------------------------------------------------------------------------------------------------------
'A4_gi7212005AC023628 '           ------------------------------------------------------------------------------------------------------------
'gi|19789524_Physcomitrella '     ------------------------------------------------------------------------------------------------------------
'gi|18348070_Physcomitrella '     ------------------------------------------------------------------------------------------------------------
'A2_gi30680919_DREB2A_At5g05410 ' ------------------------------------------------------------------------------------------------------------
'A5_gi42562576_RAP2.1_At1g46768 ' ------------------------------------------------------------------------------------------------------------
'B2_gi30695605_RAP2.12_At1g5391 ' ------------------------------------------------------------------------------------------------------------
'gi|18351137_Physcomitrella '     ------------------------------------------------------------------------------------------------------------
'B4_gi42562554_RAP2.6_At1g43160 ' ------------------------------------------------------------------------------------------------------------
'A1_gi18416558_DREB1A_At4g25480 ' ------------------------------------------------------------------------------------------------------------
'B1_gi2281634_RAP2.5 '            ------------------------------------------------------------------------------------------------------------
'A3_gi18405311_ABI4_At2g40220 '   ------------------------------------------------------------------------------------------------------------
'A6_gi2281632_RAP2.4 '            ------------------------------------------------------------------------------------------------------------
'B1_gi42562651_AtERF3_At1g50640 ' ------------------------------------------------------------------------------------------------------------
'B5_gi42566428_AF080120 '         ------------------------------------------------------------------------------------------------------------

[                                 481       491       501       511       521       531       541       551       561       571       581       591       ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
'At1g16060 '                      ------------------------------------------------------------------------------------------------------------
Os9g25600                         ------------------------------------------------------------------------------------------------------------
Os6g05340                         ------------------------------------------------------------------------------------------------------------
'wmi01_10ms3_e03_Welwitschia '    ------------------------------------------------------------------------------------------------------------
'nad03_15ms1_h07_Nuphar '         ------------------------------------------------------------------------------------------------------------
'gi|38492172_Nicotiana '          ------------------------------------------------GGTGCAAGTCAATATGGAAATCATGAAAGGGAAGCTATGGCTCTAAGCTTAGACAGCTTATATTATCACCAA
'ltu01_5ms4_a11_Liriodendron '    ------------------------------------------------------------------------------------------------------------
'At4g37750_AINTEGUMENTA '         ------------------------------------------------ACCCATCACAACAACACAAGTCACAAAGAAGCCATGGATCTTAGCTTAGATAGTTTATTCTACAACACCACT
'gi46395274__Pinus_PtANTL1 '      ------------------------------------------------------------------------------------------------------------
'gi|18356869_Physcomitrella '     ------------------------------------------------------------------------------------------------------------
'gi|21069051_Brassica '           ------------------------------------------------------------------------------------------------------------
'gi|21069053_Brassica '           ------------------------------------------------------------------------------------------------------------
'gi|18346002_Physcomitrella '     ------------------------------------------------------------------------------------------------------------
'eca01_6cs1_a05_eca01_13cs2_a02 ' ------------------------------------------------------------------------------------------------------------
'At2g41710 '                      ------------------------------------------------------------------------------------------------------------
'At1g79700 '                      ------------------------------------------------------------------------------------------------------------
Os8g34360                         ------------------------------------------------------------------------------------------------------------
Os12g03290                        ------------------------------------------------------------------------------------------------------------
Os12g03290_1                      ------------------------------------------------------------------------------------------------------------
'At3g54320 '                      ------------------------------------------------------------------------------------------------------------
Os1g59780                         ------------------------------------------------------------------------------------------------------------
Os11g19060                        ------------------------------------------------------------------------------------------------------------
Os2g40070                         ------------------------------------------------------------------------------------------------------------
Os6g44750                         ------------------GGCGGAGGCGGCGGCGCCGTCGCCGCCGCTCCGGCAGCTGCCCCGGAG-------------------------------------------------
Os1g67410                         GAGCAGCAGCATCATCACGGCGGCAAGGGCGGCGTGATCCCGAGCAGCGCCGCCGCTTGCTACGCGAGCTCCGGCAGCAGCGTCGGCTACCTGTACCCTCCTCCAAGCTCATCCTCGCTC
Os3g56050                         ------------------------------------------------GCGGGC---CCCGCCATGGCGCTGAGCCTGGACAAC---TCCGCCTTCTACTACGGCGGCCACGGTCACCAC
Os7g03250                         ------------------------------------------------GCGGCGCAGCCGGCGATGGCGCTGAGCCTGGACAACACCTCCAGCTTCTACTACGGCGGAGGCGGCGCCGCC
Os3g12950                         ------------------------------------------------TGTGGCAATGGCAGTGGC-------------------------------------------------CATGAC
Os3g07940                         ------------------------------------------------GTCAGCTACAGCAACAAAAGCAGCAGCAACCTGTACGGCAGCAGCAGCAGCAGCAGCTGCGGCCACGCCGAC
'At1g72570 '                      ------------------------------------------------AACTCTCATCAAACCGAGTATCCTATAAACCATAACCAAACCAATGTCAACTGCACCACTGTGGTTAACAGG
'At5g57390 '                      ------------------------------------------------------------------------------------------------------------
'At5g17430 '                      ------------------------------------------------------------------------------------------------------------
'At1g51190 '                      ------------------------------------------------------------------------------------------------------------
'At3g20840 '                      ------------------------------------------------------------------------------------------------------------
'At5g10510 '                      ------------------------------------------------GACTCTTCTTCTATCGTTCGTTACTCCGACAACAGTCAAACCGACACACAAGACTCTTCC---CTCACTCAA
'At5g65510 '                      ------------------------------------------------GATTCC------TTTGTCCGTTACTCTGATAAC---CAAACAGAGACCCAAGACTCTTCTTCTCTCACTCCA
'ltu01_16ms3_h06_Liriodendron '   ------------------------------------------------------------------------------------------------------------
'ZMtuc03_08_11.12253_Zea '        ------------------------------------------------------------------------------------------------------------
'ZMtuc02_12_23.7359_Zea '         ------------------------------------------------------------------------------------------------------------
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Os7g13170                          ------------------------------------------------------------------------------------------------------------
'Barley1_18652_Hordeum '           CCCGCCTCGCCCTCGCAGCCCGCGGCCACCGCGCTCCCATGCCATAGACGCCACCCAGCTGATCGGTCGACCTCGCTCGGACGCGGCACGGCGAGCGAGGCGGGCATACCTGCGTTTCAT
'gi|18476518_Hordeum '             ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.7877_Triticum '     ------------------------------------------------------------------------------------------------------------
'atr01_4ms1_d10_Amborella '        ------------------------------------------------------------------------------------------------------------
'gi|46395278_Pinus_PtAP2L2 '       ------------------------------------------------------------------------------------------ATGACGGTTAAT----------
Os4g55560                          ------------------------------------------------------------------------------------------------------------
'LEtuc02_10_21.9228_Lycopersico '  ------------------------------------------------------------------------------------------------------GGT-------
'gi|5081555_Petunia '              ------------------------------------------------------------------------CAAAGAAGAGAAATCAATATTGATGAATCCGAAGAAGGT-------
'LEtuc02_10_21.11399_Lycopersic '  ------------------------------------------------------------------------------------------------------------
'gi|28894444_Antirrhinum_LIPLES '  ------------------------------------------------------------------------------------------------------------
'gi|28894442_Antirrhinum_LIPLES '  ------------------------------------------------------------------------------------------------------------
'gi|21717332_Malus '               ------------------------------------------------------------------------------------------------CAGCGGCCACGTGGCGAGGAA
'gi|13173164_Pisum '               ------------------------------------------------------------------------------------------------AAGAGA---AAAGACCAAGAG
'At5g67180 '                       ------------------------------------------------------------------------------------------------------------
'At4g36920_APETALA2 '              ------------------------------------------------------------------------------------------------CAAACACAA------------
Os7g39110                          ------------------------------------------------------------------------------------------------------------
Os6g43220                          ------------------------------------------------------------------------------------------------------------
'gi|2098818_Zea_mays '             ------------------------------------------------------------------------------------------------------------
'gi|11181612_Picea '               CGGAGTTCCGAGGAGACTGAATCTGTTTGTGTTGAAGCGGCCGCGGCCACGGTCACTCATATTCAAAGCAATAACGAAACAAGACGTAGGGCGCCATTTCGGTCTGAGATGACCGAGTCT
'gi|46395276_Pinus_PtAP2L1 '       GAACCTCAGGTTGTGGTACCCATGGAGGCTGAT---------CAGGGGAATTTGTGTTTAGGAAATGGTAATTTTCGCGATGAGAACGTCTCGGGTTCGAGTTCGAGTTCG---------
'gi|11181610_Picea_abies '         GAGCCACAGGTTGTTGTGCCCATGGAGGCAGCTTGTTCAGCTGAAGGAAATCTGTCTGTAGGAAATGCTAATTTTCGCGATGAGAACGTCTCGGGTTCGAGTTCCAGTTCATCGGTGGCG
'GMtuc03_04_25.877_Glycine '       ------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '       ------------------------------------------------------------------------------------------------------------
'At2g39250 '                       ------------------------------------------------------------------------------------------------TCGACACACAACGAA------
'At3g54990 '                       ------------------------------------------------------------------------------------------------TCTTCTTATAACGAA------
'At5g60120 '                       ------------------------------------------------------------------------------------------------TCGACCGAGTCTACTCAG---
'At2g28550 '                       ------------------------------------------------------------------------------------------------TCCGCCGGGAATCGA------
'gi|5360996_Hyacinthus '           ------------------------------------------------------------------------------------------------------------
'pam01_2ms1_c06_Persea '           ------------------------------------------------------------------------------------------------------------
'gi|5081557_Petunia '              ------------------------------------------------------------------------------------------------GATGAAGAAGAATTACAATTC
'GMtuc03_04_25.28779_Glycine '     ------------------------------------------------------------------------------------------------------------
'GMtuc02_10_21.14413_Glycine '     ------------------------------------------------------------------------------------------------------------
'MTtuc03_04_26.7790_Medicago '     ------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '      ------------------------------------------------------------------------------------------------------------
'STtuc02I023.12365_Solanum '       ------------------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '          ------------------------------------------------------------------------------------------------------------
'Barley1_08369_Hordeum '           ------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '      ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '     ------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '     ------------------------------------------------------------------------------------------------------------
'SBtuc02_10_21.6764_Sorghum '      ------------------------------------------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '      ------------------------------------------------------------------------------------------------------------
'RAV2_gi30697755_At1g68840 '       ------------------------------------------------------------------------------------------------------------
'RAV1_gi42562037_At1g13260 '       ------------------------------------------------------------------------------------------------------------
'A4_gi30690008_TINY_At5g25810 '    ------------------------------------------------------------------------------------------------------------
'A4_gi7212005AC023628 '            ------------------------------------------------------------------------------------------------------------
'gi|19789524_Physcomitrella '      ------------------------------------------------------------------------------------------------------------
'gi|18348070_Physcomitrella '      ------------------------------------------------------------------------------------------------------------
'A2_gi30680919_DREB2A_At5g05410 '  ------------------------------------------------------------------------------------------------------------
'A5_gi42562576_RAP2.1_At1g46768 '  ------------------------------------------------------------------------------------------------------------
'B2_gi30695605_RAP2.12_At1g5391 '  ------------------------------------------------------------------------------------------------------------
'gi|18351137_Physcomitrella '      ------------------------------------------------------------------------------------------------------------
'B4_gi42562554_RAP2.6_At1g43160 '  ------------------------------------------------------------------------------------------------------------
'A1_gi18416558_DREB1A_At4g25480 '  ------------------------------------------------------------------------------------------------------------
'B1_gi2281634_RAP2.5 '             ------------------------------------------------------------------------------------------------------------
'A3_gi18405311_ABI4_At2g40220 '    ------------------------------------------------------------------------------------------------------------
'A6_gi2281632_RAP2.4 '             ------------------------------------------------------------------------------------------------------------
'B1_gi42562651_AtERF3_At1g50640 '  ------------------------------------------------------------------------------------------------------------
'B5_gi42566428_AF080120 '          ------------------------------------------------------------------------------------------------------------

[                                  601       611       621       631       641       651       661       671       681       691       701       711       ]
[                                  |         |         |         |         |         |         |         |         |         |         |         |         ]
'At1g16060 '                       ------------------------------------------------------------------------------------------------------------
Os9g25600                          ------------------------------------------------------------------------------------------------------------
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Os6g05340                          ------------------------------------------------------------------------------------------------------------
'wmi01_10ms3_e03_Welwitschia '     ------------------------------------------------------------------------------------------------------------
'nad03_15ms1_h07_Nuphar '          ------------------------------------------------------------------------------------------------------------
'gi|38492172_Nicotiana '           AATGAAGGCTATTATTCTATGCATTGTCATGGCATGTATCAAGAATCATTATTAGATGAAACAAAACCAACTCAAATT---TCACATTGTGATGCCCAAATGACTGCAGTGTCTGGAAAT
'ltu01_5ms4_a11_Liriodendron '     ------------------------------------------------------------------------------------------GATGGAATACCAGGG---
'At4g37750_AINTEGUMENTA '          CATGAGCCCAACACGACTACAAACTTTCAAGAGTTCTTTAGCTTCCCT-----------------------------------------CAAACCAGAAACCATGAGGAAGAAACTAGA
'gi46395274__Pinus_PtANTL1 '       ------------------------------------------------------------------------------------------GATTGTAGCCTTCAGCTT
'gi|18356869_Physcomitrella '      ------------------------------------------------------------------------------------------------------------
'gi|21069051_Brassica '            ------------------------------------------------------------------------------------------CGCACCACCACGATTTACAACACC
'gi|21069053_Brassica '            ------------------------------------------------------------------------------------------CGCACCACCACGATTTACAACACC
'gi|18346002_Physcomitrella '      ------------------------------------------------------------------------------------------------------------
'eca01_6cs1_a05_eca01_13cs2_a02 '  ------------------------------------------------------------------------------------------CTCAATATAATGGGCACTAACGAAATA
'At2g41710 '                       ------------------------------------------------------------------------------------------------------------
'At1g79700 '                       ------------------------------------------------------------------------------------------------------------
Os8g34360                          ------------------------------------------------------------------------------------------------------------
Os12g03290                         ------------------------------------------------------------------------------------------------------------
Os12g03290_1                       ------------------------------------------------------------------------------------------------------------
'At3g54320 '                       ------------------------------------------------------------------------------------------------------------
Os1g59780                          ------------------------------------------------------------------------------------------------------------
Os11g19060                         ---------------------ATGCAGGTGCAGCAGGAGACGGCCGCCGCG------------------------------GCGGCGGGGCACGGCCGTGGAGGCAGCTCGTCGGTCGTT
Os2g40070                          ---------------AACTCGTTCGTCTCCGAGCAAGATCATCACGCGGCGGGGGGCTTCCTCTTCTCCGGCGTCCCGATGGCCAGCAGCACCAACAGCAACAGCGGGAGCAACACTATG
Os6g44750                          ------------------------------------------------GATCAGCTCAGCTGCGGCGAGCTTGGTAGCATCGCCGCCGGG---------------------------
Os1g67410                          CAGTTCGCCGACTCCGTCATGGTGGCCACCTCCTCGCCCGTCGTCGCCCACGACGGCGTCAGCGGCGGCGGCATGGTGAGCGCCGCCGCCGCCGCGGCGGCCAGTGGCAACGGCGGCATT
Os3g56050                          CAGGGA---CACGCCCAGGACGGCGGCGCCGTCGGTGGCGACCCGCACCACGGCGGCGGCGGC------TTCCTGCAG---TGCGCTGTCATCCCCGGCGCCGGCGCCGGCCACGACGCG
Os7g03250                          GCCGCCGGGCACGGCCAACACGGCTACCTCCAGGCGTGCGACCTGTACGGCGGC-------------------------------------CCGGCCGCGCCGTCGCTCGTGACCGCC
Os3g12950                          CCGGCCACCTACTATAGCCAGGGCCAAGAA-------------------------------------------------GCAGAGGATGCAAGCAGGGCGGCCTACCAGCACCAC
Os3g07940                          CAGATCAAATACCATCATGTCCATGACGTCCAAGCTTTCTCGACGCCGTACTTCTACGGCCATGGCGGCAGCGGCGTTGGCATCGACATCAACATGAATGCGCCACCGGCAGGCTGCACA
'At1g72570 '                       TTAAACCCACCCGGTTACCTTCTCCACGACCAAACCGTAGTTACACCACATTACCCGAACCTAGATCCGAAC------------------CTTAGCAATGATTATGGAGGTTTTGAGAGG
'At5g57390 '                       ------------------------------------------------------------------------------------------GTTTCACCCAGCGATGCC
'At5g17430 '                       ------------------------------------------------------------------------------------------CGCACCACCACGATTTACAATACC
'At1g51190 '                       ------------------------------------------------------------------------------------------GTGAGCAAATCGGGGGATCAT
'At3g20840 '                       ------------------------------------------------------------------------------------------GTGAGCAAACCGGACGAAAAC
'At5g10510 '                       ATCTACGATCCACGTCAC-----------------------------CACCATAACCAAACCGGCTTTTACTCCGATCACCAC------------GATTTCAAAACCATGGCCGGTTTT
'At5g65510 '                       TTCTACGATCCACGTCACCGC---------------------ACCGTTGCCGAAGGAGTTACAGGGTTCTTCTCTGATCATCATCAGCCA------GATTTCAAGACGATAAACTCGGGA
'ltu01_16ms3_h06_Liriodendron '    ------------------------------------------------------------------------------------------------------------
'ZMtuc03_08_11.12253_Zea '         ------------------------------------------------------------------------------------------------------------
'ZMtuc02_12_23.7359_Zea '          ------------------------------------------------------------------------------------------------------------
Os7g13170                          ------------------------------------------------------------------------------------------------------------
'Barley1_18652_Hordeum '           TTGCGAGTTCCCGGCGCGCGGGCCTCGGATCGGAGGACGGAGATGGTGCTGGATCTCAATGTCGAGTCTCCGGCCGACTCCGGCACGTCCAGCTCGTCCGTGCTCAAC------------
'gi|18476518_Hordeum '             ------------------------------------------ATGGTGCTGGATCTCAATGTCGAGTCTCCGGCCGACTCCGGCACGTCCAGCTCGTCCGTGCTCAAC------------
'TAtuc03_04_26.7877_Triticum '     ------------------------------------------------------------------------------------------------------------
'atr01_4ms1_d10_Amborella '        ------------------------------------------------------------------------------------------------------------
'gi|46395278_Pinus_PtAP2L2 '       ------------------------ACTTCGGCTGCCTCAGAGATTAAT--------------------------------ACACATAGTAAAGGCGAGCAGGACACCTGCATTACGCAT
Os4g55560                          ------------------------------------------------------------------------------------------------------------
'LEtuc02_10_21.9228_Lycopersico '  ------------TGTTCTTCACCGATAGAGTTTGAAGGCGATGATGAGAAAGGTAAACGGGTC---------GGATCCGTTTCGAATTCAAGTTCATCAGCTGTAGCTGTT---GATGAT
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Os6g43220                          ------------------------------------------------------------------------ATGGCGGCAACCTTCTACGGCGTCGGCAGCATTGCACTCGCC
'gi|2098818_Zea_mays '             ------------------------------------------------------------------------------------------------------------
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'GMtuc03_04_25.876_Glycine '       ------------------------------------------------------------------------------------------------------------
'At2g39250 '                       ---------------------------GATGAAGATTGCAAAGTACCAACTTCCATCTTCATTCAAGAAGAAGATTCCATTAATCCCTCAAACGACAACTTGTCT---------------
'At3g54990 '                       ---------------------------GATCAAGATCGGAAAGTACCATTAATGATCTCAACCACCGGTGAAGAAGAATCTAACTCATCTTCCTCCTCCACAACAGACTCTGCAGCG---
'At5g60120 '                       ------------------------AACGAACGAGATTCGATTACTGTTAAAGGGGTTTCTTTGAATCAGATGGATGAATCGGTGACGTCGAACTCTTCTGTTGTTAATGCTGAAGCTTCT
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'pam01_2ms1_c06_Persea '          ------------------------------------------------------------------------------------------------------------------------
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'GMtuc03_04_25.28779_Glycine '    ------------------------------------------------------------------------------------------------------------------------
'GMtuc02_10_21.14413_Glycine '    ------------------------------------------------------------------------------------------------------------------------
'MTtuc03_04_26.7790_Medicago '    ------------------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '     ------------------------------------------------------------------------------------------------------------------------
'STtuc021023.12365_Solanum '      ------------------------------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '         ------------------------------------------------------------------------------------------------------------------------
'Barley1_08369_Hordeum '          ------------------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '     ------------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '    ------------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '    ------------------------------------------------------------------------------------------------------------------------
'SBtuc02_10_21.6764_Sorghum '     ------------------------------------------------------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '     ------------------------------------------------------------------------------------------------------------------------
'RAV2_gi30697755_At1g68840 '      ------------------------------------------------------------------------------------------------------------------------
'RAV1_gi42562037_At1g13260 '      ------------------------------------------------------------------------------------------------------------------------
'A4_gi30690008_TINY_At5g25810 '   ------------------------------------------------------------------------------------------------------------------------
'A4_gi7212005AC023628 '           ------------------------------------------------------------------------------------------------------------------------
'gi|19789524_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------
'gi|18348070_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------
'A2_gi30680919_DREB2A_At5g05410 ' ------------------------------------------------------------------------------------------------------------------------
'A5_gi42562576_RAP2.1_At1g46768 ' ------------------------------------------------------------------------------------------------------------------------
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'A3_gi18405311_ABI4_At2g40220 '   ------------------------------------------------------------------------------------------------------------------------
'A6_gi2281632_RAP2.4 '            ------------------------------------------------------------------------------------------------------------------------
'B1_gi42562651_AtERF3_At1g50640 ' ------------------------------------------------------------------------------------------------------------------------
'B5_gi42566428_AF080120 '         ------------------------------------------------------------------------------------------------------------------------

[                                 721       731       741       751       761       771       781       791       801       811       821       831       ]
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'nad03_15ms1_h07_Nuphar '         ------------------------------------------------------------------------------------------------------------------------
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Os12g03290_1                      ------------------------------------------------------------ATGGCGAAGAGATCGTCTCCTGATCCTGCATCATCTTCTCCATCTGCATCATCCTCG
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Os6g44750                         ----------------------TTCTTGCGCCGG------------------------TACCCAGCGCCTGAGAACGCCGGCGGGGTGACCATCGCAATG----------------------
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'At5g65510 '                    CCAGAAATCTTCGATGACTCAACAACTTCC------------------------------------------AACATCGGTGGTACTCATCTCTCC------------AGTCACGTGGTG
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'ZMtuc02_12_23.7359_Zea '       ------------------------------------------------------------------------------------------------------------------------
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'atr01_4ms1_d10_Amborella '     ------------------------------------------------------------------------------------------------------------------------
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'gi|28894444_Antirrhinum_LIPLES ' GGTAATTCTGAAGAAGAATTAGATGCTGCTGGTAAGAAAAGGAACAGCAGC----------------------AAGATATTTGGGTTCTCTGTCCACAGTTGCTGCGATCATGACACGTGT
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'gi|2098818_Zea_mays '          ------------------------------------------------------------------------------------------------------------------------
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'MTtuc03_04_26.7790_Medicago '  ------------------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '   ------------------------------------------------------------------------------------------------------------------------
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'Barley1_08369_Hordeum '        ------------------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '   ------------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '  ------------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '  ------------------------------------------------------------------------------------------------------GGCGAGAACGACGTCGGCGCCGACGAC
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'SPtuc02_10_22.3366_Solanum '   ------------------------------------------------------------------------------------------------------------------------
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'B1_gi2281634_RAP2.5 '          ------------------------------------------------------------------------------------------------------------------------
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'A3_gi18405311_ABI4_At2g40220 '   ----------------------------------------------------------------------------------------------------ATGGACCCTTTAGCTTCCCAACAT
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'B1_gi42562651_AtERF3_At1g50640 ' ------------------------------------------------------------------------------------------------------------------------------------
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[                                 841       851       861       871       881       891       901       911       921       931       941       951       ]
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'gi|18356869_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------------------
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Os12g03290                        CCGTCGTCTCCTTCCTCCTCTTCCTCCGAGGATTCCTCTTCGCCCATGTCGATGCCCTGCAAGAGGAGGGCGAGGCCGAGGACGGAGAAGAGCACCGGCAAGGCCAAG------------
Os12g03290_1                      CCGTCGTCTCCTTCCTCCTCTTCCTCCGAGGATTCCTCTTCGCCCATGTCGATGCCCTGCAAGAGGAGGGCGAGGCCGAGGACGGAGAAGAGCACCGGCAAGGCCAAG------------
'At3g54320 '                      TCTTCTACTACTACTTCCTCTCCT---ATTCAGTCGGAGGCTCCA----------------------------AGGCCTAAACGAGCCAAAAGGGCTAAGAAATCTTCT------------
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Os2g40070                         GCGGAGATGAGCACCGACGCGAGCGCGAGCAGCTTCGGGTGCTCCTCCGACGCGATGGGGAGGAGTAACAACGGCGGCGCGGTCTCGGCGGCGGCCGGCGGGACGAGCTCGCAGAGCCTG
Os6g44750                         ------------------------------------------------------------------------------------------------------------------------------------
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Os7g03250                         GCCGCCGAGAACGTCCTCCCCTCCGCCACCGCCGCGCAGCACCTGCACCACCCGCTCGCCCTGTCCATGAGCTCC---GGCTCCCTCTCCAGCTGCATCACC------------------
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'ZMtuc02_12_23.7359_Zea '         ------------------------------------------------------------------------------------------------------------------------------------
Os7g13170                         ------------------------------------------------------------------------------------------------------------------------------------
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'TAtuc03_04_26.7877_Triticum '    ------------------------------------------------------------------------------------------------------------------------------------
'atr01_4ms1_d10_Amborella '       ------------------------------------------------------------------------------------------------------------------------------------
'gi|46395278_Pinus_PtAP2L2 '      ------------GACTCTGCTTCTTCGCTGCCACTTGAAGAAATTCGCGGTCCTGTGAACCAGTTTTCCCGCTCG-------------------------------------------
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'LEtuc02_10_21.9228_Lycopersico ' ---------------GGCGATGAAGAACAGCCGGTGACCCGACAGTTTTTTCCGGTTGATGAGTCGGAAATGGGTGGTGTT-------------------------------------
'gi|5081555_Petunia '             ------------------GACTTAGAGCAACCGATAACGAGACAATTCTTTCCAGTTGATGAGGCTGAAGCTGAAACAGGT-------------------------------------
'LEtuc02_10_21.11399_Lycopersic ' ------------------TTGGAATCGCCGGTAGTTACCCGGCAATTTTTTCCGGTAGAT-----------------------------------------------------------
'gi|28894444_Antirrhinum_LIPLES ' ACT------------TGCTCTTCATCGTCGCCGGTGACGAGGCAGTTCTTTCCGGTGGAGGACACC-----------------------------------------------------
'gi|28894442_Antirrhinum_LIPLES ' ACG------------GGCAATATCTCGTCGCCGGTGACACGTCAGTTTTTTCCGGCGGGTGAGTCGCCG-----------------------------------------------------
'gi|21717332_Malus '              ---------------AGTGATCCGCCCGCGACCGTCACCAGACAGTTCTTTCCGGTAGAGCTAGACTATTCCTCCTCCTCTAATCTTGACGTAATGGGGCCCGCAGAGGGCGGCGGTAGC
'gi|13173164_Pisum '              GAAGAAGAATCTTTAGACAGTGAAAATTTTCCTGTGACGAGAAATTTCTTTCCCATGGATCAAGAAGCTGAAAACATGGTTGTAGCATCTAGTGGCGGA---------------------
'At5g67180 '                      ---------------CTACCGTTTGTGCTTCCGGTGACCAGGAATTTCTTTCCGGCTCAA-------------------------------------------------------------
'At4g36920_APETALA2 '             ------------------CCCAATAACCCACTTGTCACCCATCAGTTCTTCCCTGAGATGGATTCTAACGGCGGT-------------------------------------------
Os7g39110                         ------------------------------------------------------------------------------------------------------------------------------------
Os6g43220                         ------------------------------------------------------------------------------------------------------------------------------------
'gi|2098818_Zea_mays '            ------------------------------------------------------------------------------------------------------------------------------------
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'gi|11181612_Picea '              CAA---------------AAGGATCCCGCCTGCGTTACACGGCATTTTTTCCCTCTTCATAACGGGCAGCCTTCTGAAGTCCTGATG--------------------------------
'gi|46395276_Pinus_PtAP2L1 '      ------------TCAGGTTGTGGTACGAACAGTGTGACACGCCAGTTTTTCCCAGCTGGTCAGGAGTTCGATTCTCAGGTGATGATCCCG------------------------------
'gi|11181610_Picea_abies '        ------------TCAGGATGT---ACGAATAGAGTGACACGCCAGTTTTTCCCCCATGGTCGGGAGTTCGAGTCTCAGGTGATGATTCCC-----------------------------
'GMtuc03_04_25.877_Glycine '      ------------------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '      ------------------------------------------------------------------------------------------------------------------------
'At2g39250 '                      ------------------------------------------------CCTCCTCCTCCTCCTTCGGAAAAT-------------------------------------------
'At3g54990 '                      ---------------------------------------------TTTCCGGTGGTGGCTGATGCTCGTCGGAATATA-----------------------------------------
'At5g60120 '                      ------------------------GCTGTGATGATGACTAAGGAGTTTTTTCCTGTTGCTAAAGGCATGAACTTTATG-------------------------------------
'At2g28550 '                      ------------------------------------------------TTTTTTCCGGTGAGTGGAGACTGTGGACATCTACGAGATGTT--------------------------------
'gi|5360996_Hyacinthus '          ------------------------------------------------------------------------------------------------------------------------
'pam01_2ms1_c06_Persea '          ------------------------------------------------------------------------------------------------------------------------
'gi|5081557_Petunia '             ------------------AATGATCAGTTTTTAGATTCTAAGGAATTGTTTCCGTTGAGTAACGGTGGAGAAATGGCGGCGCCGGTGAAT-----------------------------
'GMtuc03_04_25.28779_Glycine '    ------------------------------------------------------------------------------------------------------------------------
'GMtuc02_10_21.14413_Glycine '    ------------------------------------------------------------------------------------------------------------------------
'MTtuc03_04_26.7790_Medicago '    ------------------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '     ------------------------------------------------------------------------------------------------------------------------
'STtuc021023.12365_Solanum '      ------------------------------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '         ------------------------------------------------------------------------------------------------------------------------
'Barley1_08369_Hordeum '          ------------------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '     ------------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '    ------------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '    GACGAGGAGGAGGCCACTCCCTCGCCTCCACCTCCGCCGACGCGGCACTACCACCAGCACCTGCTGCAGCCGCAACAACTCGTCACCCAAGAGCTGTTCCCCGCCGCGGCCACCGCCGGC
'SBtuc02_10_21.6764_Sorghum '     ------------------------------------------------------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '     ------------------------------------------------------------------------------------------------------------------------
'RAV2_gi30697755_At1g68840 '      ---------------------------ATGGATTCTAGTTGCATAGACGAGATAAGTTCCTCCACT-----------------------------------------------------
'RAV1_gi42562037_At1g13260 '      ---------------------------ATGGAATCGAGTAGCGTTGATGAGAGTACTACAAGTACA-----------------------------------------------------
'A4_gi30690008_TINY_At5g25810 '   ---------------------------ATGATAGCTTCA---------GAGAGTACCAAGAGCTGG-----------------------------------------------------
'A4_gi7212005AC023628 '           ---------------------------ATGAAGCTATCATCA------CCACCAGTTACCAACAAC-----------------------------------------------------
'gi|19789524_Physcomitrella '     ---------GTAGTGGTGTCGTCTTTGCGTGTCAAGCGAGGA------GGCAATCTCTTGGCGCCA-----------------------------------------------------
'gi|18348070_Physcomitrella '     TGCTTTACAATTATGGTAGACAGGAATAGGACCCAGAGAGGT------GCGTTGAGCGTCATGACA-----------------------------------------------------
'A2_gi30680919_DREB2A_At5g05410 ' GTGGCTGAGAGATTAAAGAGATGGAAAGAGTATAACGAGACCGTAGAAGAAGTTTCT-----------------------------------------------------------
'A5_gi42562576_RAP2.1_At1g46768 ' ------------------------------ATGGAAAGAGAACAAGAAGAGTCTACG-----------------------------------------------------------
'B2_gi30695605_RAP2.12_At1g5391 ' GATTCGTCTATCGATTGCGATGATGATTTCGACGTCGGTGAT------GTTTTCGCCGATGTGAAACCATTCGTTTTCACTTCGACTCCAAAACCCGCCGTCTCC---------------
'gi|18351137_Physcomitrella '     GGCAATTTGGAGAAGTTGGATCAAGCAGGGAAAGTGGGCGAC------GGAAGTAGTCATCAGCAA-----------------------------------------------------
'B4_gi42562554_RAP2.6_At1g43160 ' TCTGCGACATGGACGATGGGTCATAAG---------AGAGAAAGAGAAGAGTTTTCTTTGCCTCCTCAA-----------------------------------------------
'A1_gi18416558_DREB1A_At4g25480 ' AACTCATTTTCTGCTTTTTCTGAAATGTTTGGCTCCGATTAC------GAGTCTTCGGTTTCCTCA-------------------------------------------------
'B1_gi2281634_RAP2.5 '            ------------------------ATGGCCAAGATGGGCTTG------AAACCCGACCCGGCTACT-------------------------------------------------
'A3_gi18405311_ABI4_At2g40220 '   CAACACAACCATCTGGAAGATAATAACCAAACCCTAACCCAT------AATAATCCTCAATCCGAT-------------------------------------------------
'A6_gi2281632_RAP2.4 '            CTTCCTCCGACGCATCACAACAACAACAACTCTTTCTCGAAT------CTTCTCAGCCCAAAGCCG-------------------------------------------------
'B1_gi42562651_AtERF3_At1g50640 ' ---------------------ATGAGGAGAGGAAGAGGCTCT------TCCGCCGTCGCCGGACCT-------------------------------------------------
'B5_gi42566428_AF080120 '         GATTTTGATGCATTATCTACAAAACGACGTCGTGTTAAGAAG------TACGTGAAGGAAGTGGTGCTTGATTCG-----------------------------------------
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[                                 961       971       981       991       1001      1011      1021      1031      1041      1051      1061      1071      ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
'At1g16060 '                      ------------------------------------------------------------------------------------------------------------CGC
Os9g25600                         ------------------------------------------------------------------------------------------------------------CGG
Os6g05340                         ------------------------------------------------------------------------------------ATGTCGGCTGTGACAGTGGCCGGCAATGGCAAA
'wmi01_10ms3_e03_Welwitschia '    ------------------------------------------------------------------------------------------------------------------------
'nad03_15ms1_h07_Nuphar '         ------------------------------------------------------------------------------------------------------------------------
'gi|38492172_Nicotiana '          ---------------------------------AGACAAATTTCTCCTAATGAGCTGGAATGTGTTGCCATTGAAACAAAGAAAAGG---------GCTTCTGGAAAAGTTGTTCAAAAA
'ltu01_5ms4_a11_Liriodendron '    ---------------------------------CAGCAGCTATCACATGGTGGGGCTGATTTTGTGGCCATGGATACAAAGAAGAGA---------GGGGGTGGGAAGGTGGGCCAGAAG
'At4g37750_AINTEGUMENTA '         ------------------------------------------GTTGGGTTTGAGACGACGACAATGGCGGCTGCGAAGAAGAAGAGGGGACAAGAGGATGTTGTAGTTGTTGGTCAGAAA
'gi46395274__Pinus_PtANTL1 '      ------------------------------------------CCAACCATCATCGATCAGTGTACTCCGGTTGAAACCAAAAAGAGA---------GGCGCAGGAAAAGCGGGCACCAAG
'gi|18356869_Physcomitrella '     ------------------------------------------------------------------------------------------------------TCTGACAACAAA
'gi|21069051_Brassica '           ---------------------------------------------------------GATAACAACAACGACAGCAATAACAACGTTGTTGCCCAAGGGAAGACTATTGATGATAGCGTT
'gi|21069053_Brassica '           ---------------------------------------------------------GATAACAACAACTACAGCAGTAACAACCTTGTTGCCCAAGGGAAGACTATTGATGATAGCGTT
'gi|18346002_Physcomitrella '     ------------------------------------------------------------------------------TCTGACAACAAAGAT-----------------------------
'eca01_6cs1_a05_eca01_13cs2_a02 ' ------------------------------------------------------------------------GATGTTGTAGTTCCTGCAAGTAGTAGCTCTGGAAACGACCCA------
'At2g41710 '                      ------------------------------------------------------------------------------------------------------------------------
'At1g79700 '                      ------------------------------------------------------------------------------------------------------------CGT
Os8g34360                         ------------------------------------------------------------------------------------------------------------CGG
Os12g03290                        ------------------------------------------------------------------------------AGGCCCAAGAAG---------------GAGAGCAAGGAGGTGGCTGAT
Os12g03290_1                      ------------------------------------------------------------------------------AGGCCCAAGAAG---------------GAGAGCAAGGAGGTGGCTGAT
'At3g54320 '                      ------------------------------------------------------------------------------------------CCTTCTGGTGATAAATCTCATAACCCGACAAGC
Os1g59780                         ------------------------------------------------------------------------------------------AGGGCCAAGGATGGCACCGGCGGTGACGACGAC
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Os11g19060                        --------------------------------------------------GGCGGCGGCGCGGCCGAGGCGGCGGCGGCGGCGGCGG------------CAGAGGATGAAGGCGGCC
Os2g40070                         GCGCTCTCGATGAGCACGGGCTCGCACTCGCACCTGCCTATCGTCGTCGCCGGCGGCGGGAACGCCAGCGGCGGAGCGGCCGAGAGCACATCGTCGGAGAACAAGCGGGCCAGCGGCGCC
Os6g44750                         ------------------------------------------------------------------------------GCGACCGACGCGGCGGCGGAGCTGGCCGATCCGGCGAGG
Os1g67410                         GGTCGCAAGGAGATTAACGAGGAAGGCAGCGGCAGCGCCGGCGCCGTGGTTGCCGTCGGCTCGGAGTCAGGCGGCAGCGGCGCCGTGGTGGAGGCCGGCGCGGCGGCGGCGGCGGCGAGG
Os3g56050                         ----------------------------------------GCCGCCGCCGCCGGCGAGCCGTACATGGCCATGGACGCCGTGAGCAAGAAGCGCGGCGGCGCGGACCGCGCCGGGCAGAAG
Os7g03250                         ----------------------------------------GCCGGCGAGTACGGCATGGCGGCCGTGGCAGCCGCCGACGGTGGCCGCAAGCGCGGCGGCGCCGGCGGCGGCGGGCAGAAG
Os3g12950                         CAGCAGATGGCGGTGGTCGCTGCAGCTGCTGCTGCTGGTGATGGCCAGGGAAGCAACAGTAATGACGGTGGCGAGCAGCGTGTCGGGAAGAAGAGGGGCACCGGGAAAGGGGGCCAAAAG
Os3g07940                         ------------------------------------------------CGGTCAGCGGCGGCGCTGTCGCTCTCCGTGCCGGCCGCTCCCCCGAGCGAGGCGCCGCTGCCGCCGGCGGCG
'At1g72570 '                      ---------------------------------------------GTATCCGCACGGGTCGAAGAACCGGTTAAGGTAGATGAGAAGCGGAAGAGATTGGTTGTTAAACCTCAGGTAAAG
'At5g57390 '                      ------------------------------------------AACTACTCCGGTGGACACTCGTCGGAGGTCTCTAGCGTACATAAACAACAACCGAATCCTCTAGCTGTCTCAGAGGCT
'At5g17430 '                      ---------------------------------------------------------GATAGCAACAACTACAACAACAATGATGATGTCGTCCAAGAGAAGACTATTGTTGATGTCGTA
'At1g51190 '                      ---------------------------------------------------GCCGCTGCAGAAGTCGCCACTGTGAAAGCCTCGCCGGCTGAGACTAGTGCCGATAATAGTAGCAGCACT
'At3g20840 '                      ------------------------------------------------GCTGGTAATAATGTTGTAGACAAAGCTTCACCATCCGAGACCACCGGGGATAACGCTAGC------
'At5g10510 '                      -----------------------------------AATCATTACCGAGGCAATAACAATGGTGAGAGAATCAACAACAACAACAACAATGACAACGAGAAGACAGATTCTGAGAAGGAG
'At5g65510 '                      -----------------------------------GATCAACCTTTGAGCTGTAACAATGGCGAGAGAGGTGGAAACAGTAAC-----------------------------AAGAAG
'ltu01_16ms3_h06_Liriodendron '   ------------------------------------------------------------------------------------------------------------------------
'ZMtuc03_08_11.12253_Zea '        ------------------------------------------------------------------------------------------------------------------------
'ZMtuc02_12_23.7359_Zea '         ------------------------------------------------------------------------------------------------------------------------
Os7g13170                         ------------------------------------------------------------------ATGCCGATGCCGGCGGCGGCTGGGGAGGGGCCGTGGCCGCGCCGCGCGGCGGAT
'Barley1_18652_Hordeum '          ---------------TTCGTGACGAGGCAGCTGTTCCCCGCGCCGCCGCCCGCGCCCGGGGTCATGATGGGGCAGGCGCCGGCGCCTCCGCCCACGGCGCCGGTGTGGCAACCTCGGCGC
'gi|18476518_Hordeum '            ---------------TTCGTGACGAGGCAGCTGTTCCCCGCGCCGCCGCCCGCGCCCGGGGTCATGATGGGGCAGGCGCCGGCGCCTCCGCCCACGGCGCCGGTGTGGCAACCTCGGCGC
'TAtuc03_04_26.7877_Triticum '    ------------------------------------------------------------------------------------------------------------------------
'atr01_4ms1_d10_Amborella '       ------------------------------------------------------------------------------------------------------------------------
'gi|46395278_Pinus_PtAP2L2 '      ---------------CTTTGGGGTGATCATCTCGCGTCTTCTCAAACGGATTCCTCTGGGACGCCAAATCCG-------------------------------------------------
Os4g55560                         ------------GTCGTCACGCGCCAGTTCTTCCCTCCGGCCGTCCCGGGCGGCGGCGGCGACCCCGCCCCCGGGAACGCGCGCGCCGGGTGGCTCCGCCTGGCCGGAGCCGCCCCGCCG
'LEtuc02_10_21.9228_Lycopersico ' ------GCTGCTGAAAATGGATGCCCGAATTTTCCCAGAGCTCACTGGGTTGGAGTTAAATTTTACCAAACGGAGACACTTGGCAACACGGGATTG----------------------GCC
'gi|5081555_Petunia '             ------GTTGTAACTAATGGATCCCTGAATTTTCCAAGAGCTCATTGGGTTGGTGTTAAATTTTACCAAAATGAGCCACTTGGCATCACCGGTGTG---------------------GTT
'LEtuc02_10_21.11399_Lycopersic ' ---------------AACGAGTCTACCAATTTTCCAAGGGCACAATGGGCTGGAATTAAATTTTGTGAATCGGAACCGCCACTTGTCAATGGATTA---------------------GTG
'gi|28894444_Antirrhinum_LIPLES ' ---------------GCACCTGATAATTTCCCAAGAGCGGCTCACTGGGTTGGGGTTAAGTTTTGCCCAAACGACAACGGT-----------------------------------TTG
'gi|28894442_Antirrhinum_LIPLES ' ------GAGATTATGTTGGGAGGTGGGGGACCACCCAGGGCGCACTGGGTCGGAGTTAAGTTCTGCCAGTCTGACCCA-----------------------------------AAC
'gi|21717332_Malus '              ATCCCACCACCTCCTTCTACATCGTCGTCGTTTCCCCGAGCCCACTGGGTTGGGGTCAATTTCGGGCAGTCGGATTCGGGC---------AGCCCC---------------------GGA
'gi|13173164_Pisum '              ---AATGGAACATCTTCTTGTTCTTCTACTTTTCCTCGTGCTCATTGGGTAGGTGTGAAATTTTGTCAATCAGAAACACTTGGA--------------------------------AGT
'At5g67180 '                      ------------------------AGCATGGAACCGGGAGTTCGTTGGTCCGGTTTCAATAGTGTCGGTAAGTCGGATCCAAGC--------------------------------GGA
'At4g36920_APETALA2 '             ---------------GGTGTTGCTTCTGGCTTTCCTCGGGCTCACTGGTTTGGTGTTAAGTTTTGTCAGTCGGATCTAGCCACCGGATCGTCCGCGGGTAAAGCT------------ACC
Os7g39110                         ------------------------------------------------------------------------------------------------------------------------
Os6g43220                         ------------------------------------------------------------------------------------------------------------------------
'gi|2098818_Zea_mays '            ------------------------------------------------------------------------------------------------------------------------
'gi|11181612_Picea '              ---CCAACGGAATGTACTGGTGGAAATCCGTTTACAGAATCACATTGGACAACAGTAACTTCCCGTCTACCAGAGAGTACAGAA-----------------------------------
'gi|46395276_Pinus_PtAP2L1 '      ------------------GGGCGACCTCAGCTCCCCAGGGCTCATTGGGTGGGGCTTACATTTCGTCAAGCGGAGTCATTCAGA-----------------------------------
'gi|11181610_Picea_abies '        ------------------GGGCGACCTCAGCTCCCAAGGGCTCATTGGGTGGGGCTTACATTTCGTCAAGCGGAGTCATTCAGA-----------------------------------
'GMtuc03_04_25.877_Glycine '      ------------------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '      ------------------------------------------------------------------------------------------------------------------------
'At2g39250 '                      ---------------------GAACTCTCCGGCCCCGGAAATGAGTGGTTGGATCTTTCGTCGATGCAAAGAAATAAACAAGAAACG-----------------------------------
'At3g54990 '                      ---------------------GAATTCTCCGTGGAAGACAGTCACTGGTTGAATCTTTCTTCTTTACAAAGAAATACACAGAAA-----------------------------------
'At5g60120 '                      ---------------------GATTCGAGCGCTCAAAGTTCAAGGAGCACCGTTGATATTTCCTTCCAGAGGGGGAAACAAGGTGGAGACTTTATAGGTAGCGGGAGCGGTGGT---GGC
'At2g28550 '                      ---------------------GAAGGATCATCAAGCTCTAGAAACTGGATAGATCTTTCTTTTGACCGTATTGGTGACGGAGAAACGAAATTGGTAACTCCG------------------
'gi|5360996_Hyacinthus '          --------------------------GGAGCGCCGCGGGGCCACTGGGCGGAGGTGAAGTTTGTTGAGAAGGAGGCGGAC-------------------------------------
'pam01_2ms1_c06_Persea '          ------------------------------------------------------------------------------------------------------------------------
'gi|5081557_Petunia '             ------------GTGTATGGTAATTACGGTGGTACAATGGAGCAGAGGATTATTATTCCAGTACAGCAACAGCAACAGCAACAG-----------------------------------
'GMtuc03_04_25.28779_Glycine '    ------------------------------------------------------------------------------------------------------------------------
'GMtuc02_10_21.14413_Glycine '    ------------------------------------------------------------------------------------------------------------------------
'MTtuc03_04_26.7790_Medicago '    ------------------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '     ------------------------------------------------------------------------------------------------------------------------
'STtuc021023.12365_Solanum '      ------------------------------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '         ------------------------------------------------------------------------------------------------------------------------
'Barley1_08369_Hordeum '          ------------------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '     ------------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '    ------------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '    GGTCCGCCGCCGATGTCCGTGCCGCAGCATTGGGCCGAGCTCGGCTTCTTCCGCCCCGCGGCGCCGCCTCCGGACATGAGGATCCTGCAGATGCAGCAGCAGCAGCTGCAGGTGCACGCG
'SBtuc02_10_21.6764_Sorghum '     ------------------------------------------------------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '     ------------------------------------------------------------------------------------------------------------------------
'RAV2_gi30697755_At1g68840 '      ------------------------------------TCAGAATCTTTC------TCCGCC---ACCACCGCCAAGAAGCTCTCTCCTCCTCCCGCGGCGGCGTTACGCCTCTACCGGATG
'RAV1_gi42562037_At1g13260 '      -------------------------------------GGTTCCATCTGTGAAACCCCGGCGATAACTCCGGCGAAAAAGTCGTCGGTAGGT---------------AACTTATACAGG---
'A4_gi30690008_TINY_At5g25810 '   -------------------------------------GAAGCTAGCGCAGTCAGACAAGAGAATGAAGAAGAGAAGAAGAAA-----------------------------------
'A4_gi7212005AC023628 '           -------------------------------------GAACCAACCGCCACCGCTTCTGCCGTT---------AAATCTTGCGGCGGA-----------------------------
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'gi|19789524_Physcomitrella '     ---------------------------------------------CTGAAGAGGAATGTGTCCAGCATTGCTAAGAAATCCTCA-----------------------------------
'gi|18348070_Physcomitrella '     ---------------------------------------------GGTGCACCTCATTATCTGTGTCTGGTGAAGAAGCATCAGCAA---------------------------------
'A2_gi30680919_DREB2A_At5g05410 ' --------------------------------------ACCAAGAAGAGGAAAGTACCTGCGAAAGGGTCGAAGAAGGGT-------------------------------------
'A5_gi42562576_RAP2.1_At1g46768 ' ------------------------------------------------------------------ATGAGAAAG-----------------------------------------AGAAGG
'B2_gi30695605_RAP2.12_At1g5391 ' ---------------------------------------------GCCGCTGCGGAAGGTTCAGTTTTTGGTAAGAAAGTTACTGGCTTGGAT---------------------------
'gi|18351137_Physcomitrella '     ------------------GAATCTAGTGAGGCCGGGCCATTAGTGACTCAACAAGTACTAGCCCCGCCTCCAAAGAAA-----------------------------------CGA---
'B4_gi42562554_RAP2.6_At1g43160 ' ---------------------------------------------CCATTGATTACCGGTTCAGCTGTGACTAAA---------------------------------------------
'A1_gi18416558_DREB1A_At4g25480 ' ----------------------------------GGCGGTGATTATATTCCGACGCTTGCGAGCAGCTGCCCCAAGAAA-------------------------------------------
'B1_gi2281634_RAP2.5 '            ------------------------------------------------------------------------------------------------------------
'A3_gi18405311_ABI4_At2g40220 '   -----------------------------------TCCACCACCGACTCATCAACTTCCTCCGCTCAACGCAAA-------------------------------------CGCAAA
'A6_gi2281632_RAP2.4 '            ----------------------------------------------------TTACTGATGAAGCAATCTGGAGTCGCTGGATCTTGT---------------------TTCGCTTACGGT
'B1_gi42562651_AtERF3_At1g50640 ' ------------------------------------------------------------------------------------------------------------
'B5_gi42566428_AF080120 '         ---------------------------------------------GTGGTTTCTGATAAAGAGAAGCCGATGAAGAAGAAGAGAAAGAAG---------------------------CGCGTT

[                                 1081      1091      1101      1111      1121      1131      1141      1151      1161      1171      1181      1191      ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
'At1g16060 '                      CGATCGCAACCA---------------------------CGA---------GACGCTCCACCCCAACGTAGCTCCGTCCATAGAGGCGTCACAAGGCATCGATGGACTGGAAGGTACGAA
Os9g25600                         AAGAGCGTCCCC---------------------------CGC---------GAGTCCCCCTCCCAGCGCAGCTCCGTCTACCGCGGCGTCACCCGGCACCGGTGGACGGGGCGGTTCGAG
Os6g05340                         GAGGCCGGCGGT---------------------------AGC---------AATGCGGCTAACAAGAGAAGCTCAAGGTTTAGGGGTGTGAGCAGGCACCGTTGGACAGGCAGATTTGAG
'wmi01_10ms3_e03_Welwitschia '    GCTTTGGATGGA---------------------------TCT---------CAAAATCCC---CTGAGGACTTCAAAGTTCAAAGGAGTTACCAGGCACAGAATAACAGGCCGGTTTGAG
'nad03_15ms1_h07_Nuphar '         CAGCCTATGCAT---------------------------AGGAAGTCCATTGACACCTTTGGACAGAGAACATCTCAGTATAGAGGGGTTACAAGACACAGATGGACTGGTAGATATGAA
'gi|38492172_Nicotiana '          CAACCTGTTCAT---------------------------AGGAAATCTATTGATACATTTGGTCAGAGAACTCTCAGTATAGAGGTGTCACTAGGCATAGGTGGACAGGTAGGTATGAG
'ltu01_5ms4_a11_Liriodendron '    CAGCCAGTTCAT---------------------------AGGAAGTCCATTGATACATTTGGGCAGAGAACATCACAGTATAGAGGTGTTACAAGGCATAGGTGGACTGGTAGATATGAA
'At4g37750_AINTEGUMENTA '         CAGATTGTTCAT---------------------------AGAAAATCTATCGATACTTTTGGACAACGAACTTCTCAATACCGAGGCGTTACAAGACATAGATGGACTGGTAGATATGAA
'gi46395274__Pinus_PtANTL1 '      GAACCCGTTCCT---------------------------CGCAAGTCAATTGACACTTTCGGCCAACGGACTTCTCAGTACCGCGGTGTGACTAGGCATCGCTGGACGGGACGTTATGAA
'gi|18356869_Physcomitrella '     GATCCGTCCCCC---------------------------CGCAAGTCCATCGATACCTTCGGCCAGAGAACATCTGTGTACAGAGGCGTCACTAGGCATCGTTGGACTGGACGGTACGAG
'gi|21069051_Brassica '           GAAGCTACACCG---------------------------AAGAAAACTATTGAGAGTTTTGGACAGAGGACGTCTATATACCGCGGTGTTACAAGGCATCGGTGGACAGGAAGATATGAG
'gi|21069053_Brassica '           GAAGCTACACCG---------------------------AAGAAAACTATTGAGAGTTTTGGACAGAGGACGTCTATATACCGCGGTGTTACAAGGCATCGGTGGACAGGAAGATATGAG
'gi|18346002_Physcomitrella '     ---CCGTCCCCC---------------------------CGCAAGTCCATCGATACCTTCGGCCAGAGAACATCTGTGTACAGAGGCGTCACTAGGCATCGTTGGACTGGACGGTACGAG
'eca01_6cs1_a05_eca01_13cs2_a02 ' -----------------------------------GTGAAGAAGGCGCTTTATAAGTTTGGTCAAAGAACTTCAAATTATCGTGGAGTGACTAGACATAGATGGACTGGGAAATTTGAA
'At2g41710 '                      ------------------------------------------------------CCGTGCACTGCTGGGAAAAGGAGTTCCATATACCGGGGAGTCACCAGACATAGATGGACAGGTCGTTATGAA
'At1g79700 '                      AAGTCGCCGCCT-------------------------------CGA------AACGCTCCTCTTCAACGCAGCTCCCCTTACAGAGGCGTCACA------AGATGGACTGGGAGATACGAA
Os8g34360                         AGGAGCGCCCCG-------------------------------CGG------GATTGCCCCTCCCAGCGCAGCTCCGCGTTCCGCGGCGTCACACGGCACCGGTGGACGGGGCGGTTCGAG
Os12g03290                        CCTTCTTCCAAT-------------------------------------GGCGGCGGCGGCGGCAAGAGGAGTTCTATCTACAGGGGAGTCACCAGGCATCGGTGGACTGGCAGATTTGAG
Os12g03290_1                      CCTTCTTCCAAT-------------------------------------GGCGGCGGCGGCGGCAAGAGGAGTTCTATCTACAGGGGAGTCACCAGGCATCGGTGGACTGGCAGATTTGAG
'At3g54320 '                      CCTGCTTCTACC-------------------------------------------------------CGACGCAGCTCTATCTACAGAGGAGTCACTAGACATAGATGGACTGGGAGATTCGAG
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Os11g19060                        ATGGAC-------------------------------------------------ACGTTCGGGCAGCGGACGTCCATCTACCGGGGTGTCACCAAGCACAGGTGGACAGGAAGGTATGAA
Os2g40070                         ATGGATTCGCCGGGCGGTGGCGCGATAGAGGCCGTGCCGAGGAAGTCCATCGACACGTTCGGGCAAAGGACCTCGATATATCGAGGTATAACAAGGCATAGATGGACAGGGCGATATGAG
Os6g44750                         AGGACC-------------------------------------------GCCGAGACGTTCGGGCAACGGACGTCCATCTACCGTGGTGTCACTAGGCACCGGTGGACGGGGAGGTACGAG
Os1g67410                         AAGTCC-------------------------------------------GTCGACACGTTCGGCCAGAGAACATCGATCTACCGCGGCGTGACAAGGCATAGATGGACAGGGAGGTATGAG
Os3g56050                         CAGCCGGTGCAC---------------------------CGCAAGTCCATTGACACGTTCGGCCAGAGGACGTCGCAGTACAGAGGCGTCACCAGGCATAGGTGGACTGGGAGATATGAG
Os7g03250                         CAGCCGGTGCACCAC------------------------CGCAAGTCCATCGACACGTTCGGTCAGAGGACGTCGCAGTACAGAGGCGTCACCAGGCATAGGTGGACTGGGCGATATGAG
Os3g12950                         CAGCCTGTTCAC---------------------------CGGAAGTCCATTGACACGTTTGGGCAGAGGACATCGCAGTATAGGGGCGTCACCAGGCACAGGTGGACTGGAAGATATGAA
Os3g07940                         ATGCCGGTGGTC---------------------------CGCAAGCCCGCTCAGACGTTCGGGCAGAGGACGTCACAGTTCCGTGGCGTCACCAGACATAGATGGACTGGAAGATACGAG
'At1g72570 '                      GAATCCGTTCCT---------------------------CGGAAGTCGGTTGATAGTTATGGACAAAGAACTTCTCAGTATCGTGGAGTTACAAGGCATAGATGGACAGGGAGATATGAA
'At5g57390 '                      TCGCCTACTCCG---------------------------AAGAAGAACGTAGAGAGTTTTGGACAACGTACCTCGATTTATAGAGGAGTCACAAGACATAGATGGACTGGAAGATACGAA
'At5g17430 '                      GAAACTACACCG---------------------------AAGAAAACTATTGAGAGTTTTGGACAAAGGACGTCTATATACCGCGGTGTTACAAGGCATCGGTGGACAGGTAGATACGAG
'At1g51190 '                      ACCAACACAAGTGGAGGAGCCATCGTTGAGGCTACACCGAGACGGACTTTGGAAACTTTTGGACAACGAACCTCTATCTATCGTGGAGTTACAAGACATAGATGGACCGGTAGATATGAA
'At3g20840 '                      ---GGTGGAGCACTAGCCGTTGTTGAGACGGCCACGCCAAGACGTGCATTGGACACTTTCGGACAACGAACCTCGATCTATCGTGGTGTCACAAGACATCGATGGACTGGTCGATATGAG
'At5g10510 '                      AAGGCTGTTGTGGCTGTGGAAACATCAGATTGTTCTAATAAGAAGATTGCTGATACGTTTGGTCAAAGGACTTCGATTTACAGAGGTGTTACTCGACATAGATGGACGGGAAGATATGAA
'At5g65510 '                      AAAACAGTTTCTAAGAAGGAAACATCAGATGATTCAAAGAAGAAGATTGTCGAAACATTGGGACAAAGAACTTCAATTTATCGTGGAGTCACCCGACATAGATGGACTGGAAGATACGAA
'ltu01_16ms3_h06_Liriodendron '   ------------------------------------------------------------------------------------------------------------
'ZMtuc03_08_11.12253_Zea '        ------------------------------------------------------------------------------------------------------------
'ZMtuc02_12_23.7359_Zea '         ------------------------------------------------------------------------------------------------------------
Os7g13170                         CTCGGGGTGGCGCAGAGCCAGAGGTCCCCCGCCGGCGGGAAGAAGAGCCGCCGCGGCCCGAGGTCTCGGAGCTCCCAGTACAGGGGCGTCACCTTCTACAGGAGGACCGGGCGATGGGAG
'Barley1_18652_Hordeum '          GCCGAGGAGCTGGTCGTGGCGCAGCGGGTGGCCCCCAAGAAGAAGACGCGGCGGGGGCCGAGGTCGCGCAGCTCGCAGTACCGGGGCGTCACCTTCTACCGCAGGACCGGCCGCTGGGAG
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[                                1201      1211      1221      1231      1241      1251      1261      1271      1281      1291      1301      1311      ]
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'STtuc02_10_23.1438_Solanum '     ----------------------------------------------------------------------------------------------------------------------
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[                                 1321      1331      1341      1351      1361      1371      1381      1391      1401      1411      1421      1431      ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
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'ZMtuc02_12_23.7359_Zea '         ------------------------------------------------------------------------------------------------------------
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'LEtuc02_10_21.9228_Lycopersico ' ----------------------------------------------------------------------------------------------------
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'MTtuc03_04_26.7790_Medicago '    ----------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '     ----------------------------------------------------------------------------------------------------
'STtuc021023.12365_Solanum '      ----------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '         ----------------------------------------------------------------------------------------------------
'Barley1_08369_Hordeum '          ----------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '     ----------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '    ----------------------------------------------------------------------------------------------------
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'SBtuc02_10_21.6764_Sorghum '     ----------------------------------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '     ----------------------------------------------------------------------------------------------------
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'A3_gi18405311_ABI4_At2g40220 '   GTTTACCTATACGGGTCACGT------GCTCAGCTCAACTTAACC-----------------------------------------------------
'A6_gi2281632_RAP2.4 '            TACAAGCTGCGCGGCGATTTC------GCCCGGCTTAACTTCCCT-----------------------------------------------------
'B1_gi42562651_AtERF3_At1g50640 ' CGTAACCTCCGTGGTCCTAAA------GCCAAAACTAATTTCCCC-----------------------------------------------------
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[                                 1441      1451      1461      1471      1481      1491      1501      1511      1521      1531      1541      1551      ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
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'ltu01_5ms4_a11_Liriodendron '    ----------------------------------------------------------------------------------------------------------------
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'ZMtuc02_12_23.7359_Zea '         ----------------------------------------------------------------------------------------------------------------
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'Barley1_18652_Hordeum '          CAGAGCACCGGGTTCGCCAGGGGGAGCTCGAAGTACCGCGGCGTCACG---CTCCACAAGTGCGGCCGCTGGGAGGCAAGGATGGGCCAACTGCTCGGCAAGAAGTACATATATCTTGGG
'gi|18476518_Hordeum '            CAGAGCACCGGGTTCGCCAGGGGGAGCTCGAAGTACCGCGGCGTCACG---CTCCACAAGTGCGGCCGCTGGGAGGCAAGGATGGGCCAACTGCTCGGCAAGAAGTACATATATCTTGGG
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'atr01_4ms1_d10_Amborella '       CAAAGCACTGGTTTCTCGAGAGGGAGCTCCAAATATAGAGGTGTGACA---CTTCACAAATGTGGGCGTTGGGAAGCCCGTATGGGGCAATACCTTGGTAAAAAGTACATCTATCTCGGT
'gi|46395278_Pinus_PtAP2L2 '      CAAAGCAATGGTTTCTCTCGAGGAAGCTCCAAGTATAGAGGCGTCACA---CTGCACAAGTGCGGCCGATGGGAAGCCAGGATGGGACAATTTCTCGGGAAAAAGTATATTTACTTGGGC
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'gi|5081555_Petunia '              CAAAGTACTGGTTTTCCAAGAGGAAGTTCCAAGTATAGGGGGGTTACT---TTGCACAAATGTGGTAGATGGGAAGCTAGAATGGGACAGTTCTTAGGCAAAAAGTACGTTTATTTGGGC
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'gi|28894444_Antirrhinum_LIPLES ' CAAAGTACTGGTTTTCCAAGAGGGAGTTCAAAGTATAGAGGTGTTACT---TTGCACAAATGTGGTAGATGGGAAGCTAGAATGGGCCAGTTTTTAGGCAAAAAGTATGTTTATTTGGGT
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'gi|13173164_Pisum '              CAAAGCACTGGTTTTCCTCGAGGAAGTTCTAAATATAGAGGTGTTACA---TTGCACAAATGTGGAAGATGGGAAGCTAGAATGGGTCAATTTTTAGGAAAAAAATATGTTTATCTGGGC
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'gi|2098818_Zea_mays '            CAGGGCGCCGGCTTCGTCAGGGGCAGCTCCAGGTTCCGGGGAGTCACC---CAGCACAAGTGCGGCAAGTGGGAGGCCAGGATCGGCCAGCTCATGGGCAAGAAGTATGTGTACCTGGGC
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'At5g60120 '                      CAGAGCTCTGGTTTCTCAAGGAATAATTCTAGATATCAAGGAGTTGCT---TTGCAAAAGATTGGCGGGTGGGGAGCT---CAA-------------------------------------
'At2g28550 '                      CAGAGCACGGGGTTTTCGCGGGGGAGTTCGAAGTATCGAGGGGTTACG---TTACACAAATGTGGTAGATGGGAAGCT---AGG-------------------------------------
'gi|5360996_Hyacinthus '          CAGAGCACTGGGTTTTCGAGGGGCAGCTCGAAATATCGAGGGGTGACT---CTCCACAAGTGCGGCCACTGGGAAGCTAGGATGGGCCAATTCCTTGGC---------------------
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'pam01_2ms1_c06_Persea '          CAAAGCACTGGATTCTCTAGGGGAAGTTCAAAATATAGAGGTGTTACG---CTCCACAAATGTGGTCGATGGGAAGCTCGCATGGGTCAGCTCCTTGGCAAGAAGTATATTTATCTTGGA
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'GMtuc03_04_25.28779_Glycine '    CACAGTACCGGTTTCTCAAGGGGCAGTTCGAAATACCGGGGAGTGACA---CTTCACAAATGTGGCCGTTGGGAAGCTCGAATGGGACAATTCCTTGGCAAGAAG---------------
'GMtuc02_10_21.14413_Glycine '    CACAGTACCGGTTTCTCAAGGGGCAGTTCGAAATACCGGGGAGTGACA---CTTCACAAATGTGGCCGTTGGGAAGCTCGAATGGGACAATTCCTTGGCAAGAAGTATATATATCTTGGG
'MTtuc03_04_26.7790_Medicago '    ------------------------------------------------------------------TGTCTTGAATTTATTACACTTAAATTATCAAAGCTCATTAAGAGTCTAACG
'STtuc02_10_23.1438_Solanum '     ------------------------------------------------------------------------------------------------------------------------
'STtuc021023.12365_Solanum '      ------------------------------------------------------------------------------------------------------------TCAACCAACCGG
'nad03_31ms3_d04_Nuphar '         ------------------------------------------------------------------------------------------------------------------GGT
'Barley1_08369_Hordeum '          ------------------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '     ------------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '    ------------------------------------------CGTCAC---CCTGCACAATGCGGCCGGTGGGAGGCGCGCATGGGCCAGTTCCTCGGCAAGAAG---------------
'TAtuc03_04_26.3852_Triticum '    CAGAGCACCGGCTTCTCGCGGGGCAGCTCCAAGTACAGAGGCGTAACC---CTGCACAAGTGCGGCCGGTGGGAGGCGCGCATGGGCCAGTTCCTCGGCAAGAAGTACATATATCTTGGG
'SBtuc02_10_21.6764_Sorghum '     ----------------------------------------------------------------------------------------------GCACGAGGATATCTTGGG
'SPtuc02_10_22.3366_Solanum '     ------------------------------------------------------------------------------------------------------------------------
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'RAV1_gi42562037_At1g13260 '      ------------------------------------------------------------------------------------------------------------------------
'A4_gi30690008_TINY_At5g25810 '   ------------------------------------------------------------------------------------------------------------------------
'A4_gi7212005AC023628 '           ------------------------------------------------------------------------------------------------------------------------
'gi|19789524_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------
'gi|18348070_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------
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'A5_gi42562576_RAP2.1_At1g46768 ' ------------------------------------------------------------------------------------------------------------------------
'B2_gi30695605_RAP2.12_At1g5391 ' ------------------------------------------------------------------------------------------------------------------------
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'B4_gi42562554_RAP2.6_At1g43160 ' ------------------------------------------------------------------------------------------------------------------------
'A1_gi18416558_DREB1A_At4g25480 ' ------------------------------------------------------------------------------------------------------------------------
'B1_gi2281634_RAP2.5 '            ------------------------------------------------------------------------------------------------------------------------
'A3_gi18405311_ABI4_At2g40220 '   ------------------------------------------------------------------------------------------------------------------------
'A6_gi2281632_RAP2.4 '            ------------------------------------------------------------------------------------------------------------------------
'B1_gi42562651_AtERF3_At1g50640 ' ------------------------------------------------------------------------------------------------------------------------
'B5_gi42566428_AF080120 '         ------------------------------------------------------------------------------------------------------------------------

[                                 1561      1571      1581      1591      1601      1611      1621      1631      1641      1651      1661      1671      ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
'At1g16060 '                      ACTTACGCGACGCAAGAAGAAGCAGCTATAGCGTACGATATCGCAGCTATCGAGTACCGTGGACTCAACGCCGTTACTAACTTCGACATCAGCCGTTATCTGAAACTCCCGGTG------
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'wmi01_10ms3_e03_Welwitschia '    ACTTTTGATACTCAGGAAGAAGCTGCN-------------------------------------------------------------------------------------
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'ltu01_5ms4_a11_Liriodendron '    ------------------------------------------------------------------------------------------------------------------------
'At4g37750_AINTEGUMENTA '         ACTTTTGGAACCCAAGAAGAAGCTGCAGAAGCTTACGATGTAGCAGCAATTAAGTTCCGTGGCACAAATGCTGTGACTAACTTTGATATCACGAGGTACGATGTTGATCGTATCATGTCT
'gi46395274__Pinus_PtANTL1 '      ACATTCAGTACCCAGGAGGAGGCTGCAGAGGCCTATGATATTGCAGCCATCAAATTCCGAGGAATTAGTGCAGTGACAAATTTTGATATCAGCAAATATGATGTCCAACGGATATGTTCT
'gi|18356869_Physcomitrella '     ACTTACAGCACTCAAGAGGAAGCAGCGGAGGCCTACGACATAGCTGCCATAAAATATCGTGGAATTAATGCCGTCACAAACTTTCATATCTCTCGTTAC---------------------
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'At1g79700 '                      ACATACGCCACGCAAGAAGAAGCAGCAATCGCCTACGACATCGCGGCAATAGAGTACCGTGGACTTAACGCCGTTACCAATTTCGACGTCAGCCGTTATCTAAAC---------------
Os8g34360                         ACTTATGCAACACAAGAGGAGGCGGCCGTGGCGTACGACATCGCGGCGATCGAGCACCGCGGCCTCAACGCCGTCACCAACTTCGACATCAATCTCTACATCAGGTGGTACCACGGCTCT
Os12g03290                        ACTTTCGATACTCAAGAGGAGGCAGCCAAGGCCTATGATCTTGCTGCAATCGAATACCGAGGTGCCAATGCGGTAACCAACTTCGACATCAGCTGCTACCTGGACCAGCCACAGTTACTG
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Os2g40070                         ACCTTCAGCACCGAGGAGGAGGCGGCGGAGGCGTACGACATCGCGGCGATCAAGTTCCGGGGGCTCAACGCCGTCACCAACTTTGACATGAGCCGCTACGACGTCAAGAGCATCCTGGAG
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Os3g56050                         ACATTCAGCACGCAGGAGGAGGCGGCGGAGGCGTACGACGTGGCGGCGATCAAGTTCCGGGGGCTCAACGCCGTCACCAACTTCGACATCACGAGGTACGACGTGGACAAGATCCTGGAG
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'gi|28894442_Antirrhinum_LIPLES ' CTTTTTGATACTGAAGTTGAAGCTGCCAGGGCTTATGATAAAGCCGCCATCAAATGCAATGGAAAGGAAGCTGTGACCAATTTTGATCCCAGCATTTATGAAGAAGAACTCAAAGCAGCA
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'At2g39250 '                      ------------------------------------------------------------AATGATCACATCCATCTCTTCCAAAACAGCAGCAGCAAAATGCAA------------
'At3g54990 '                      ------------------------------------------------ACCCAATTCAAAACTCATGATCAGATTCATCTCTTCCAAAACAGGTACCATTTTGTTAGACACGTAATCTTT
'At5g60120 '                      ------ATGGAGCAGCTTCATGGAAACATGGGTTGTGACAAGGCAGCCGTACAATGGAAGGGAAGGGAAGCTGCTTCCTTAATTGAGCCTCATGCATCCCGAATGATTCCCGAGCTAATG
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'MTtuc03_04_26.7790_Medicago '    CAATACGTTTCTCTCTTTCCGGAAATCAAGGCTTATGACAAAGCAGCTCTAAAATGCAATGGAAGAGAGGCTGTGACTAACTTCGAGCCAAGTACATATGAAAATGAGATGAAACCGGGA
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'Barley1_08369_Hordeum '          ---------------------------------TACGACAAGGCGGCGATCAAATGCAATGGTAGAGAGGCCGTGACGAACTTCGAGCCGAGCACCTATGATGCGGAGCTGCTCAATGAA
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'A2_gi30680919_DREB2A_At5g05410 ' ----------------------------------------------------------------------------------------------------------------------
'A5_gi42562576_RAP2.1_At1g46768 ' ----------------------------------------------------------------------------------------------------------------------
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'B4_gi42562554_RAP2.6_At1g43160 ' ----------------------------------------------------------------------------------------------------------------------
'A1_gi18416558_DREB1A_At4g25480 ' ----------------------------------------------------------------------------------------------------------------------
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[                                 1681      1691      1701      1711      1721      1731      1741      1751      1761      1771      1781      1791      ]
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'At3g54990 '                      ------------------------------------------------------------------------------------------------------------------
'At5g60120 '                      TTAAGCTCGACCTCAACTTGGGAATCTCTCTTTCAC-----------------------------------------------------------------------------------
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[                                 1801      1811      1821      1831      1841      1851      1861      1871      1881      1891      1901      1911      ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
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'gi|46395278_Pinus_PtAP2L2 '     ATCGTTGTCGAACCCGACTGGAAGAAAGCTCGTTGTGCCATTTCTACGCCGGAAGATGCAAGTCAGCAGACTCAATTGGAAGCACCGTTCTCATATGGGCAATTGGGCCCGTACACTGGA
Os4g55560                        ------------------------------------------------------------------------------------------------------------------
'LEtuc02_10_21.9228_Lycopersico ' ------------------------------------------------------------------------------------------------------------------
'gi|5081555_Petunia '            AATAGAGGTCAAAATCCTTCCTCAATGCAATTCGATGTTGATTGGAGGCATAACGGGTTAAGGCCTGAGAAG------CAAACTGCACCAGTTGATATGGATGCT------CGACGAAGA
'LEtuc02_10_21.11399_Lycopersic ' AATAGGGGTCAAAATTCTTCATCTAATTTGCAATTGGATGGCCATTGGGGC-------------------------------------------------------------
'gi|28894444_Antirrhinum_LIPLES ' ---GACAATCATTCTTCGTCGTCGATGCAATTGGAGGCTGATTGGAGA------CAATGGAAGCCTGAGCAA------CAATTGACCTCAAACAACGTCGGTAACCCTGGG---AAACAA
'gi|28894442_Antirrhinum_LIPLES ' TTTGTAGACCAGCCTTCTTCGTCAATGACATTTGAAGTTGATTGGAGACGCCACGGATTGAAGCCTGAGAAC---------CACATGACTTCGACCGACATTGATAATCCCCGGAGAAGA
'gi|21717332_Malus '             ATGGAACACCAGCATTCTGTCTCGATGCAACTTGATGCCAATTGGAGGAGTCAAGGACTTCGGCCTAAGCTTAACATACAACGAGATCGATCAAGAGACGACATTGATGCTCAGAGAAGA
'gi|13173164_Pisum '             AATGTTGCAAATCATGATCAATCTAATTGGCAGAATGGGGGGAACATAAACAAGCCTAAGCTTGTGAATATTTTACCAAAACCATATAATAGACCAAACAACATGGAACCATATGGAAGA
'At5g67180 '                     ------------------------------------------------------------------------------------------------------------------
'At4g36920_APETALA2 '            AGGATGAACCAACAACAACAAGATTCTCTCCACTCTAATGAAGTTCTTGGATTAGGT-----------------------------------------------------------
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Os6g43220                        ------------------TCCGGTGGCGAACGGGCCGCCGGCGAGGTCCTCCACTCTGCACCAAGC-------------------------------------------------------
'gi|2098818_Zea_mays '           ------------------------------------------------------------------------------------------------------------------
'gi|11181612_Picea '             AGTCAACTGAATCGAATTGAAGCTGTAACCTATTCAAACCTTTCACAGGATTCAAAGATTTTGTCATGTCTCACATCTAAAGGGGCCGAGAACGCTGTACCAGAGTTTCAGTCGTTGCCT
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'gi|11181610_Picea_abies '       ------------------------------------AAGGACAATAACGATGGCCCAATGAGATCAGAGTCTGATTTATGCACTTTGTCTGAACCTGATTGGAAGACATCCTGC------
'GMtuc03_04_25.877_Glycine '     ----------------------------------------------TTTGGA-----------------------------------------------------------
'GMtuc03_04_25.876_Glycine '     ------------------------------------------------------------------------------------------------------------------
'At2g39250 '                     ------------------------------------------------------------------------------------------------------------------
'At3g54990 '                     ------------------------------------------------------------------------------------------------------------------
'At5g60120 '                     ------------------------------------------------------------------------------------------------------------------
'At2g28550 '                     ------------------------------------------------------------------------------------------------------------------
'gi|5360996_Hyacinthus '         ------------------------------------------------------------------------------------------------------------------
'pam01_2ms1_c06_Persea '         ------------------------------------------------------------------------------------------------------------------
'gi|5081557_Petunia '            ------------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.28779_Glycine '   ------------------------------------------------------------------------------------------------------------------
'GMtuc02_10_21.14413_Glycine '   ------------------------------------------------------------------------------------------------------------------
'MTtuc03_04_26.7790_Medicago '   ------------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '    ------------------------------------------------------------------------------------------------------------------
'STtuc021023.12365_Solanum '     ------------------------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '        ------------------------------------------------------------------------------------------------------------------
'Barley1_08369_Hordeum '         ------------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '    ------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '   ------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '   ------------------------------------------------------------------------------------------------------------------
'SBtuc02_10_21.6764_Sorghum '    ------------------------------------------------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '    ------------------------------------------------------------------------------------------------------------------
'RAV2_gi30697755_At1g68840 '     CGGCAG-------------------------------------------------TTGTTTCTCTCCGTCGACGCTAACGGAAAACGTAAC---------------------------
'RAV1_gi42562037_At1g13260 '     CGTCGTAATGGTAACGGAAAC-----------------------------------ATGACTAGGACGTTGTTAACGTCGGGGTTGAGTAAT---------------------------
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'A4_gi7212005AC023628 '          GATGACGTGGCAGGA-----------------------------------------------ATAGACGACGGAGATGATTTCTGGGAAGGC---------------------------
'gi|19789524_Physcomitrella '    TCGCCGCGCGAA----------------------------GTC---------------CAAGCGGCAGCGACCGCAGCCGCCGTGGCATGC-----------------------------
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'gi|18348070_Physcomitrella '     ---------------------------------------------------------CAATCTGTT-----------------------------------------------------
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'A5_gi42562576_RAP2.1_At1g46768 ' GCGGAGGTCGGC-------------------------------------------------------GCCAGAGTCGACGCTCTTCTAGCTTCT---------------------------
'B2_gi30695605_RAP2.12_At1g5391 ' TCCTTTGAAAATATGTGTTTCATGGAGGAGAAACACCAAGTGAGCAACAACAACAACAACCAGTTTGGGATGACAAACTCCGTTGATGCTGGATGTAATGGG------------------
'gi|18351137_Physcomitrella '     GCTTCGCAACCGGAG-------------------------------------------------------------TCTTCACCT-------------------------------------
'B4_gi42562554_RAP2.6_At1g43160 ' TTATCTTACTCTCGA---------------------------------------------TGTATGGAGCAACAACAACCATTAGTAGGC-------------------------------
'A1_gi18416558_DREB1A_At4g25480 ' ACGACGGATCATGGC-------------------------------------------------------TTCGACATGGAGGAGACGTTGGTGGAGGCT---------------------------
'B1_gi2281634_RAP2.5 '            ACGGCTGGGAAT---------------------------GTTCCCCCGCAGCTCGAGCTTAGTCTCGGCGGAGGAGGCGGCGGCTCGTGTTAT-----------------------------
'A3_gi18405311_ABI4_At2g40220 '   GCCACCGTAGGAGGAGGAGCCAACTTTGGTCCGTACGGTATCCCTTTTAACAACAACATCTTCCTTAATGGTGGGACCTCTATGTTATGCCCTAGTTATGGTTTT---------------
'A6_gi2281632_RAP2.4 '            ACTCAGAAACAGGACAAATCG------------------ACGAAATCATCGAAGAAACGTGAGAAGAAGGTTTCGTCGCCAGATCTATCGGAGAAAGTG----------------------
'B1_gi42562651_AtERF3_At1g50640 ' GACCATCAACAACAGTTCCCG------------------------ATTGTTAACCGGCCTACTAGTAGCAGCATGAGCAGCACCGTTGAATCGTTTAGC----------------------
'B5_gi42566428_AF080120 '         TTCTCCGGCGAGTCTACTGCGGTTAAAGAGGAGTTTGTCGGTGTATCGACGGCGGAGATTGTGGTTAAAAAGGAGCCGTCTTTTAACGGTTCAGAT------------------------

[                                 1921      1931      1941      1951      1961      1971      1981      1991      2001      2011      2021      2031      ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
'At1g16060 '                      --------------------------------------------------TCACAGAGTCAATCTTCGTCAGAGGACAACGATGATCGGAAAACAAAGCTCTTGAAGTCGTCACCTTTA
Os9g25600                         --------------------------------------------------ACGTCGGCGCTCAGCCTGCTGCTGCAGTCGCCCAAGTTCAAGGAGATGATCGAGCGGACGTCGGCGGCG
Os6g05340                         --------------------------------------------------ACCACGGCGCTCAGCCTGCTGCTCCGGTCGTCGATGTTCCAGGAGCTCGTGGCGCGGCAGCCCGTCGTG
'wmi01_10ms3_e03_Welwitschia '    ----------------------------------------------------------------------------------------------------------------------
'nad03_15ms1_h07_Nuphar '         ----------------------------------------------------------------------------------------------------------------------
'gi|38492172_Nicotiana '          ------------------------------------------TTACAAGATCTAATCGGTATTGATTTGATGAATTCAAGCAACCATCCAATTCTTGATGATCAACAA------------
'ltu01_5ms4_a11_Liriodendron '    ----------------------------------------------------------------------------------------------------------------------
'At4g37750_AINTEGUMENTA '         ----------------------------------------------------------------------------------------------------------------------
'gi46395274__Pinus_PtANTL1 '      ------------------------------------------GATAAAATTGCTCAAGATTGGCAGCTTATGGATTCCAATTCCGAGCAAGACCAACACAAGGTGTTC------------
'gi|18356869_Physcomitrella '     ----------------------------------------------------------------------------------------------------------------------
'gi|21069051_Brassica '           ------------------------------------------TCTTCGGAGAGTGCTAGGGCTTGTTTCAAACAAGAGGATGATCAACACCATTTCTTGAGCAACACG------------
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'gi|18346002_Physcomitrella '     ----------------------------------------------------------------------------------------------------------------------
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'At2g41710 '                      ------------------------------------------AACGATGAGAATGCAAACCGTAACATCATCAATATGGAGAAGAATAACGGCAAGGCAATAGAGAAACCAGTTGTGAGT
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'At3g54320 '                      ----------------------------------------------------------------------------------------------------------------------
Os1g59780                         --------------------------------------------------ATCCTGCCGGCGCTCTGCATGGACCGCGCCGACTTCGAGGCCAGGTACCCTGCCCGCCGCGCCCGCGAC
Os11g19060                        GGCCAGCCC---------------AGGGCATGGTTGAAACAAGAGCAGGACAGCTCTGTGGTTACAGCGGCGCAGAACCTGCACAATCTACATCATTTTAGTTCC---------------
Os2g40070                         GGCCAGGCGCCGGCGGCGCCGTCGCGCGGGTGGTGCAAGCCCGAGCAGGACGCCGCCGTCGCTGCCGCCGCGCACAGCCTCCAGGACCTCCAGCAGCTGCACCTCGGC------------
Os6g44750                         ----------------------------------------TCGGAGAAGGACTACTGGTCCCTCCTTGCCCTGCAC-------------TACCACCACCACCAGCAG---------------
Os1g67410                         GCGCAGCCGCTG------------CGTGGGTGGTGCAAGCAGGAGCAGGACCACGCCGTGATCGCGGCGGCGCACAGCCTGCAGGATCTCCACCACCTCAACCTCGGCGCCGCCGCCGCC
Os3g56050                         ------------------------CATGACCTCCTGCCGAGCGACGCCTTCTCGGTGCTGCAGGACATCGTGTCGACCGTGGACGCGGCGGGCGCGCCGCCGCGC---------------
Os7g03250                         ------------------------GCCGAC---------CAGGCCGCATTCTCCGTCCTCCACGACCTCGTCGCCGTCGACGCCGCGGCGGCGCACCAGCAGCAGCAG------------
Os3g12950                         GCT---------------------------------------CTCCACGGCATTGTCGGGTTCGACGTCGAGTCGGCGGCAGCTGACGAGATCGATGTCCCGGGAGGG------------
Os3g07940                         CAG---------------------------------------TACGCGCACGCCATGAAGTTCGAGGCCGGCGAGAGCAGCGGCGGCGGCGGCGGAGACGGCGCCACC------------
'At1g72570 '                      ----------------------------------------------------------------------------------------------------------------------
'At5g57390 '                      ------------------------------------------AACCCGAAAGCAGAAATGCGACCATTAGCAAACTTTGGGTCGGATCTTCATAACCCTTCTCCTGGT------------
'At5g17430 '                      ------------------------------------------TCTACCGAGAGTACTAGGGTTTGTTTCAAACAAGAGGAGGAACAACAACACTTCTTGAGAAACTCG------------
'At1g51190 '                      CAGAACAACAACGATATCTCTCAGTATCATGATTCCTTT---------AGTTACATTCAGACGCAGCTTCATCTTCACCAACAACAAACCAACAATTACTTGCAG------TCTTCTAGT
'At3g20840 '                      CATTACAACAACAACAATGCTCACGATTCCTCCTCTTTTAATCACCATAGCTATATCCAGACACAACTTCATCTCCAC---CAACAGACCAACAATTACTTGCAGCAACAGTCGAGCCAG
'At5g10510 '                      ------------------------------------------TCTCAACAGATCATTCCTTGTGGAATCCCTTTTGAAGCAGCTGCTCTTTACCACCACCACCAACAA------------
'At5g65510 '                      ------------------------------------------AACCCTAACTCAATCCCATGTGGCATTCCATTTGAGCCTTCAGTTCTCTATTACCAC---------------------
'ltu01_16ms3_h06_Liriodendron '   ----------------------------------------------------------------------------------------------------------------------
'ZMtuc03_08_11.12253_Zea '        ------------------------------------------GATGGTACCCTGACTGGTTTTGGATTAAGTTGTAATTCTCCTGAAGCTTCAAGCTCCATTGTTTCTCAGCCAATGGGC
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Os7g13170                         ------------------------------------------GATGGTACCCTAACTGGGTTCCAGTTGAATTGTGATTCTCCTGAAGCTTCAAGTTCTGTTGTTACTCAGCCAATAAGT
'Barley1_18652_Hordeum '          ------------------------------------------GACAACATCATCGCCGGCCTTCAGTTAACTTTTGATTCCCCTGAGTCGTCAACCACAATGGTCTCCTCTCAGCCAATG
'gi|18476518_Hordeum '            ------------------------------------------GACAACATCATCGCCGGCCTTCAGTTAACTTTTGATTCCCCTGAGTCGTCAACCACAATGGTCTCCTCTCAGCCAATG
'TAtuc03_04_26.7877_Triticum '    ------------------------------------------GACAACATCATCGCCGGCCTTCAGTTAACTTTTGATTCCCCTGAATCGTCAACCACAATGATCTCTTCTCAGCCAATG
'atr01_4ms1_d10_Amborella '       ------------------------------------------------------------------------------------GATGGAGCAGGTGGAGGTACACTCTTCTCT
'gi|46395278_Pinus_PtAP2L2 '      TTGCAGGATAGAGAGACCTTTTCCAGCCAAGGGAAGCAAACGCCAATTACATTTTTGCCCCGGTATCAAGTTCATCATCCAAATTCGGAGAAGATCCAAGTCAATGGCACCTTGAATCAT
Os4g55560                         ------------------------------------------------------------------------GACGACGAGATCACCGGCGGCGGTGGCGGTGGCACGGGCTCC
'LEtuc02_10_21.9228_Lycopersico ' ----------------------------------------------------------------------------------------------------------------------
'gi|5081555_Petunia '             GATAATGGGTACAATGAATCAGAAACGTTGCAG---------TTATTGAGCAAAACGCACCTACATTCTCCAGTCTCTTTGAAGCATAATAATAGTCATCAATTACAACGGTTTGGCCAA
'LEtuc02_10_21.11399_Lycopersic ' ----------------------------------------------------------------------------------------------------------------------
'gi|28894444_Antirrhinum_LIPLES ' ---TACGGATACAACGAGACGGAGACCTTG------------CAACTTCTAAGCCAAACACATCTCCACTCTCCT------CTGAAAGTGAACAACGAAATGCACAGATTTGGACAATTG
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'gi|28894442_Antirrhinum_LIPLES ' GATAATGGTTATAGTGAAACAGAAACTTTG------------CAGCTCTTAAGCCAAACACATCTTAATTCTCCCGGCATGTTGAAGGCTAACGACGAAAGGCACAGATTTGGACAACTG
'gi|21717332_Malus '              ---GACGGGTACTCGGAGAGTGAAGCCATG------------CAGCTTCTACTCCGAACAAACCTTCAATCTCAAGCCCCAGCTGAAGTACATAAATATGGG---CAGTTCAACAGGAGG
'gi|13173164_Pisum '              ---GATTTGCATGGAGAGAATGAAGCACTG------------AGAATGCTAAGTCAAACTCATCTTCAATCTTCGTCGCCAAACGGTATTCATCGATACGGG------------------
'At5g67180 '                      ------------------------------------------------------------------------------------------------------------------------
'At4g36920_APETALA2 '             ------------------------------------------------------------------------------------------------------------------------
Os7g39110                         ------------------------------------------------------------------------------------------------------------------------
Os6g43220                         ------------------------------------------------------------------------------------------------------------------------
'gi|2098818_Zea_mays '            ------------------------------------------------------------------------------------------------------------------------
'gi|11181612_Picea '              CGTGGTCATGCTGTATATTGGAATTCTCAG------------ACGCTGCAAGTTCCAGACGCCATGAAACACAAACAATCTCACACGAGGGAGGATAATGCTTATGAGCAAACTGCAATA
'gi|46395276_Pinus_PtAP2L1 '      ------------------------------------------------------------------------------------------------------TTGACTCAGCCAACGGTTCCA
'gi|11181610_Picea_abies '        ------------------------------------------------------------------------------------------------------CTGATTAAGCCTACGGTTCCA
'GMtuc03_04_25.877_Glycine '      ------------------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '      ------------------------------------------------------------------------------------------------------------------------
'At2g39250 '                      ------------------------------------------------------------------------------------------------------------------------
'At3g54990 '                      ------------------------------------------------------------------------------------------------------------------------
'At5g60120 '                      ------------------------------------------------------------------------------------------------------------------------
'At2g28550 '                      ------------------------------------------------------------------------------------------------ACTTATGAAACTCAGCGTGGAGTTAGCTTGAGGATAGAT
'gi|5360996_Hyacinthus '          ------------------------------------------------------------------------------------------CCAGTTGGCGTCCAGTTCCATTTGGGCTCCTTCGAA
'pam01_2ms1_c06_Persea '          ------------------------------------------------------------------------------------------------------TTCAGATGCAGC------CCA
'gi|5081557_Petunia '             ------------------------------------------------------------------------------------------------TCTGAATTCCAATGTGCCTCAATTGGT
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'GMtuc02_10_21.14413_Glycine '    ------------------------------------------CAGTCCATCCCT------TACAACATGCATCCTGGAAGAAGTTCAATGATGGAGACTAATATTAATTCCGTTATTGGT
'MTtuc03_04_26.7790_Medicago '    ------------------------------------------CAGACCGTCCCTTCT---TACAACATGCATCCTGGAAGGAATTTAAAGATGGAGACTAATGTTAATTCAGTTATTGGT
'STtuc02_10_23.1438_Solanum '     ------------------------------------------CGCTATCATCCT------TATGATATGCAAGACGCAACCAAACCTAAGATGGATAAACCTGGTTCAGTAATAGTTGGA
'STtuc021023.12365_Solanum '      ------------------------------------------CAGTATCATCCT------TATGATATGCAAGAAGCAACAAAATCACAGATGGACAAATCTGGTTCACCGATTGTTGGT
'nad03_31ms3_d04_Nuphar '         ------------------------------------------CGTTTGCAATGTGGCAATTTCGAGTCGCCTGAGTTTAAGAAACCAAGGATGGAGACGGCTTCTCATACGGCATCGGCC
'Barley1_08369_Hordeum '          ------------------------------------------CAGCTCCACCATGGATCATATGAAGGCTCTGAACTAAAGAGACCAAAGGTCGATGCCCCCCCTGAGATGGTCGCAATC
'HVtuc02_11_10.2029_Hordeum '     ------------------------------------------CAGCTCCACCATGGATCATATGAAGGCTCTGAACTAAAGAGACCAAAGGTCGATGCCCCCCCTGAGATGGTCGCAATC
'TAtuc03_04_26.3851_Triticum '    ------------------------------------------CAACTCCACCATGGATCATATGAAGGCTCTGAACTAAAGAGACCAAAGGTCGATGCTCCCCCTGAGATGGTCGCAATC
'TAtuc03_04_26.3852_Triticum '    ------------------------------------------CAACTCCACCATGGATCATATGAAGGCTCTGAACTAAAGAGACCAAAGGTCGATGCTCCCCCTGAGATGGTCGCAATC
'SBtuc02_10_21.6764_Sorghum '     ------------------------------------------CAGCTCCACCATGGATCATTTGAGGGCTCCGAATCGAAAAAAACAAAGATTGATACTCCCTCTGAGCTGTCGGGCCAC
'SPtuc02_10_22.3366_Solanum '     ------------------------------------------CAGCTCCACCATGGATCATTTGAGGGCTCCGAATCGAAAAAAACAAAGATTGATACTCCCTCTGAGCTGTCGGGCCAC
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'RAV1_gi42562037_At1g13260 '      ------------------------------------------------------------------------------------------------------------------------
'A4_gi30690008_TINY_At5g25810 '   ------------------------------------------------------------------------------------------------------------------------
'A4_gi7212005AC023628 '           ------------------------------------------------------------------------------------------------------------------------
'gi|19789524_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------
'gi|18348070_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------
'A2_gi30680919_DREB2A_At5g05410 ' ------------------------------------------------------------------------------------------------------------TATTGGAGTGATATTCTG
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'B4_gi42562554_RAP2.6_At1g43160 ' ------------------------------------------------------------------------------------------------------------------------
'A1_gi18416558_DREB1A_At4g25480 ' ------------------------------------------------------------------------------------------------------------------------
'B1_gi2281634_RAP2.5 '            ------------------------------------------------------------------------------------------------------------------------
'A3_gi18405311_ABI4_At2g40220 '   ------------------------------------------------TTCCCTCAACAACAACAACAACAAAATCAGATGGTCCAGATGGGACAATTCCAACACCAACAGTATCAGAAT
'A6_gi2281632_RAP2.4 '            ------------------------------------------------------------------------------------------------------------------------
'B1_gi42562651_AtERF3_At1g50640 ' ------------------------------------------------------------------------------------------------------------------------
'B5_gi42566428_AF080120 '         ------------------------------------------------------------------------------------------------------------------------

[                                 2041      2051      2061      2071      2081      2091      2101      2111      2121      2131      2141      2151      ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
'At1g16060 '                      GTGGCAGAGGAGGTAATCGGACCATCGACGCCACCTGAGATTGCTCCGCCT-------------------------------------------------------------
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Os6g05340                         GAAGGCGACGACGGACAGTTGGCGGTGGTGTCGGGCGACGACGCCGACGCCGAC----------------------------------------------------------------
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'nad03_15ms1_h07_Nuphar '         ------------------------------------------------------------------------------------------------------------------------
'gi|38492172_Nicotiana '          ---------------AACAAGATTGGTAACCATTTTTCAAATGCTTCATCTTTGGTTACCAGCCTTGGCAGTTCAAGAGAAGCAAGTCCTGATAAAAGTGCAGCCTCT------------
'ltu01_5ms4_a11_Liriodendron '    ------------------------------------------------------------------------------------------------------------------------
'At4g37750_AINTEGUMENTA '         --------------------------GGAAATATGAGTCCTTGGACATCAAACCCTAAT------------------------------------------------------
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'gi|18356869_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------
'gi|21069051_Brassica '           ---------------CAGAGCCTCATGACTAATATCGATCATCAAAGTTCTGTTTCGGATGATTCGGTTACTGTTTGTGGAAATGTTGTTGGTTATGGTGGTTATCAAGGATTTGCAGCC
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'gi|18346002_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------
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'eca01_6cs1_a05_eca01_13cs2_a02 ' ----------------------------------------------------------------------------------------------------------------------
'At2g41710 '                      CATGGAGTTGCTTTAGGCGGTGCTGCTGCTTTGTCTCTTCAGAAAAGCATGTACCCACTTACCTCTCTCTTAACGGCTCCATTGCTCACCAACTACAATACATTGGATCCT---------
'At1g79700 '                      ---TCAGAGGAAGTAATCGAACCATCTACATCGCCGGAAGTGATTCCAACT-----------------------------------------------------------------
Os8g34360                         GCGGCGTCGTCCTCTGGTAGCAGCAGTAGCAGCAGCACAGACTCACCTTCTTCTTCGTCGTCGTCATCGCTGTCGCCGTCGCCATTGCCATCGCCGCCGCGCAGCAGCAGCCAACCGTA
Os12g03290                        GATACAATGCCTGGGGCTTACTTCAGCAACTCGATGAATTTCAGTGAATGGTTCAATGATGAGGCATTCGAAGGCGGCATGGAGTACCTATTTGAAGGGTGCTCCAGTATAACTGAAGGC
Os12g03290_1                      ----------------------------------------------------------------------------------------------------------------------
'At3g54320 '                      ----------------------------------------------------------------------------------------------------------------------
Os1g59780                         GCCGCCGCCGACGGCTGGTCGACGTCGTCGGACGACGTCGCCGCCGCCTCCGTCGACGATGACGTGCTGCGTAGC------------CTGCCAGACGACGTGGGCTTCGTCGACGACGTC
Os11g19060                        ---------------TTGGGCTACACCCACAACTTCTTCCAGCAATCTGATGTTCCAGACGTCACAGGTTTCGTTGATGCGCCTTCGAGGTCCAGTGACTCATACTCCTTCAGGTACAAT
Os2g40070                         ---------------AGCGCCGCCGCCCACAACTTCTTCCAGGCGTCGTCGAGCTCGACGGTCTACAAC-----------------------------------------------GGC
Os6g44750                         ------------------CAGCAGCAGCAGCAGCAGTTTCCTGCTTCTGCATTTGAC------ACCTACGGCTGCTCCTCCGGCGTGAACGTGGACTTCACAATGGGGACTAGCAGCCAC
Os1g67410                         GCGCATGACTTCTTCTCGCAGGCGATGCAGCAGCAGCACGGCCTCGGCAGCATCGACAACGCGTCGCTCGAGCACAGCACCGGCTCCAACTCCGTCGTCTACAACGGCGACAATGGCGGC
Os3g56050                         ------------------GCGCCGCACATGTCGATGGCGGCGACGAGC---------------CTGGGCAACTCCCGGGAGCAGAGCCCTGACAGGGGCGTCGGC---------GGCGGC
Os7g03250                         ---------------CAGCAGCAGCACATGTCCATGTCGGCGGCGTCGTCGCTGGTGACGAGCCTGAGCAACTCGCGCGAGGGGAGCCCCGACCGCGGCGGCGGC---------------
Os3g12950                         ---------------AAGATCAGTGGCATCAACTTCTCGAACTCGTCTTCGCTGGTGACTAGCCTGAGCAACTCGAGGGAGGGGAGCCCTGAGAGGCTTGGCCTCGCC------------
Os3g07940                         ---------------ACCAACTGGATGGCCGCCGCCGCCGCCGCGGCGCGC-----------------------------------------------------------------
'At1g72570 '                      ----------------------------------------------------------------------------------------------------------------------
'At5g57390 '                      ---------------TATGCTATAATGCCGGTAATGCAGGAAGGTGAAAACAACTTTGGTGGTAGTTTTGTTGGGTCTGATGGGTATAACAATCATTCCGCTGCATCGAAC---------
'At5g17430 '                      ---------------CCGAGTCACATGACTAATGTTGATCATCATAGCTCGACCTCTGATGATTCTGTTACCGTTTGTGGAAATGTTGTTAGTTATGGTGGTTATCAAGGATTCGCAATC
'At1g51190 '                      CACACTTCACAGCTCTACAATGCTTATCTTCAGAGTAACCCTGGTCTGCTTCATGGATTTGTCTCT------------GATAATAACAACACTTCAGGG----------------------
'At3g20840 '                      AACTCTCAGCAGCTCTACAATGCGTATCTTCATAGCAATCCGGCTCTGCTTCATGGACTTGTCTCTACCTCTATCGTTGACAACAATAATAACAATGGAGGCTCTAGTGGGAGCTACAAC
'At5g10510 '                      ------------CAACAGCAACACCAACAGCAGCAGCAGCAACAGAACTTCTTCCAGCATTTTCCGGCGAATGCAGCTTCTGACTCGACCGGGTCTAACAACAACTCC------------
'At5g65510 '                      ----------------------------------------CAGAACTTCTTTCAGCATTATCCTTTG------GTCTCTGACTCTACA-----------------------------
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'ZMtuc02_12_23.7359_Zea '         TCA------TCATCCCCTTGGCCCGGGTATCACCAAAACCCAGCAGTGTCATTT---CACCATCAGCGCTTGTACTCGTCAGCTTGTCATGGCTTCTTTCCGAAC---CACCAGGTCCAG
Os7g13170                         ------------CCTCAGTGGCCTGTGCTTCCTCAGGGCACATCGATGTCC------CAGCATCCACATTTATATGCATCTCCTTGTCCGGGCTTCTTTGTGAACCTCAGGGAAGTACCT
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'TAtuc03_04_26.7877_Triticum '    AGCTCATCTTCGTCCCAGTGGCCTGTGCATCAACATGGCACGGCAGTAGCACCTCAGCAGCACCAGCGTTTGTACCCATCTGCTTGTCATGGCTTCTACCCGAACGTACAGGTGCAGGTG
'atr01_4ms1_d10_Amborella '       TCTTTATCGGTATCTTTCTGT-----------------------------------------------------------------------------------------------
'gi|46395278_Pinus_PtAP2L2 '       AATCCAATGAGGCTTCTTCCCAACCCTAAAGATGACAGCATACACCTTACGCTGGAACAACAGGGCCTATGGAGCAGAGTTTGTCCTCCGTCCTTTGCTAATTACAAGCTATACAGCCCC
Os4g55560                         GACCAGCGCGTCCCTATGGCGTTCGACCTTGACTGG---CAAACGGCGGCGGCGAGGAGCACCAAAGCTAAGTTCTTGAGCAATGGTGATCCGGGGACAGCGGGAGGCCTGTCACTGACG
'LEtuc02_10_21.9228_Lycopersico ' ----------------------------------------------------------------------------------------------------------------------
'gi|5081555_Petunia '              TATATGAGACCTGGTGAATCCCATATGATTCAAATGTTTCCACCACAATTCGGCTCATCAAATTATCAGATTCAATTTCCAAGCGGCAGCAATGGAGGTCGAATTGGAGCTACAAATGTA
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Os6g43220                         ------------------------------------------------AACCAGAGGACGAGCCTGACGTTCATGCTGCCGGAGGAGGAGGAGATGACC----------------------
'gi|2098818_Zea_mays '            ----------------------------------------------------------------------------------------------------------------------
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'GMtuc03_04_25.877_Glycine '      ----------------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '      ----------------------------------------------------------------------------------------------------------------------
'At2g39250 '                      ----------------------------------------------------------------------------------------------------------------------
'At3g54990 '                      ----------------------------------------------------------------------------------------------------------------------
'At5g60120 '                      ----------------------------------------------------------------------------------------------------------------------
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'HVtuc02_11_10.2029_Hordeum '     CCTCATCGGTACCCCGTTCTGACC------------GAGCATCCACCAATCTGGCATGGCCAATCATATCCCCTCTTCTTAAATAATGAG------------------------------
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[                                 2161      2171      2181      2191      2201      2211      2221      2231      2241      2251      2261      2271      ]
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'At1g16060 '                      ------------------------------------------------------------------------------------------------------CGTCGGAGCTTCCCGGAAGAT
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'wmi01_10ms3_e03_Welwitschia '    ------------------------------------------------------------------------------------------------------------------
'nad03_15ms1_h07_Nuphar '         ------------------------------------------------------------------------------------------------------------------
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'ltu01_5ms4_a11_Liriodendron '    ------------------------------------------------------------------------------------------------------------------
'At4g37750_AINTEGUMENTA '         ------------------------------------------------------------------------------------------------------------------
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'gi|18356869_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------
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'gi|18346002_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------
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'At2g41710 '                      ------------------------------------------------------------------------------------------------------------------
'At1g79700 '                      ------------------------------------------------------------------------------------------------------CGCCGGAGCTTCCCCGACGAT
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Os3g56050                         GGCGGCGGCGGCGTCCTCGCCACGCTGTTCGCCAAG---------CCCGCGGCGGCGTCGAAGCTGTACAGCCCGGTGCCGCTGAACACCTGGGCCTCGCCCTCGCCGGCGGAACAACGT
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Os3g07940                         ------------------------------------------------------------------------------------------------------------------
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'At3g20840 '                      ACTGCAGCA----------------------------------------------TTTCTTGGGAACCACGGTATTGGTATTGGGTCCAGCTCGACTGTTGGATCG------ACCGAGGAG
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'ltu01_16ms3_h06_Liriodendron '   ------------------------------------------------------------------------------------------------------------------
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'LEtuc02_10_21.9228_Lycopersico ' ------------------------------------------------------------------------------------------------------------------------
'gi|5081555_Petunia '             GGAGATTTA---------------------------------------------------------TCGCTCTCGAGCAGCAATGCTTCTTCACAATGGCAATCCAATTTACCTCCTCAA
'LEtuc02_10_21.11399_Lycopersic ' ------------------------------------------------------------------------------------------------TTTCAAAATAATTATGAG
'gi|28894444_Antirrhinum_LIPLES ' AGTAGTACTAATGTTGTTATAAATGGAAAAAGTGTT------------------GGAGGAGTAGGAGAAGCATCATCTGTATCAAGAAATGAACAGCAATGGCAAATGAATTATCATCAT
'gi|28894442_Antirrhinum_LIPLES ' AGTGGCAGC------------------AGAAATGTC------------------AATGGAGGAGAATTTAATAATTACGTAGCAAGAAATGAACAGCAATGGCAAATGAATCATCATCAG
'gi|21717332_Malus '              TCACTGTCA-----------------------------------------------------------------ACGAGCGACCACCAACAACAATGGCAATCCGCAACTCCGACCTCCAAT
'gi|13173164_Pisum '              TTATCAACA-----------------------------------------------------------------AACAATCATCAGCAACAACAACAACAATGGCAACCAGGATCACATTAT
'At5g67180 '                      ACGACGACT-----------------------------------------------------------------------------GTCAGATCGGAAAAGCAGCAATCGGACGGTGGAGGAAAT
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'gi|2098818_Zea_mays '            ------------------------------------------------------------------------------------------------------------------------
'gi|11181612_Picea '              CAATCAGGATGGACTTGGCAACTG------------------------------------------------------------CATGCTAGCGGACCAACTACTCCAGTATTCACCACC
'gi|46395276_Pinus_PtAP2L1 '      CCACCAGGATGGGTTTGGCAACTG------------------------------------------------------------CCTACAAATAGGCCAGCTCCT------CCCTCTCCC
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'GMtuc03_04_25.877_Glycine '      ------------------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '      ------------------------------------------------------------------------------------------------------------------------
'At2g39250 '                      ------------------------------------------------------------------------------------------------------------------------
'At3g54990 '                      ------------------------------------------------------------------------------------------------------------------------
'At5g60120 '                      ------------------------------------------------------------------------------------------------------------------------
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'Barley1_08369_Hordeum '          GATGCAGCCAGAGATCATAGCAGGAGGCCAGAGGTG------------------GCCACAGGGGGTGTTCCAACCTGGGCATGGAGGGTGAGCCACCCTCCTCCA---ACACAACCCATG
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'A6_gi2281632_RAP2.4 '            ---------------CCGGTGACGGAGTTTGAAGAGTCCACCGCTGGATCTTCGCCG--------------------------TTGTCGGACTTGACGTTCGCTGACCCGGAGGAGCCG
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[                                 2281      2291      2301      2311      2321      2331      2341      2351      2361      2371      2381      2391      ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
'At1g16060 '                      ATCCAGACGTATTTCGGGTGTCAAAACTCC------------GGCAAGTTAACGGCGGAGGAAGATGATGTTATCTTCGGTGATTTAGATTCTTTCCTTACGCCTGATTTCTACAGCGAG
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Os2g40070                          AACGAGGAGCAGGGGAAGCTCATCGGGTACGACGCCATGGCGATGGCGAGCGGCGCCGCCGGCGGCGGGTACCAGCTGTCGCAGGGCTCG---GCGTCGACGGTGAGCATCGCGAGGGCG
Os6g44750                          AAGCAGAGCAACAGCTACTCCGGTAACAACATTCCTTATGCTGCTGCAGCAGCTATGACTTCTGGA---TCAGCACTCTACGGGGGCTCCACCGGTAGCAACGGGACATGGGTGGCGAGT
Os1g67410                          CAGGTGCAGATGGGGTACGACAGCTACCTCGTCGGCGCAGACGCCTACGGCGGCGGCGGCCGGGAGGATGCCATCCTGGGCGATGACGCCGGCGTCGGCGCCGGCCGCCACGAGCAGC
Os3g56050                          GTTGGTTTTGCAAAGCCGAACTCACTGTGGTGGTGTTTATCATCTCAAAGTAAATTGAAAGCACATTCTCGATCGAACGGCGGCCGTAAACCCTCCAGAGGTTCGGAGAAAAATCCTCCG
Os7g03250                          ---------------------------------------------TCCTGGGTCTCCTCGCCGCCGGCGTCTGCCAGGCCGCCCGCCGTCTCCATCGCCCACATGCCCCTCTTCGCCGCCTGG
Os3g12950                          ---------------------------------------------ATGCCGGCGCCGGCCGCAGCTCACGTGATGAGGCCGCCGAGTGCCATTGCTCATCTCCCTGTTTTTGCAGCCTGG
Os3g07940                          ------------------------------------------------------------------CCGGTCGCCGGCATCCCGACCACCGTGCACCACCAGCTCCCGGTGTTCGCGCTGTGG
'At1g72570 '                       ------------------------------------------------------------------------------------------------------------
'At5g57390 '                       ------------------------------------TGGATTAATAACAACATTTCAAGTTCTTACCAAACTGCAAAATCAAATCTCTCTGTTTTGCACACACCGGTTTTTGGGTTGGAA
'At5g17430 '                       CAGCAGATTCAGCAGTCGCCGGGAGGAGATTTTCCGGTGGCGATTTCGAATAACCATAGCTCTAACATGTACTTTCACGGGGAAGGTGGTGGAGAAGGGGCTCCAACGTTTTCAGTTTGG
'At1g51190 '                       TTTCCAGCCGTGAAAGTCGATTACGATATGCCTCCTTCCGGTGGAGCTACAGGGTATGGAGGATGGAATAGTGGAGAGTCTGCTCAAGGATCGAATCCAGGAGGTGTTTTCACGATGTGG
'At3g20840 '                       TTTCCAACCGTTAAAACAGATTACGATATGCCTTCCAGTGATGGAACCGGAGGGTATAGTGGTTGGACCAGT---GAGTCTGTTCAGGGGTCAAACCCTGGTGGTGTTTTCACTATGTGG
'At5g10510 '                       ------------------------------------------------------------AACGTTCAGGGAACAATGGGACTTATGGCACCAAATCCGGCTGAGTTCTTCCTCTGG
'At5g65510 '                       ------------------------------------------------------------------ATTCAAGCTCCTATG---------------AACCAAGCTGAGTTTTTCTTGTGG
'ltu01_16ms3_h06_Liriodendron '    ------------------------------------------------------------------------------------------------------------
'ZMtuc03_08_11.12253_Zea '         CTCCCTGCC---------------ACCACTGCAGCATCATCAGGATTCTCTACCGCCGCTGCCACCGGCGTGGACGCGGCCACAGCCGGCCACAGCGTGCCGCCGCCGTCTGGTAGCCTC
'ZMtuc02_12_23.7359_Zea '          CCGTTGCAC---------------CACTCTGCAGCATCATCAGGATTCTCTACCGCCGCCGGG---------------------GCCAACGGCGGCATGCCCCTGCCGTCTCACCCGCCG
Os7g13170                          CCATTACTC---------------CCTACTGCAGCATCATCAGGATTCTCTACGGGCACCGTC------------------------GCCGACGCCGCCCGCTCGCCTTCCTCCCGCCCC
'Barley1_18652_Hordeum '           CCGTTGCTT---------------TATGCTGCAGCATCATCAGGATTCTCTACCGCCGCCGGC---------------------------GCGAACCCCGCCCCGCCCGCCGTCGTACCC
'gi|18476518_Hordeum '             CCGTTGCTT---------------TATGCTGCAGCATCATCAGGATTCTCTACCGCCGCCGGC---------------------------GCGAACCCCGCCCCGCCCGCCGTCGTACCC
'TAtuc03_04_26.7877_Triticum '     CCGTTGCTT---------------TACGCTGCAGCATCATCAGGATTTTCTACCGCCGCCGCCGGC------------------------GCGAACCTCGCCCCGCCGCCGCCGTACCCG
'atr01_4ms1_d10_Amborella '        ------------------------------------------------------------------------------------------------------------
'gi|46395278_Pinus_PtAP2L2 '        ---------------------------GCAGCAGCATCATCAGGATTCTCACCCCAAGCTCAAATTACTGTAGCTCATCCTTCAGATTGGCTCCACAAGTTACAAGGTGCTCAGTCTATG
Os4g55560                          CCGACCAAC---------------GCCGCGGCCGCCGCAACCGCTACAGCAGCTGCAGCATCATCACGATTCCCTCCCTACATTGCGACGCAAGCCTCAACCTGGCTGCAGAAGAACGGG
'LEtuc02_10_21.9228_Lycopersico '  ------------------------------------------------------------------------------------------------------------
'gi|5081555_Petunia '              ATATTTGCA---------------GCTGCTGCAGCATCATCAGGATTCTCCCAGCAGATAGTAAGACCTCAAAATTGG---------------------------TCATCCGAAAATGGC
'LEtuc02_10_21.11399_Lycopersic '  ATAATTGCA---------------ACTGCTGCAGCATCATCAGGATTCCCCCAGCAGATAATAAGGACTCAAAAT-------------------------------------AATGGC
'gi|28894444_Antirrhinum_LIPLES '  CAGTTTGCT---------------------GCAGCATCATCAGGATTCCCTCAGGCGCAGGCACAGATAATAAAA------CCCCAAAAC------TGGCTGCAGATCAAGAAAAATGGG
'gi|28894442_Antirrhinum_LIPLES '  TTATTTGCT---------------AGTGCTGCAGCATCATCAGGATTCCCACACGCGCCGCCTTTACTTAGTAGTTCTCGACCACGTGAC------TGGCCT---CTGCAGAAAAATGGG
'gi|21717332_Malus '               TTATTTGCA---------------ACCGCTGCAGCATCATCAGGATTCCCACCACAACTTAGACCGTTGCCCACGCAAAAC------------------AGCTGGCTGCAGAAAAATGGG
'gi|13173164_Pisum '               TTATCATCT---------------GCTGCTGCAGCATCATCAGGATTCCCACCTCAAATAAGAACACCCTCTTCACAA---------------------ACTTGGCTGCACAAAAATGGC
'At5g67180 '                       CGAGTGGTG---------------GGAATGGCAGCATCATCAGGATTCTCTCCTCAACCTTCCCCTTACCGCATTCCT-----------------------------------CGCACC
'At4g36920_APETALA2 '              GTGTTGACA---------------AATGCTGCAGCATCATCAGGATTCTCTCCTCATCATCACAATCAGATTTTTAATTCTACTTCTACTCCTCATCAAAATTGGCTGCAGACAAATGGC
Os7g39110                          ------------------------------------------------------------------------------------------------------------
Os6g43220                          CCGGCGATG---------------CCGGACGGCGGCGCGGTCATCCGCCCTGATCAGCATCAGCATCACCCCAGTAGCCGGAACATGCTCCTGATGTGGTGTTCCTACATTGATCTTCCT
'gi|2098818_Zea_mays '             ------------------------------------------------------------------------------------------------------------
'gi|11181612_Picea '               AAT-----------------------AGATCCCCTGCATCAGGATTCTCACCCCAAATCCATACAGCGTTCGTTCCTTCAACACATGGGTGTCACAAAATGGGAGTGCATTGGGCAGCG
'gi|46395276_Pinus_PtAP2L1 '       ATGATTGAA-----------------AGTGCAGCATCATCAGGATTCTCACCCCAAATA------TTTTCTTCAACAACTAGTCCTTCTTCAGAATGGCTGCAGAAAAGGGGTTTCAT
'gi|11181610_Picea_abies '         ATGATTGAA-----------------AGTGCAGCATCATCAGGATTCTCACCCCAAATA------TATTCTTCAACAACTAGTCCTTCTCCAGAATGGCTGCAGAAAAGGGGATTTCAT
'GMtuc03_04_25.877_Glycine '       ------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '       ------------------------------------------------------------------------------------------------------------
'At2g39250 '                       ------------------------------------------------------------------------------------------------------------
'At3g54990 '                       ------------------------------------------------------------------------------------------------------------
'At5g60120 '                       ------------------------------------------------------------------------------------------------------------
'At2g28550 '                       TTGTTCTCA---------------GTTGCAGCAGCATCATCAGGATTCTCACATTTCCGGCCACAACCTCCCAATGACAATGCAACACGTGGTTACTTTTATCCACACCCT---------
'gi|5360996_Hyacinthus '           CCGATGTTC-----------------ACTGCAGCATCATCAGGATTCGCCACCACCCATGCCACATCCTCCATTACCCCCCCTGCCAGCCATCATCTTCAGTTCCCTCCACCACCCAAC
'pam01_2ms1_c06_Persea '           CCATTGTTC---------------CCTTCTGCAGCATCATCAGGATTCTCCACCACAACTGCAACA-----------------------ACAGCTGCCTTCCCGCCCCTGCATCCACAA
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'gi|5081557_Petunia '             CCACTCTTC---------------TCTACTGCAGCATCATCAGGATTCGCTAATTCAACTACAGCTGATGTTCATCAACATTACTTTTCTACTGGACCATTACCTTACCATCATTCACCA
'GMtuc03_04_25.28779_Glycine '    CCACCGTTC---------------TCTACTGCAGCATCATCAGGATTCTCAATTTCAGCTACTTTTCCATCAACTGCCATCTTTCCAACAAAATCCATGAACCCAATTCCCCAGAGCTTC
'GMtuc02_10_21.14413_Glycine '    CCACCGTTC---------------TCTACTGCAGCATCATCAGGATTCTCAATTTCAGCCACTTTTCCATCAACTGCCATCTTTCCAACAAAATCCATCAACTCAGTTCCCCATAGCCTC
'MTtuc03_04_26.7790_Medicago '    CCACAATTC---------------TCTTCTGCAGCATCATCAGGATTCTCCATTTCAGCTACCTTTCCACCAAATGCAATCTTTCAAACACAACCAATCAACTCAATTCCCCAGTCACTC
'STtuc02_10_23.1438_Solanum '     ACAATGTTC---------------TGCACGGCAGCATCATCAGGATTCTTCATTCCATCTACTACTTCTATCACTTCATCAGCATCTGCATTAGCAACTTCAACAAATGCCTCACAGTGC
'STtuc021023.12365_Solanum '      TCAATGTTC---------------TCTGCTGCAGCATCATCAGGATTCTCAACTCCGGCTACCACT---------GCTTCGGCCTCTCAAATGTCT------------------------
'nad03_31ms3_d04_Nuphar '         ------TTC---------CCGTCGTCTGCTGCAGCATCATCAGGATTCTCAACCCAAACCCCACAACCTATTGCCGCATCTGCTTTTCCTCTCCCTACCAACCTGCGCTTTTCATTCCCA
'Barley1_08369_Hordeum '          CCACTCTTC---TCGTCGTCATCGTCCGCTGCAGCATCATCAGGATTCTCCAAAACAGCCGCGGCAGCTGCCCCCGCCGCCCCATCGGCCTCATTCCGGTTCGACCCGATGGCTCCATCA
'HVtuc02_11_10.2029_Hordeum '     CCACTCTTC---TCGTCGTCATCGTCCGCTGCAGCATCATCAGGATTCTCCAAAACAGCCGCGGCAGCTGCCCCCGCCGCCCCATCGGCCTCATTCCGGTTCGACCCGATGGCTCCATCA
'TAtuc03_04_26.3851_Triticum '    CCACTCTTC---TCGTCGTCATCGTCCGCTGCAGCATCATCAGGATTCTCCAAAACCGCCGCGGCAGCTGCCCCCGGCGCCCCATCGGCCTCATTCCGGTTCGACCCGATGGCGCCATCA
'TAtuc03_04_26.3852_Triticum '    CCACTCTTC---TCGTCGTCATCGTCCGCTGCAGCATCATCAGGATTCTCCAAAACCGCCGCGGCAGCTGCCCCCGGCGCCCCATCGGCCTCATTCCGGTTCGACCCGATGGCGCCATCA
'SBtuc02_10_21.6764_Sorghum '     CCGCTGTTCTCTTCGTCATCGTCATCCGCTGCAGCATCATCAGGATTCTCCAATACCGCCACGACAGCTGCC---------CCATCGGCCTCCCTCCGGTTCGATGCACCGCCATCGTCG
'SPtuc02_10_22.3366_Solanum '     CCGCTGTTCTCTTCGTCATCGTCATCCGCTGCAGCATCATCAGGATTCTCCAATACCGCCACGACAGCTGCC---------CCATCGGCCTCCCTCCGGTTCGATGCACCGCCATCGTCG
'RAV2_gi30697755_At1g68840 '      AAACACTTTCCGTTACCGTCACCGTCACCGGCAGTGACTAAAGGAGTTTTGATCAACTTCGAAGACGTTAACGGTAAAGTGTGGAGGTTCCGTTACTCATACTGGAACAGTAGTCAAAGT
'RAV1_gi42562037_At1g13260 '      AAACATTTTCCGTTACCGTCA---AGTAACGTTTCCGTGAAAGGAGTGTTGTTGAACTTTGAGGACGTTAACGGGAAAGTGTGGAGGTTCCGTTACTCGTATTGGAACAGT---------
'A4_gi30690008_TINY_At5g25810 '   ---------------TGGCCTTATCCACCGCAATGGTCAGAAGGTGATTACCAAATGATTCCTGCCTCGTTATCACAAGATTGGGATCTTCAAGGACTGTATAATTAT------------
'A4_gi7212005AC023628 '           ------------------------------TGGCTTGTCGACGGAGACTTGTATCAGTATCAGTTCATGGCGTGTCTG-----------------------------------------
'gi|19789524_Physcomitrella '      ------------GACATGAGCTCT------------------------------------------------------------------------------------------
'gi|18348070_Physcomitrella '      ------------------------------------------------------------------------------------------------------------------
'A2_gi30680919_DREB2A_At5g05410 ' GAGAGTCAACAAAGTGGTTTTGATCCGCTACAAAGCCTCAACTACGGAATACCTCCGTTTCAGCTCGAGGGAAAGGATGGTAATGGATTCTTCGACGACTTGAGTTACTTGGATCTGGAG
'A5_gi42562576_RAP2.1_At1g46768 ' ------------------------------------------------------------------------------------------------------------------
'B2_gi30695605_RAP2.12_At1g5391 ' CCTTACAACAACACTGAATGGGACGCTTCACTGGATTTCCTCAACGAAGATGCTGTAACGACTCAGGACAATGGTGCAAACCCTATGGACCTATGGAGTATTGATGAAATTCATTCCATG
'gi|18351137_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------
'B4_gi42562554_RAP2.6_At1g43160 ' ------------------------------------------------------------------------------------------------------------------
'A1_gi18416558_DREB1A_At4g25480 ' ------ATGCTTTTGCCGCTTCCGTCCGTACAGTGGAATCATAATCATGAAGTCGACGGCGATGATGACGACGTATCGTTATGGAGTTAT-------------------------------
'B1_gi2281634_RAP2.5 '            ---------------GATTCGTCATCGGTCGTTGATTTCGAAGGTGGGATGGAGAAGAGATCTCAGACTGTTAGATCTAGATCT-----------------------------------
'A3_gi18405311_ABI4_At2g40220 '   GGTTATATGGTTGGAGATGGATCTTCGACCATTTGGCCTTTTGGAGGAGAAGAAGAATATAGTCATAATTGGGGGAGTATTTGGGATTTTATTGATCCCATCTTGGGGGAATTCTAT---
'A6_gi2281632_RAP2.4 '            ---------------CCGCAGTGGAACGAGACG------TTCTCGTTGGAGAAGTATCCGTCGTACGAGATCGATTGGGATTCGATTCTAGCT---------------------------
'B1_gi42562651_AtERF3_At1g50640 ' GCATCGTCTTCACGGCGACGGAATCCGCCG---------TTTCAATTCGATCTTAATTTTCCACCGTTGGATTGTGTTGACTTGTTCAATGGCGCTGATGATCTTCACTGTACCGATCTA
'B5_gi42566428_AF080120 '         GGGTTTGGATTCGGGTCTGGGTCTGGA------------TTCTCCAGCTGGCACGTTGAGGACCATTTTCAAGATATTGGGGATTTATTCGGGTCGGATCCTGTCTTAACTGTT------
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[                                 2401      2411      2421      2431      2441      2451      2461      2471      2481      2491      2501      2511      ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
'At1g16060 '                      TTAAATGATTGC------------------------------------------------------------------------------------------------------
Os9g25600                         CTGGACTTG---------------------------------------------------------------------------------------------------------
Os6g05340                         TTGATC------------------------------------------------------------------------------------------------------------
'wmi01_10ms3_e03_Welwitschia '    ------------------------------------------------------------------------------------------------------------------
'nad03_15ms1_h07_Nuphar '         ------------------------------------------------------------------------------------------------------------------
'gi|38492172_Nicotiana '          AATGAT------------------------------------------------------------------------------------------------------------
'ltu01_5ms4_a11_Liriodendron '    ------------------------------------------------------------------------------------------------------------------
'At4g37750_AINTEGUMENTA '         GCTGATTCT---------------------------------------------------------------------------------------------------------
'gi46395274__Pinus_PtANTL1 '      TTGTTCTTCTCATCCCCGCAGCAAGCTTCGAAGCTCGTGAAATATGAGAATGGCAGTACCACTCTCAGTCCATGGATGATTCCACCAAATACAGTACCACCACTACAATCAAGGCCCAAT
'gi|18356869_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------
'gi|21069051_Brassica '           AACGACAAT---------------------------------------------------------------------------------------------------------
'gi|21069053_Brassica '           AACGACAAT---------------------------------------------------------------------------------------------------------
'gi|18346002_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------
'eca01_6cs1_a05_eca01_13cs2_a02 ' ------------------------------------------------------------------------------------------------------------------
'At2g41710 '                      TCAGGATCCTCTCTTACTTCAGAGGTGACAAAGACAGAGACCAGCTGTTCC---------------------------------------------------------------
'At1g79700 '                      TTTGATTATGGACCT---------------------------------------------------------------------------------------------------
Os8g34360                         CTCGACGTC---------------------------------------------------------------------------------------------------------
Os12g03290                        AGTGTGTGCAAC------------------------------------------------------------------------------------------------------
Os12g03290_1                      ------------------------------------------------------------------------------------------------------------------
'At3g54320 '                      ------------------------------------------------------------------------------------------------------------------
Os1g59780                         ------------------------------------------------------------------------------------------------------------------
Os11g19060                        GGCCAATCTGTGGGGGGCAACAGCTGGGTTTTGCCGACACCG------------------------------------------------------------------------
Os2g40070                         AACGGCTACTCGGCCAACTGGAGCTCGCCTTTCAATGGCGCCATGGGA------------------------------------------------------------------
Os6g44750                         AACACGAGCACGGCTCCCCACTTCTACAACTATTTGTTTGGGATGGAG------------------------------------------------------------------
Os1g67410                         AGCGACATGACCGGAGTCTGCCATGGCGCACAGCTCTTCAGCGTCTGGAACGACACA---------------------------------------------------------
Os3g56050                         AACCCCTGCATGACCTTCTCAGCTTCTCTCGATCGGACGAATGAATTTGAAGATGCGACTTTGCATGTAGATGTAATACTATTGAAAGTGCATTTGGTGTACACGTTAGGTGTGTCATCG
Os7g03250                         ACCGACGCC---------------------------------------------------------------------------------------------------------
Os3g12950                         ACAGATGCT---------------------------------------------------------------------------------------------------------
Os3g07940                         AACGAC------------------------------------------------------------------------------------------------------------
'At1g72570 '                      ------------------------------------------------------------------------------------------------------------------
'At5g57390 '                      ------------------------------------------------------------------------------------------------------------------
'At5g17430 '                      AACGACACT---------------------------------------------------------------------------------------------------------
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'At1g51190 '                      AATGAA-------------------------------------------------------------------------------------------------------
'At3g20840 '                      AATGAG------------------------------------------------------------------------------------------------------
'At5g10510 '                      CCTAATCAGTCTTAC---------------------------------------------------------------------------------------------
'At5g65510 '                      CCTAACCAGTCTTAC---------------------------------------------------------------------------------------------
'ltu01_16ms3_h06_Liriodendron '   ------------------------------------------------------------------------------------------------------------
'ZMtuc03_08_11.12253_Zea '        CGGCAGTTCTCGGGCTACCACCAGCTCCGCTTCCCCCCAACCGCC---------------------------------------------------------------
'ZMtuc02_12_23.7359_Zea '         GCGCAGTTCCCGACTACTACAAACCCGTTCTTCTTCCCC---------------------------------------------------------------------
Os7g13170                         CATCCATTTCCCGGCCACCACCAGTTCTACTTCCCCCCGACCGCC---------------------------------------------------------------
'Barley1_18652_Hordeum '          CGACCATCACCACCGCTTCTACTCCCCCGCCCGCCGGACAAC------------------------------------------------------------------
'gi|18476518_Hordeum '            CGACCATCACCACCGCTTCTACTCCCCCGCCCGCCGGACAAC------------------------------------------------------------------
'TAtuc03_04_26.7877_Triticum '    GACCACCACCGG---TTCTACTTCCCCCGCCCGCCGGACAAC------------------------------------------------------------------
'atr01_4ms1_d10_Amborella '       ------------------------------------------------------------------------------------------------------------
'gi|46395278_Pinus_PtAP2L2 '      GGTACTACTCAGCTTTCAGCTCCTAAGTCTGCATCTCAGAGACAGAATTTACATAGCATTCAAGCCAGCTTAAGTGGACAAGTCTTGGGTTTGGGCTTAAATTTATCAACGAAATCAAAA
Os4g55560                         TTCCATTCCCTGACCCGGCCCACC------------------------------------------------------------------------------------
'LEtuc02_10_21.9228_Lycopersico ' ------------------------------------------------------------------------------------------------------------
'gi|5081555_Petunia '             TTCCATCACTTTCTTATGAGACCCTCA---------------------------------------------------------------------------------
'LEtuc02_10_21.11399_Lycopersic ' TTCCATCATTATTTTATGAGACCT----------------------------------------------------------------------------------
'gi|28894444_Antirrhinum_LIPLES ' ATCCACCCAAGTACTCTCATGAGACCC-------------------------------------------------------------------------------
'gi|28894442_Antirrhinum_LIPLES ' TTCCATTCATCTTATAATATAAGGCCCTCA----------------------------------------------------------------------------
'gi|21717332_Malus '              TTCCACACTCTCGCCAGACGC---------------------------------------------------------------------------------------
'gi|13173164_Pisum '              TTCCACACACTCATGAGACCCTCT------------------------------------------------------------------------------------
'At5g67180 '                      TTCCACTTCTCTCGTCCC------------------------------------------------------------------------------------------
'At4g36920_APETALA2 '             TTCCAACCTCCTCTCATGAGACCTTCT---------------------------------------------------------------------------------
Os7g39110                         ------------------------------------------------------------------------------------------------------------
Os6g43220                         GAGATCACGGGCCCTGAG------------------------------------------------------------------------------------------
'gi|2098818_Zea_mays '            ------------------------------------------------------------------------------------------------------------
'gi|11181612_Picea '              CAGTCGACTGATCCATGCATGGTACAAACCCCGAGCCCGCATCTGGCAACTCGTCTGACCAGTGGACCTGATTCCGGCGACCATCCGGTGGGTTTAACTCTTGATTTGCCAGGCAAGAAG
'gi|46395276_Pinus_PtAP2L1 '      TTCTTGTTCCAGCCTGCATTAATGCAGACCAAGAATATTTTGCATTCAACCACTGCACCAGCTTTGATTAACACTTATGGG------------------------AAAAAAACCGGTGAC
'gi|11181610_Picea_abies '        TTCTTGTTCCAGCCTGCATTAATGCAGACAAAGAATATTTTGCATTCACCAACAGCACCAGCTTTGATTAACACTTACGGG------------------------AAAAAACCCAGTGAC
'GMtuc03_04_25.877_Glycine '      ------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '      ------------------------------------------------------------------------------------------------------------
'At2g39250 '                      ------------------------------------------------------------------------------------------------------------
'At3g54990 '                      ------------------------------------------------------------------------------------------------------------
'At5g60120 '                      ------------------------------------------------------------------------------------------------------------
'At2g28550 '                      ------------------------------------------------------------------------------------------------------------
'gi|5360996_Hyacinthus '          ACCAACTACTATTCCAGG------------------------------------------------------------------------------------------
'pam01_2ms1_c06_Persea '          ------AGTAATGGCCATTTTCCTACCTACTGTTACAGG---------------------------------------------------------------------
'gi|5081557_Petunia '             TCACTTGCCAATATGAACTTTGCACAATATTACTGCAGAAGC------------------------------------------------------------------
'GMtuc03_04_25.28779_Glycine '    TGTTTCACTTCA---CACAGCACACCAGGTAGCAATGCACCT---CAATTCTATTACGAGGTCAAGTCCTCGCAGGCACCATCCCAGCCTCTATCTTGTAATACAAGTATAAATGGTAGC
'GMtuc02_10_21.14413_Glycine '    TGTTTCACTTCA---CCCAGCACACCAGGTAGCAACGCACCT---CAATTCTATAACTATTACGAG-----------------------------------------
'MTtuc03_04_26.7790_Medicago '    TGTTTCACT---------------CCTGGTAGCAATGCATCATCTCAATACTATTACCAGGTTAAGTCCTCACAGGCACCACCA-----------------------------
'STtuc02_10_23.1438_Solanum '     TTTTATCAGATCAACCCCCGCCTACCACCTCCA---------------------------------------------------------------------------
'STtuc021023.12365_Solanum '      ------------------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '         TCATCT------------------------------------------------------------------------------------------------------
'Barley1_08369_Hordeum '          TCGTCGTCAAGCAACCAACACCACCACCACCACCCCCGC---------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '     TCGTCGTCAAGCAACCAACACCACCACCACCACCCCCGC---------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '    TCATCGTCAAGCAACCAACACCACCACCAC---CCCCGC---------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '    TCATCGTCAAGCAACCAACACCANCAC---------------------------------------------------------------------------------
'SBtuc02_10_21.6764_Sorghum '     TCATCGAGC---------CATCATCATCGCCGC---------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '     TCATCGAGC---------CAT---------------------------------------------------------------------------------------
'RAV2_gi30697755_At1g68840 '      TACGTGTTGACCAAGGGA------------------------------------------------------------------------------------------
'RAV1_gi42562037_At1g13260 '      ------------------------------------------------------------------------------------------------------------
'A4_gi30690008_TINY_At5g25810 '   ------------------------------------------------------------------------------------------------------------
'A4_gi7212005AC023628 '           ------------------------------------------------------------------------------------------------------------
'gi|19789524_Physcomitrella '     ------------------------------------------------------------------------------------------------------------
'gi|18348070_Physcomitrella '     ------------------------------------------------------------------------------------------------------------
'A2_gi30680919_DREB2A_At5g05410 ' AAC-------------------------------------------------------------------------------------------------------
'A5_gi42562576_RAP2.1_At1g46768 ' ------------------------------------------------------------------------------------------------------------
'B2_gi30695605_RAP2.12_At1g5391 ' ATTGGAGGAGTCTTC-----------------------------------------------------------------------------------------------
'gi|18351137_Physcomitrella '     ------------------------------------------------------------------------------------------------------------
'B4_gi42562554_RAP2.6_At1g43160 ' ------------------------------------------------------------------------------------------------------------
'A1_gi18416558_DREB1A_At4g25480 ' ------------------------------------------------------------------------------------------------------------
'B1_gi2281634_RAP2.5 '            ------------------------------------------------------------------------------------------------------------
'A3_gi18405311_ABI4_At2g40220 '   ------------------------------------------------------------------------------------------------------------
'A6_gi2281632_RAP2.4 '            ------------------------------------------------------------------------------------------------------------
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'B1_gi42562651_AtERF3_At1g50640 ' CGTCTC-------------------------------------------------------------------------------------------------------
'B5_gi42566428_AF080120 '         ----------------------------------------------------------------------------------------------------------------

[                                 2521      2531      2541      2551      2561      2571      2581      2591      2601      2611      2621      2631      ]
[                                 |         |         |         |         |         |         |         |         |         |         |         |         ]
'At1g16060 '                      ----------------------------------------------------------------------------------------------------------------
Os9g25600                         ----------------------------------------------------------------------------------------------------------------
Os6g05340                         ----------------------------------------------------------------------------------------------------------------
'wmi01_10ms3_e03_Welwitschia '    ----------------------------------------------------------------------------------------------------------------
'nad03_15ms1_h07_Nuphar '         ----------------------------------------------------------------------------------------------------------------
'gi|38492172_Nicotiana '          ----------------------------------------------------------------------------------------------------------------
'ltu01_5ms4_a11_Liriodendron '    ----------------------------------------------------------------------------------------------------------------
'At4g37750_AINTEGUMENTA '         ----------------------------------------------------------------------------------------------------------------
'gi46395274__Pinus_PtANTL1 '      CTCTCTGTGGGGCATTTGCCCATGTTTGCATTATGGAATGAA----------------------------------------------------------------
'gi|18356869_Physcomitrella '     ----------------------------------------------------------------------------------------------------------------
'gi|21069051_Brassica '           ----------------------------------------------------------------------------------------------------------------
'gi|21069053_Brassica '           ----------------------------------------------------------------------------------------------------------------
'gi|18346002_Physcomitrella '     ----------------------------------------------------------------------------------------------------------------
'eca01_6cs1_a05_eca01_13cs2_a02 ' ----------------------------------------------------------------------------------------------------------------
'At2g41710 '                      ----------------------------------------------------------------------------------------------------------------
'At1g79700 '                      ----------------------------------------------------------------------------------------------------------------
Os8g34360                         ----------------------------------------------------------------------------------------------------------------
Os12g03290                        ----------------------------------------------------------------------------------------------------------------
Os12g03290_1                      ----------------------------------------------------------------------------------------------------------------
'At3g54320 '                      ----------------------------------------------------------------------------------------------------------------
Os1g59780                         ----------------------------------------------------------------------------------------------------------------
Os11g19060                        ----------------------------------------------------------------------------------------------------------------
Os2g40070                         ----------------------------------------------------------------------------------------------------------------
Os6g44750                         ----------------------------------------------------------------------------------------------------------------
Os1g67410                         ----------------------------------------------------------------------------------------------------------------
Os3g56050                         GTCGCCGCCTCGCCGCGCGTCACAGAGGACGTCGCCCTCTCATGTGTTTTCCTACACTACTCTCTGACTTGGGAACTCATTCCCTCCGCACAGCCATCCTTTGTGAGATACGTCCAGCCA
Os7g03250                         ----------------------------------------------------------------------------------------------------------------
Os3g12950                         ----------------------------------------------------------------------------------------------------------------
Os3g07940                         ----------------------------------------------------------------------------------------------------------------
'At1g72570 '                      ----------------------------------------------------------------------------------------------------------------
'At5g57390 '                      ----------------------------------------------------------------------------------------------------------------
'At5g17430 '                      ----------------------------------------------------------------------------------------------------------------
'At1g51190 '                      ----------------------------------------------------------------------------------------------------------------
'At3g20840 '                      ----------------------------------------------------------------------------------------------------------------
'At5g10510 '                      ----------------------------------------------------------------------------------------------------------------
'At5g65510 '                      ----------------------------------------------------------------------------------------------------------------
'ltu01_16ms3_h06_Liriodendron '   ----------------------------------------------------------------------------------------------------------------
'ZMtuc03_08_11.12253_Zea '        ----------------------------------------------------------------------------------------------------------------
'ZMtuc02_12_23.7359_Zea '         ----------------------------------------------------------------------------------------------------------------
Os7g13170                         ----------------------------------------------------------------------------------------------------------------
'Barley1_18652_Hordeum '          ----------------------------------------------------------------------------------------------------------------
'gi|18476518_Hordeum '            ----------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.7877_Triticum '    ----------------------------------------------------------------------------------------------------------------
'atr01_4ms1_d10_Amborella '       ----------------------------------------------------------------------------------------------------------------
'gi|46395278_Pinus_PtAP2L2 '      GCTGAACTGTGCTCTTCCAAAGATACAGTTCGTTCGAAGTCCTTGAAAGGAGTGGTTGGAGATGGTCGTTCATTCGGGGTTAAAGACCGC-------------------------------
Os4g55560                         ----------------------------------------------------------------------------------------------------------------
'LEtuc02_10_21.9228_Lycopersico ' ----------------------------------------------------------------------------------------------------------------
'gi|5081555_Petunia '             ----------------------------------------------------------------------------------------------------------------
'LEtuc02_10_21.11399_Lycopersic ' ----------------------------------------------------------------------------------------------------------------
'gi|28894444_Antirrhinum_LIPLES ' ----------------------------------------------------------------------------------------------------------------
'gi|28894442_Antirrhinum_LIPLES ' ----------------------------------------------------------------------------------------------------------------
'gi|21717332_Malus '              ----------------------------------------------------------------------------------------------------------------
'gi|13173164_Pisum '              ----------------------------------------------------------------------------------------------------------------
'At5g67180 '                      ----------------------------------------------------------------------------------------------------------------
'At4g36920_APETALA2 '             ----------------------------------------------------------------------------------------------------------------
Os7g39110                         ----------------------------------------------------------------------------------------------------------------
Os6g43220                         ----------------------------------------------------------------------------------------------------------------
'gi|2098818_Zea_mays '            ----------------------------------------------------------------------------------------------------------------
'gi|11181612_Picea '              ATAAAACGTTCAAGCGTCCAAAGAGACAAAGTAGAT----------------------------------------------------------------------------
'gi|46395276_Pinus_PtAP2L1 '      CACTCATTGAACTTGTCTCTAGGT----------------------------------------------------------------------------------------
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'gi|11181610_Picea_abies '        CACTCATTGAACTTGTCACTAGGT-------------------------------------------------------------------------------------------
'GMtuc03_04_25.877_Glycine '      ------------------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.876_Glycine '      ------------------------------------------------------------------------------------------------------------------------
'At2g39250 '                      ------------------------------------------------------------------------------------------------------------------------
'At3g54990 '                      ------------------------------------------------------------------------------------------------------------------------
'At5g60120 '                      ------------------------------------------------------------------------------------------------------------------------
'At2g28550 '                      ------------------------------------------------------------------------------------------------------------------------
'gi|5360996_Hyacinthus '          ------------------------------------------------------------------------------------------------------------------------
'pam01_2ms1_c06_Persea '          ------------------------------------------------------------------------------------------------------------------------
'gi|5081557_Petunia '             ------------------------------------------------------------------------------------------------------------------------
'GMtuc03_04_25.28779_Glycine '    CCACCACACAAGTTC-----------------------------------------------------------------------------------------------------
'GMtuc02_10_21.14413_Glycine '    ------------------------------------------------------------------------------------------------------------------------
'MTtuc03_04_26.7790_Medicago '    ------------------------------------------------------------------------------------------------------------------------
'STtuc02_10_23.1438_Solanum '     ------------------------------------------------------------------------------------------------------------------------
'STtuc021023.12365_Solanum '      ------------------------------------------------------------------------------------------------------------------------
'nad03_31ms3_d04_Nuphar '         ------------------------------------------------------------------------------------------------------------------------
'Barley1_08369_Hordeum '          ------------------------------------------------------------------------------------------------------------------------
'HVtuc02_11_10.2029_Hordeum '     ------------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3851_Triticum '    ------------------------------------------------------------------------------------------------------------------------
'TAtuc03_04_26.3852_Triticum '    ------------------------------------------------------------------------------------------------------------------------
'SBtuc02_10_21.6764_Sorghum '     ------------------------------------------------------------------------------------------------------------------------
'SPtuc02_10_22.3366_Solanum '     ------------------------------------------------------------------------------------------------------------------------
'RAV2_gi30697755_At1g68840 '      ------------------------------------------------------------------------------------------------------------------------
'RAV1_gi42562037_At1g13260 '      ------------------------------------------------------------------------------------------------------------------------
'A4_gi30690008_TINY_At5g25810 '   ------------------------------------------------------------------------------------------------------------------------
'A4_gi7212005AC023628 '           ------------------------------------------------------------------------------------------------------------------------
'gi|19789524_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------
'gi|18348070_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------
'A2_gi30680919_DREB2A_At5g05410 ' ------------------------------------------------------------------------------------------------------------------------
'A5_gi42562576_RAP2.1_At1g46768 ' ------------------------------------------------------------------------------------------------------------------------
'B2_gi30695605_RAP2.12_At1g5391 ' ------------------------------------------------------------------------------------------------------------------------
'gi|18351137_Physcomitrella '     ------------------------------------------------------------------------------------------------------------------------
'B4_gi42562554_RAP2.6_At1g43160 ' ------------------------------------------------------------------------------------------------------------------------
'A1_gi18416558_DREB1A_At4g25480 ' ------------------------------------------------------------------------------------------------------------------------
'B1_gi2281634_RAP2.5 '            ------------------------------------------------------------------------------------------------------------------------
'A3_gi18405311_ABI4_At2g40220 '   ------------------------------------------------------------------------------------------------------------------------
'A6_gi2281632_RAP2.4 '            ------------------------------------------------------------------------------------------------------------------------
'B1_gi42562651_AtERF3_At1g50640 ' ------------------------------------------------------------------------------------------------------------------------
'B5_gi42566428_AF080120 '         ------------------------------------------------------------------------------------------------------------------------

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[                                 |         |         |    ]
'At1g16060 '                      ------------------------
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Os6g05340                         ------------------------
'wmi01_10ms3_e03_Welwitschia '    ------------------------
'nad03_15ms1_h07_Nuphar '         ------------------------
'gi|38492172_Nicotiana '          ------------------------
'ltu01_5ms4_a11_Liriodendron '    ------------------------
'At4g37750_AINTEGUMENTA '         ------------------------
'gi46395274__Pinus_PtANTL1 '      ------------------------
'gi|18356869_Physcomitrella '     ------------------------
'gi|21069051_Brassica '           ------------------------
'gi|21069053_Brassica '           ------------------------
'gi|18346002_Physcomitrella '     ------------------------
'eca01_6cs1_a05_eca01_13cs2_a02 ' ------------------------
'At2g41710 '                      ------------------------
'At1g79700 '                      ------------------------
Os8g34360                         ------------------------
Os12g03290                        ------------------------
Os12g03290_1                      ------------------------
'At3g54320 '                      ------------------------
Os1g59780                         ------------------------
Os11g19060                        ------------------------
Os2g40070                         ------------------------
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Os6g44750                          ------------------------
Os1g67410                          ------------------------
Os3g56050                          TCTTCTGAGTGCAAATTGACGGAT
Os7g03250                          ------------------------
Os3g12950                          ------------------------
Os3g07940                          ------------------------
'At1g72570 '                       ------------------------
'At5g57390 '                       ------------------------
'At5g17430 '                       ------------------------
'At1g51190 '                       ------------------------
'At3g20840 '                       ------------------------
'At5g10510 '                       ------------------------
'At5g65510 '                       ------------------------
'ltu01_16ms3_h06_Liriodendron '    ------------------------
'ZMtuc03_08_11.12253_Zea '         ------------------------
'ZMtuc02_12_23.7359_Zea '          ------------------------
Os7g13170                          ------------------------
'Barley1_18652_Hordeum '           ------------------------
'gi|18476518_Hordeum '             ------------------------
'TAtuc03_04_26.7877_Triticum '     ------------------------
'atr01_4ms1_d10_Amborella '        ------------------------
'gi|46395278_Pinus_PtAP2L2 '       ------------------------
Os4g55560                          ------------------------
'LEtuc02_10_21.9228_Lycopersico '  ------------------------
'gi|5081555_Petunia '              ------------------------
'LEtuc02_10_21.11399_Lycopersic '  ------------------------
'gi|28894444_Antirrhinum_LIPLES '  ------------------------
'gi|28894442_Antirrhinum_LIPLES '  ------------------------
'gi|21717332_Malus '               ------------------------
'gi|13173164_Pisum '               ------------------------
'At5g67180 '                       ------------------------
'At4g36920_APETALA2 '              ------------------------
Os7g39110                          ------------------------
Os6g43220                          ------------------------
'gi|2098818_Zea_mays '             ------------------------
'gi|11181612_Picea '               ------------------------
'gi|46395276_Pinus_PtAP2L1 '       ------------------------
'gi|11181610_Picea_abies '         ------------------------
'GMtuc03_04_25.877_Glycine '       ------------------------
'GMtuc03_04_25.876_Glycine '       ------------------------
'At2g39250 '                       ------------------------
'At3g54990 '                       ------------------------
'At5g60120 '                       ------------------------
'At2g28550 '                       ------------------------
'gi|5360996_Hyacinthus '           ------------------------
'pam01_2ms1_c06_Persea '           ------------------------
'gi|5081557_Petunia '              ------------------------
'GMtuc03_04_25.28779_Glycine '     ------------------------
'GMtuc02_10_21.14413_Glycine '     ------------------------
'MTtuc03_04_26.7790_Medicago '     ------------------------
'STtuc02_10_23.1438_Solanum '      ------------------------
'STtuc021023.12365_Solanum '       ------------------------
'nad03_31ms3_d04_Nuphar '          ------------------------
'Barley1_08369_Hordeum '           ------------------------
'HVtuc02_11_10.2029_Hordeum '      ------------------------
'TAtuc03_04_26.3851_Triticum '     ------------------------
'TAtuc03_04_26.3852_Triticum '     ------------------------
'SBtuc02_10_21.6764_Sorghum '      ------------------------
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'RAV2_gi30697755_At1g68840 '       ------------------------
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'gi|19789524_Physcomitrella '      ------------------------
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        'B1_gi2281634_RAP2.5 '            ------------------------
        'A3_gi18405311_ABI4_At2g40220 '   ------------------------
        'A6_gi2281632_RAP2.4 '            ------------------------
        'B1_gi42562651_AtERF3_At1g50640 ' ------------------------
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End;
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