Table S2. Genes in the upper $1 \%$ of $\mathrm{H}_{\exp }$ values.

| VectorBase ID | Collection | Hexp | No. SNPs | Function* | Description |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEL009800-RA | P | 0.061 | 512 | CYT/STR | cuticle prot |
| AAEL000029-RA | T | 0.048 | 2083 | DIV | dopachrome-conversion enzyme (DCE) |
| AAEL000076-RA | K | 0.196 | 2 | DIV | dimethyladenosine transferase |
| AAEL000475-RB | KT | 0.073,0.082 | 179,68 | DIV | Beta-catenin-like |
| AAEL000560-RA | M | 0.067 | 38 | DIV | hypo prot |
| AAEL000810-RA | KMT | 0.069,0.05,0.049 | 10611,8578,7884 | DIV | prot kinase c |
| AAEL001838-RA | P | 0.058 | 66 | DIV | Prefoldin subunit |
| AAEL002264-RA | KT | 0.086,0.074 | 147,32 | DIV | conserved hypo prot |
| AAEL004011-RA | M | 0.051 | 9 | DIV | hypo prot |
| AAEL004164-RA | K | 0.111 | 437 | DIV | conserved hypo prot |
| AAEL004351-RB | K | 0.103 | 118 | DIV | casein kinase |
| AAEL004351-RC | K | 0.09 | 95 | DIV | casein kinase |
| AAEL004372-RA | PKMT | 0.127,0.16,0.126,0.057 | 1044,1188,1118,1020 | DIV | Lipid storage droplets surface-binding |
| AAEL004689-RB | PK | 0.091,0.083 | 51,68 | DIV | RING finger domain |
| AAEL004872-RA | M | 0.132 | 61 | DIV | Parkin coregulated |
| AAEL004985-RA | K | 0.113 | 58 | DIV | house keepingprot |
| AAEL005073-RA | M | 0.051 | 3292 | DIV | Golgin subfamily A member 6-like |
| AAEL005551-RA | PKMT | 0.102,0.096,0.064,0.09 | 1137,1204,1281,1132 | DIV | Trichohyalin |
| AAEL005756-RC | T | 0.069 | 67 | DIV | Rhodanese-like domain |
| AAEL005877-RC | K | 0.081 | 16 | DIV | Activator of 90 kDa heat shock prot ATPase homolog |
| AAEL005977-RA | KM | 0.069,0.08 | 833,241 | DIV | chondroitin 4-sulfotransferase |
| AAEL006341-RA | PK | 0.064,0.082 | 72,588 | DIV | conserved hypo prot |
| AAEL006353-RA | K | 0.081 | 58 | DIV | sulfotransferase (sult) |
| AAEL006445-RA | T | 0.048 | 1545 | DIV | GPI-anchored wall transfer prot 1 |
| AAEL006575-RC | P | 0.063 | 8 | DIV | troponin C |
| AAEL006600-RC | T | 0.054 | 241 | DIV | juvenile hormone-inducible prot |
| AAEL006632-RB | KM | 0.078,0.08 | 67,34 | DIV | Receptor expression-enhancing prot |
| AAEL006820-RA | PKMT | 0.069,0.085,0.059,0.06 | 1577,1618,1570,1553 | DIV | lipid storage droplets surface binding prot 2 (Isd2) |
| AAEL006996-RA | M | 0.088 | 59 | DIV | conserved hypo prot |
| AAEL007294-RA | T | 0.046 | 2477 | DIV | Dromyosuppressin |
| AAEL007614-RA | T | 0.12 | 4 | DIV | conserved hypo prot |
| AAEL007820-RB | K | 0.086 | 156 | DIV | LSM12 homolog A |
| AAEL007953-RA | T | 0.076 | 559 | DIV | SPRY domain |


| AAEL008012-RA | PKT | 0.114,0.109,0.124 | 59,132,1 | DIV | hypo prot |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEL008058-RB | K | 0.107 | 18 | DIV | liprin a (lar-interacting prot a synapse defective prot 2) |
| AAEL008092-RA | K | 0.072 | 157 | DIV | hypo prot |
| AAEL008114-RA | PK | 0.071,0.093 | 981,998 | DIV | p15-2b prot |
| AAEL008200-RA | P | 0.065 | 155 | DIV | conserved hypo prot |
| AAEL008532-RA | T | 0.066 | 22 | DIV | NULL |
| AAEL008556-RB | PKMT | 0.117,0.105,0.088,0.093 | 83,120,88,78 | DIV | prp4 |
| AAEL008900-RA | T | 0.046 | 214 | DIV | p15-2a prot |
| AAEL009052-RA | PKM | 0.079,0.095,0.158 | 100,229,19 | DIV | conserved hypo prot |
| AAEL009212-RE | K | 0.07 | 12 | DIV | Iola |
| AAEL009219-RA | P | 0.058 | 4630 | DIV | predicted prot |
| AAEL009997-RA | PMT | 0.065,0.056,0.061 | 969,933,952 | DIV | hypo prot |
| AAEL010170-RB | K | 0.092 | 106 | DIV | ras-related prot Rab-8A |
| AAEL010172-RA | PKM | 0.076,0.088,0.081 | 145,221,64 | DIV | Leucokinins |
| AAEL010194-RA | PK | 0.058,0.085 | 105,65 | DIV | hypo prot |
| AAEL010281-RA | MT | 0.075,0.06 | 102,120 | DIV | Zinc finger |
| AAEL010576-RE | K | 0.097 | 12 | DIV | modifier of mdg4 |
| AAEL010897-RA | MT | 0.052,0.053 | 1391,1111 | DIV | SH3 domain-containing |
| AAEL011083-RB | PKMT | 0.105,0.1,0.055,0.112 | 164,219,48,107 | DIV | NULL |
| AAEL011098-RA | PKMT | 0.078,0.086,0.061,0.054 | 2907,3073,2830,2620 | DIV | Nucleoside diphosphate kinase |
| AAEL011208-RA | PMT | 0.067,0.064,0.055 | 1358,1590,1305 | DIV | Av71 muscle cell intermediate filament |
| AAEL011414-RC | PT | 0.058,0.046 | 119,5 | DIV | high mobility group non-histone prot |
| AAEL012119-RA | PKMT | 0.096,0.072,0.096,0.099 | 609,1285,309,257 | DIV | Nucleolin |
| AAEL012231-RA | K | 0.145 | 71 | DIV | hypo prot |
| AAEL012576-RA | K | 0.07 | 55 | DIV | pyruvate kinase |
| AAEL012612-RB | K | 0.127 | 36 | DIV | serine/threonine prot kinase |
| AAEL012887-RA | MT | 0.086,0.077 | 47,3 | DIV | conserved hypo prot |
| AAEL012971-RA | PKMT | 0.079,0.068,0.051,0.057 | 325,427,378,350 | DIV | Mucin-2 |
| AAEL012971-RB | K | 0.082 | 22 | DIV | Mucin-2 |
| AAEL013038-RA | M | 0.058 | 1571 | DIV | Diacylglycerol kinase |
| AAEL013203-RB | PK | 0.139,0.102 | 5,127 | DIV | Ubiquitin carboxyl-terminal hydrolase |
| AAEL013464-RA | T | 0.059 | 208 | DIV | WD repeat-containing |
| AAEL013574-RB | PK | 0.071,0.072 | 145,190 | DIV | apolipoprot D |
| AAEL013681-RA | M | 0.063 | 19 | DIV | hypo prot |
| AAEL013877-RG | PKMT | 0.06,0.069,0.059,0.051 | 1115,1604,598,366 | DIV | glucosamine-6-phosphate isomerase |
| AAEL014039-RA | K | 0.072 | 74 | DIV | conserved hypo prot |


| AAEL014668-RA | PKMT | 0.086,0.091,0.08,0.083 | 3397,3409,3092,3211 | DIV | ankyrin 23/unc44 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEL014741-RA | PKM | 0.082,0.094,0.061 | 1915,1736,1358 | DIV | serine/threonine-prot kinase ripk4 |
| AAEL014742-RA | PKMT | 0.135,0.139,0.067,0.061 | 3063,2875,2562,2721 | DIV | ankyrin 23/unc44 |
| AAEL014956-RA | MT | 0.051,0.053 | 1983,1924 | DIV | internalin A |
| AAEL015143-RA | P | 0.074 | 37 | DIV | glycine rich RNA binding prot |
| AAEL015454-RA | M | 0.075 | 82 | DIV | conserved hypo prot |
| AAEL017027-RA | T | 0.076 | 6 | DIV | hypo prot |
| AAEL017039-RA | T | 0.128 | 26 | DIV | Alcohol dehydrogenase |
| AAEL017112-RA | T | 0.053 | 65 | DIV | hypo prot |
| AAEL017469-RA | MT | 0.074,0.052 | 64,16 | DIV | hypo prot |
| AAEL017506-RA | PKMT | 0.073,0.077,0.124,0.06 | 172,251,20,61 | DIV | hypo prot |
| AAEL003139-RB | M | 0.057 | 116 | FAT | short-chain dehydrogenase |
| AAEL009231-RA | PT | 0.059,0.051 | 1268,1244 | FAT | Lipid storage droplet-1 |
| AAEL006212-RA | T | 0.047 | 2116 | IMM | toll-like receptor |
| AAEL014141-RB | PKMT | 0.08,0.069,0.085,0.084 | 124,131,116,82 | IMM | Serine Protease Inhibitor (serpin)likely cleavage at S/M |
| AAEL005520-RB | PMT | 0.062,0.068,0.056 | 182,77,121 | MET | carbonic anhydrase |
| AAEL012113-RA | T | 0.054 | 331 | MET | vacuolar ATP synthase proteolipid subunit |
| AAEL013132-RB | K | 0.077 | 38 | MET | 6-phosphofructo-2-kinase/fructose-2 6-bisphosphatase |
| AAEL017670-RA | PMT | 0.064,0.061,0.054 | 249,223,212 | miRNA | miRNA |
| AAEL000526-RA | T | 0.047 | 28 | MITO | ATP synthase subunit f mito |
| AAEL000619-RA | PKM | 0.067,0.103,0.057 | 724,726,658 | MITO | ATP synthase subunit f mito |
| AAEL001718-RA | PKMT | 0.071,0.084,0.054,0.06 | 1223,1256,1161,1172 | MITO | ATP synthase subunit f mito |
| AAEL001885-RA | PMT | 0.059,0.058,0.061 | 53,159,73 | MITO | ATP synthase subunit f mito |
| AAELO02431-RA | MT | 0.057,0.058 | 494,549 | MITO | ATP synthase subunit f mito |
| AAEL002897-RA | PKMT | 0.068,0.081,0.053,0.048 | 742,749,729,747 | MITO | ATP synthase subunit f mito |
| AAEL006000-RC | MT | 0.056,0.054 | 227,176 | MITO | cytochrome c oxidase polypeptide 7A1 |
| AAEL006118-RA | MT | 0.056,0.057 | 107,61 | MITO | mito ribosomal prot L55 |
| AAEL008059-RA | KMT | 0.068,0.057,0.049 | 971,789,815 | MITO | ATP synthase subunit f mito |
| AAELO08582-RA | P | 0.086 | 23 | MITO | 30 S ribosomal prot S2(prokaryotic and organellar) |
| AAEL009589-RA | M | 0.059 | 189 | MITO | Endonuclease G mito |
| AAEL011010-RA | KT | 0.106,0.05 | 725,710 | MITO | ATP synthase subunit f mito |
| AAEL011110-RA | MT | 0.051,0.049 | 471,460 | MITO | ATP synthase subunit f mito |
| AAEL011391-RB | K | 0.12 | 26 | MITO | mito ribosomal prot 59 |
| AAEL014532-RA | T | 0.058 | 529 | MITO | ATP synthase subunit f mito |
| AAEL014681-RA | PKT | 0.065,0.093,0.049 | 970,960,909 | MITO | ATP synthase subunit f mito |
| AAEL017508-RA | M | 0.057 | 80 | MITO | mito dicarboxylate carrier |


| AAEL017637-RA | K | 0.099 | 19 | ncRNA | U6 spliceosomal RNA |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEL017645-RA | PKMT | 0.079,0.086,0.084,0.077 | 125,161,157,58 | ncRNA | U2 spliceosomal RNA |
| AAEL017739-RA | PKM | 0.089,0.105,0.127 | 126,111,31 | ncRNA | U5 spliceosomal RNA |
| AAEL017763-RA | P | 0.127 | 20 | ncRNA | U6 spliceosomal RNA |
| AAEL017814-RA | K | 0.073 | 127 | ncRNA | U1 spliceosomal RNA |
| AAEL017860-RA | K | 0.109 | 110 | ncRNA | U1 spliceosomal RNA |
| AAEL017888-RA | PKM | 0.102,0.088,0.074 | 108,115,109 | ncRNA | U5 spliceosomal RNA |
| AAEL017921-RA | T | 0.059 | 190 | ncRNA | 5.8S ribosomal RNA |
| AAEL003877-RA | MT | 0.056,0.049 | 3170,3250 | PROT | ubiquitin |
| AAEL004121-RB | K | 0.109 | 97 | PROT | ubiquitin-conjugating enzyme E2 q |
| AAEL009898-RA | M | 0.05 | 1933 | PROT | proteasome subunit alpha type |
| AAEL014007-RA | K | 0.1 | 26 | PROT | Serine protease easter |
| AAEL017399-RA | T | 0.048 | 3378 | PROT | Glutamyl aminopeptidase |
| AAEL006588-RA | PKMT | 0.069,0.111,0.069,0.063 | 840,994,727,654 | ReDox | conserved hypo prot |
| AAEL007463-RA | K | 0.077 | 59 | ReDox | 5 10-methylenetetrahydrofolate reductase |
| AAEL007523-RA | PMT | 0.065,0.069,0.072 | 7423,7203,7165 | ReDox | peroxisomal n1-acetyl-spermine/spermidine oxidase |
| AAEL009685-RB | PMT | 0.082,0.081,0.077 | 392,254,213 | ReDox | oxidoreductase |
| AAEL013007-RA | M | 0.056 | 695 | ReDox | cytochrome c oxidase subunit VB |
| AAEL015588-RA | M | 0.058 | 12 | ReDox | $5 \mathrm{p}-1106$ \|hydroxyacyl dehydrogenase |
| AAEL001484-RA | PMT | 0.082,0.076,0.079 | 628,567,310 | R/T/T | chromosome region maintenance prot 1/exportin |
| AAEL002368-RA | PM | 0.079,0.078 | 113,113 | R/T/T | 40S ribosomal prot S27 |
| AAEL003382-RA | K | 0.089 | 227 | R/T/T | Ro ribonucleoprot autoantigen |
| AAEL004830-RA | PKMT | 0.079,0.074,0.085,0.089 | 509,597,494,374 | R/T/T | 605 ribosomal prot L18a |
| AAEL006785-RB | PKT | 0.104,0.073,0.093 | 127,105,74 | R/T/T | 60S ribosomal prot L18a |
| AAEL007048-RB | PKT | 0.112,0.102,0.089 | 151,163,80 | R/T/T | Zinc finger |
| AAEL007925-RA | T | 0.047 | 743 | R/T/T | histone H2A |
| AAEL008026-RA | T | 0.048 | 370 | R/T/T | MADF domain |
| AAEL008447-RA | T | 0.053 | 717 | R/T/T | 60 S ribosomal prot L18a |
| AAEL009118-RA | PKM | 0.099,0.101,0.207 | 122,160,3 | R/T/T | histone H2A |
| AAEL009400-RC | PM | 0.08,0.087 | 213,148 | R/T/T | ccr4-associated factor |
| AAEL010335-RA | T | 0.046 | 257 | R/T/T | 60S ribosomal prot L18a |
| AAEL010468-RB | PMT | 0.068,0.079,0.073 | 281,173,138 | R/T/T | DNA-directed RNA polymerase I 12kD-subunit |
| AAEL010550-RA | PMT | 0.069,0.066,0.069 | 778,775,700 | R/T/T | 60S ribosomal prot L18 |
| AAEL011089-RB | K | 0.112 | 107 | R/T/T | ribonucleoprot |
| AAEL011251-RA | M | 0.058 | 35 | R/T/T | RNA binding motif prot |
| AAEL011286-RA | P | 0.061 | 46 | R/T/T | conserved hypo prot |


| AAEL012618-RA | K | 0.069 | 253 | R/T/T | RNA-binding |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEL012921-RA | PMT | 0.066,0.062,0.063 | 440,460,471 | R/T/T | ribosomal prot L36 |
| AAEL013682-RA | M | 0.058 | 1101 | R/T/T | zinc finger prot |
| AAEL016019-RA | PKMT | 0.107,0.081,0.057,0.105 | 104,83,61,59 | R/T/T | tRNA-Asp Asp ATC |
| AAEL017516-RC | K | 0.072 | 39 | R/T/T | 60S ribosomal prot L23a |
| AAEL004246-RB | PK | 0.1,0.126 | 39,36 | SigT | still life sif |
| AAEL006091-RA | PK | 0.07,0.094 | 40,112 | SigT | rab6 |
| AAEL006786-RC | PKM | 0.07,0.078,0.099 | 58,456,96 | SigT | GTPase rho |
| AAEL017480-RA | PKMT | 0.125,0.147,0.103,0.092 | 2005,1954,1988,2005 | SigT | Ankyrin-1 |
| AAEL016262-RA | PK | 0.137,0.102 | 44,118 | Trna | Ala (not confirmed) |
| AAEL016369-RA | PK | 0.059,0.083 | 71,155 | tRNA | Ala (not confirmed) |
| AAEL016478-RA | PK | 0.061,0.07 | 85,189 | tRNA | Ala (not confirmed) |
| AAEL016754-RA | K | 0.073 | 140 | tRNA | Ala (not confirmed) |
| AAEL016890-RA | P | 0.062 | 61 | tRNA | Ala (not confirmed) |
| AAEL016048-RA | K | 0.124 | 53 | tRNA | Ala(AGC antisense) |
| AAEL016379-RA | PKMT | 0.074,0.08,0.078,0.077 | 237,241,180,184 | tRNA | Ala(AGC antisense) |
| AAEL016076-RA | K | 0.11 | 46 | tRNA | Ala(AGC antisense) |
| AAEL016250-RA | PKM | 0.075,0.089,0.117 | 46,98,9 | tRNA | Ala(AGC antisense) |
| AAEL016283-RA | PKM | 0.065,0.076,0.078 | 119,156,107 | tRNA | Ala(AGC antisense) |
| AAEL016300-RA | P | 0.231 | 1 | tRNA | Ala(AGC antisense) |
| AAEL016322-RA | M | 0.052 | 101 | tRNA | Ala(AGC antisense) |
| AAEL016323-RA | K | 0.08 | 120 | tRNA | Ala(AGC antisense) |
| AAEL016335-RA | PKT | 0.105,0.085,0.095 | 23,24,37 | tRNA | Ala(AGC antisense) |
| AAEL016368-RA | PKM | 0.106,0.113,0.074 | 117,130,38 | tRNA | Ala(AGC antisense) |
| AAEL016376-RA | PMT | 0.059,0.052,0.06 | 222,138,123 | tRNA | Ala(AGC antisense) |
| AAEL016405-RA | P | 0.066 | 208 | tRNA | Ala(AGC antisense) |
| AAEL016411-RA | PKMT | 0.089,0.073,0.267,0.066 | 90,111,3,18 | tRNA | Ala(AGC antisense) |
| AAEL016421-RA | K | 0.116 | 37 | tRNA | Ala(AGC antisense) |
| AAEL016425-RA | PKMT | 0.071,0.071,0.076,0.094 | 147,120,41,42 | tRNA | Ala(AGC antisense) |
| AAEL016427-RA | PK | 0.099,0.103 | 91,179 | tRNA | Ala(AGC antisense) |
| AAEL016433-RA | P | 0.058 | 6 | tRNA | Ala(AGC antisense) |
| AAEL016606-RA | T | 0.048 | 105 | tRNA | Ala(AGC antisense) |
| AAEL016623-RA | PK | 0.095,0.116 | 59,52 | tRNA | Ala(AGC antisense) |
| AAEL016650-RA | PKM | 0.072,0.07,0.091 | 141,201,81 | tRNA | Ala(AGC antisense) |
| AAEL016672-RA | PKMT | 0.071,0.08,0.066,0.069 | 207,205,153,173 | tRNA | Ala(AGC antisense) |
| AAEL016735-RA | P | 0.067 | 92 | tRNA | Ala(AGC antisense) |


| AAEL016760-RA | PK | 0.1,0.086 | 70,133 | tRNA | Ala(AGC antisense) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEL016761-RA | P | 0.061 | 23 | tRNA | Ala(AGC antisense) |
| AAEL016782-RA | PKMT | 0.079,0.072,0.078,0.077 | 156,163,144,82 | tRNA | Ala(AGC antisense) |
| AAEL016827-RA | PKM | 0.133,0.118,0.11 | 83,148,64 | tRNA | Ala(AGC antisense) |
| AAEL016937-RA | PKM | 0.098,0.11,0.056 | 96,175,28 | tRNA | Ala(AGC antisense) |
| AAEL016950-RA | P | 0.087 | 21 | tRNA | Ala(AGC antisense) |
| AAEL016829-RA | T | 0.071 | 58 | tRNA | Ala(AGC antisense) |
| AAEL016248-RA | T | 0.058 | 30 | tRNA | Ala(AGC antisense) |
| AAEL016801-RA | P | 0.124 | 1 | tRNA | Ala(AGC antisense) |
| AAEL016917-RA | P | 0.065 | 26 | tRNA | Ala(AGC antisense) |
| AAEL016075-RA | PKMT | 0.087,0.078,0.071,0.081 | 182,186,134,126 | tRNA | Ala(AGC antisense) |
| AAEL016160-RA | PKM | 0.065,0.08,0.072 | 118,114,62 | tRNA | Ala(AGC antisense) |
| AAEL016052-RA | M | 0.056 | 67 | tRNA | Ala(AGC antisense) |
| AAEL016601-RA | PKMT | 0.074,0.077,0.087,0.07 | 120,147,98,87 | tRNA | Ala(TGC antisense) |
| AAEL016536-RA | K | 0.069 | 90 | tRNA | Arg(ACG antisense) |
| AAEL016554-RA | P | 0.059 | 19 | tRNA | $\operatorname{Arg}$ (ACG antisense) |
| AAEL016592-RA | M | 0.05 | 33 | tRNA | Arg(ACG antisense) |
| AAEL016256-RA | PKMT | 0.096,0.093,0.088,0.089 | 288,459,196,215 | tRNA | Arg(TCG antisense) |
| AAEL016667-RA | PKMT | 0.084,0.091,0.089,0.079 | 160,165,160,144 | tRNA | Asn(GTT antisense) |
| AAEL016231-RA | PMT | 0.06,0.058,0.069 | 144,158,142 | tRNA | Asn(GTT antisense) |
| AAEL016444-RA | K | 0.114 | 21 | tRNA | Asp(GTC antisense) |
| AAEL016541-RA | P | 0.09 | 34 | tRNA | Asp(GTC antisense) |
| AAEL016955-RA | T | 0.046 | 203 | tRNA | Asp(GTC antisense) |
| AAEL016202-RA | T | 0.046 | 228 | tRNA | Asp(GTC antisense) |
| AAEL016400-RA | MT | 0.053,0.053 | 205,172 | tRNA | Cys(GCA antisense) |
| AAEL016492-RA | PK | 0.062,0.082 | 39,18 | tRNA | Cys(GCA antisense) |
| AAEL016145-RA | M | 0.053 | 33 | tRNA | Glu (not confirmed) |
| AAEL016392-RA | P | 0.064 | 45 | tRNA | Glu (not confirmed) |
| AAEL016132-RA | PK | 0.099,0.121 | 43,87 | tRNA | Glu(CTC antisense) |
| AAEL016148-RA | KM | 0.091,0.079 | 56,45 | tRNA | Glu(CTC antisense) |
| AAEL016473-RA | M | 0.082 | 26 | tRNA | Glu(CTC antisense) |
| AAEL016557-RA | PK | 0.072,0.09 | 56,126 | tRNA | Glu(TTC antisense) |
| AAEL016856-RA | PK | 0.069,0.085 | 54,97 | tRNA | Glu(TTC antisense) |
| AAEL016705-RA | M | 0.055 | 7 | tRNA | Gly (not confirmed) |
| AAEL016508-RA | M | 0.062 | 34 | tRNA | Gly (not confirmed) |
| AAEL016191-RA | PMT | 0.061,0.074,0.059 | 13,22,8 | tRNA | Gly(GCC antisense) |


| AAEL016009-RA | PKMT | 0.085,0.08,0.089,0.081 | 41,159,8,58 | tRNA | Gly(GCC antisense) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEL016274-RA | M | 0.054 | 25 | tRNA | Gly(TCC antisense) |
| AAEL016689-RA | P | 0.062 | 16 | tRNA | Gly(TCC antisense) |
| AAEL016879-RA | PMT | 0.069,0.065,0.065 | 417,334,386 | tRNA | His(GTG antisense) |
| AAEL016458-RA | PK | 0.062,0.068 | 83,135 | tRNA | His(GTG antisense) |
| AAEL016104-RA | K | 0.121 | 58 | tRNA | Leu(CAG antisense) |
| AAEL016396-RA | T | 0.062 | 86 | tRNA | Leu(AAG antisense) |
| AAEL016436-RA | P | 0.11 | 5 | tRNA | Leu(GAG antisense) |
| AAEL016803-RA | PKMT | 0.11,0.087,0.095,0.099 | 183,295,116,147 | tRNA | Leu(GAG antisense) |
| AAEL016406-RA | T | 0.06 | 14 | tRNA | Leu(TAG antisense) |
| AAEL016865-RA | M | 0.06 | 55 | tRNA | Leu(TAG antisense) |
| AAEL016239-RA | PKMT | 0.073,0.083,0.117,0.073 | 136,149,10,65 | tRNA | Lys(CTT antisense) |
| AAEL016268-RA | T | 0.057 | 29 | tRNA | Lys(CTT antisense) |
| AAEL016178-RA | PK | 0.073,0.068 | 12,53 | tRNA | Lys(CTT antisense) |
| AAEL016669-RA | P | 0.062 | 8 | tRNA | Met(CAT antisense) |
| AAEL016226-RA | K | 0.072 | 51 | tRNA | Met(CAT antisense) |
| AAEL016943-RA | PT | 0.061,0.072 | 129,82 | tRNA | Pro(AGG antisense) |
| AAEL016520-RA | PKT | 0.062,0.096,0.12 | 28,92,15 | tRNA | Pro(TGG antisense) |
| AAEL016291-RA | T | 0.116 | 2 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016304-RA | K | 0.084 | 41 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016314-RA | K | 0.135 | 29 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016364-RA | PKMT | 0.105,0.116,0.108,0.103 | 150,180,119,46 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016378-RA | PK | 0.09,0.158 | 13,95 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016418-RA | PKM | 0.075,0.07,0.093 | 118,89,87 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016502-RA | K | 0.114 | 86 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016572-RA | PKM | 0.087,0.095,0.098 | 127,221,32 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016748-RA | PKMT | 0.112,0.082,0.115,0.099 | 97,206,55,45 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016795-RA | P | 0.069 | 34 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016798-RA | MT | 0.053,0.056 | 117,65 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016804-RA | PKMT | 0.108,0.132,0.13,0.13 | 108,111,66,84 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016821-RA | K | 0.109 | 31 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016846-RA | K | 0.117 | 64 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016916-RA | PKMT | 0.092,0.092,0.098,0.076 | 179,276,91,163 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016089-RA | K | 0.108 | 186 | tRNA | Pseudogene Ala(AGC antisense) |
| AAEL016390-RA | PKMT | 0.086,0.083,0.087,0.072 | 301,333,61,69 | tRNA | Pseudogene Glu(CTC antisense) |
| AAEL016832-RA | T | 0.048 | 64 | tRNA | Pseudogene Phe(AAA antisense) |


| AAEL016219-RA | PKMT | 0.102,0.098,0.076,0.116 | 107,146,119,62 | tRNA | Pseudogene Val(GAC antisense) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEL016067-RA | PMT | 0.06,0.059,0.049 | 85,65,65 | tRNA | Ser(CGA antisense)) |
| AAEL016223-RA | PKMT | 0.077,0.074,0.082,0.054 | 170,195,148,128 | tRNA | Ser(AGA antisense) |
| AAEL016065-RA | P | 0.063 | 118 | tRNA | Ser(CGA antisense) |
| AAEL016066-RA | PKMT | 0.068,0.067,0.07,0.068 | 431,496,392,431 | tRNA | Ser(CGA antisense) |
| AAEL016951-RA | PK | 0.06,0.068 | 35,165 | tRNA | Ser(not confirmed) |
| AAEL016180-RA | P | 0.073 | 51 | tRNA | Thr(AGT antisense) |
| AAEL016237-RA | K | 0.096 | 47 | tRNA | Tyr(GTA antisense) |
| AAEL016150-RA | KM | 0.083,0.059 | 137,6 | tRNA | Tyr(GTA antisense) |
| AAEL016154-RA | PK | 0.084,0.116 | 48,122 | tRNA | Tyr(GTA antisense) |
| AAEL016157-RA | KT | 0.069,0.062 | 111,54 | tRNA | Tyr(GTA antisense) |
| AAEL016316-RA | PKM | 0.102,0.079,0.231 | 146,83,1 | tRNA | Val(AAC antisense) |
| AAEL016627-RA | P | 0.12 | 29 | tRNA | Val(AAC antisense) |
| AAEL016880-RA | PMT | 0.065,0.067,0.064 | 186,181,145 | tRNA | Val(AAC antisense) |
| AAEL016043-RA | K | 0.092 | 5 | tRNA | Val(AAC antisense) |
| AAEL016404-RA | PKM | 0.083,0.087,0.092 | 174,198,74 | tRNA | Val(not confirmed) |
| AAEL000309-RB | M | 0.064 | 50 | TRP | Cytokine receptor |
| AAEL001125-RA | PKMT | 0.091,0.132,0.056,0.046 | 600,511,572,616 | TRP | p15-2b prot |
| AAEL001516-RA | PK | 0.071,0.081 | 10,138 | TRP | $5 \mathrm{p}-1810 \mid$ vesicle associated prot |
| AAEL002436-RC | PKT | 0.095,0.091,0.085 | 77,70,22 | TRP | Trimeric intracellular cation channel type B |
| AAEL004268-RA | PMT | 0.059,0.06,0.056 | 2671,2060,1723 | TRP | Sialin Sodium/sialic acid cotransporter |
| AAEL007521-RB | K | 0.126 | 8 | TRP | importin beta-2 |
| AAEL007580-RA | PK | 0.079,0.092 | 1030,1107 | TRP | NTF2-related export prot |
| AAEL010579-RA | K | 0.071 | 1498 | TRP | Lipid storage droplets surface-binding |
| AAEL011825-RC | K | 0.071 | 11 | TRP | aryl hydrocarbon receptor |
| AAEL012288-RA | M | 0.059 | 803 | TRP | sugar transporter |
| AAEL009600-RB | PKMT | 0.078,0.072,0.078,0.087 | 731,904,446,329 | TRP | 20-hydroxy-ecdysone receptor |
| AAEL000304-RC | MT | 0.058,0.056 | 202,107 | UNK | conserved hypo prot |
| AAEL000348-RA | PMT | 0.076,0.069,0.075 | 148,168,117 | UNK | conserved hypo prot |
| AAEL000473-RA | PMT | 0.059,0.051,0.053 | 2242,2130,1876 | UNK | hypo prot |
| AAEL001495-RB | M | 0.057 | 673 | UNK | conserved hypo prot |
| AAEL001561-RB | K | 0.091 | 52 | UNK | conserved hypo prot |
| AAEL001712-RA | PM | 0.064,0.053 | 340,247 | UNK | hypo prot |
| AAEL002180-RA | PMT | 0.066,0.059,0.05 | 777,793,769 | UNK | hypo prot |
| AAEL002573-RA | T | 0.05 | 285 | UNK | hypo prot |
| AAEL002604-RA | PT | 0.059,0.055 | 1194,1375 | UNK | SH3 domain-containing |


| AAELO02884-RA | MT | 0.05,0.051 | 858,787 | UNK | hypo prot |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAEL005161-RA | T | 0.046 | 838 | UNK | hypo prot |
| AAEL005758-RA | MT | 0.051,0.048 | 497,502 | UNK | conserved hypo prot |
| AAEL006470-RA | PKMT | 0.071,0.07,0.064,0.055 | 3511,5905,2863,2873 | UNK | hypo prot |
| AAEL006644-RA | T | 0.047 | 3351 | UNK | hypo prot |
| AAEL006846-RA | M | 0.058 | 292 | UNK | hypo prot |
| AAEL006914-RA | PMT | 0.063,0.062,0.078 | 419,201,187 | UNK | hypo prot |
| AAEL006943-RA | MT | 0.057,0.056 | 9491,8900 | UNK | hypo prot |
| AAEL007571-RA | M | 0.054 | 862 | UNK | hypo prot |
| AAEL007645-RA | MT | 0.053,0.051 | 590,546 | UNK | hypo prot |
| AAEL007734-RA | T | 0.047 | 311 | UNK | conserved hypo prot |
| AAEL008808-RA | T | 0.054 | 526 | UNK | hypo prot |
| AAEL009065-RA | T | 0.05 | 815 | UNK | hypo prot |
| AAEL009322-RA | M | 0.052 | 293 | UNK | hypo prot |
| AAEL009552-RA | PMT | 0.059,0.055,0.047 | 712,773,799 | UNK | hypo prot |
| AAEL009633-RA | T | 0.049 | 811 | UNK | conserved hypo prot |
| AAEL010325-RA | PT | 0.059,0.054 | 894,1058 | UNK | hypo prot |
| AAEL010634-RA | PKMT | 0.066,0.069,0.078,0.098 | 106,133,68,57 | UNK | hypo prot |
| AAEL010690-RA | M | 0.055 | 349 | UNK | hypo prot |
| AAEL010746-RA | PMT | 0.066,0.059,0.057 | 1354,1287,1170 | UNK | hypo prot |
| AAEL010849-RA | PKT | 0.06,0.091,0.046 | 1619,1913,1253 | UNK | NTF2-related |
| AAEL011160-RA | MT | 0.054,0.05 | 452,453 | UNK | predicted prot |
| AAEL011207-RA | KT | 0.068,0.048 | 2854,1711 | UNK | hypo prot |
| AAEL011618-RA | M | 0.058 | 237 | UNK | conserved hypo prot |
| AAEL011829-RA | T | 0.049 | 250 | UNK | hypo prot |
| AAEL011894-RA | T | 0.076 | 84 | UNK | hypo prot |
| AAEL011971-RA | KM | 0.07,0.055 | 1141,1053 | UNK | Nicastrin |
| AAEL012196-RA | M | 0.057 | 751 | UNK | conserved hypo prot |
| AAEL012331-RA | M | 0.053 | 452 | UNK | SH3 domain-containing |
| AAEL012849-RB | PKT | 0.078,0.085,0.067 | 81,82,57 | UNK | hypo prot |
| AAEL013655-RA | PMT | 0.058,0.055,0.058 | 1108,811,713 | UNK | conserved hypo prot |
| AAEL013838-RA | PKMT | 0.063,0.079,0.059,0.063 | 1835,2092,1371,907 | UNK | hypo prot |
| AAEL014726-RA | MT | 0.05,0.055 | 2205,1751 | UNK | conserved hypo prot |
| AAEL014955-RA | PMT | 0.06,0.06,0.064 | 3322,1980,1599 | UNK | tartan prot |
| AAEL015091-RA | PMT | 0.064,0.071,0.092 | 1341,759,322 | UNK | hypo prot |
| AAEL015509-RA | T | 0.05 | 219 | UNK | conserved hypo prot |


| AAELO16980-RA | MT | $0.054,0.056$ | 908,1016 | UNK | hypo prot |
| :--- | :--- | :--- | :--- | :--- | :--- |
| AAELO17279-RA | T | 0.047 | 436 | UNK | hypo prot |
| AAELO17605-RA | T | 0.056 | 87 | UNK | hypo prot |
| AAELO08230-RA | KMT | $0.094,0.096,0.097$ | $466,183,131$ | UNK | hypo prot |

* Functional classes: ‘CYT/STR’, cytoskeletal and structural; ‘DIV’, diverse functions; FAT, Fatty Acid Metabolism; 'IMM’, immunity-and apoptosisrelated; 'MET', metabolism; 'miRNA' microRNA; 'MITO', mitochondrial; 'ncRNA' non-coding RNA'; 'PROT', proteolysis or 26S proteasome function; 'R/T/T', replication, transcription, and translation; 'ReDox', reduction/oxidation and oxidoreductive stress; 'SigT', Signal Transduction; 'TRP', transport or signaling; 'UNK', unknown functions.

