

1

2

3

4

0.0 AUBES2582
 3.0 AUBES2148 AUBES1157
 4.7 AUBES4076
 5.8 AUBES2400
 8.8 AUBES1995
 9.9 AUBES5192
 14.7 AUBES4012
 16.8 AUBES4851
 18.9 IpCG0128_U9
 21.8 AUBES3298
 22.6 AUBES1924
 22.8 AUBES4943
 23.0 AUBES3946
 23.2 AUBES4697
 23.5 AUBES3566
 23.8 AUBES3598
 24.3 AUBES2756
 24.5 AUBES2772
 24.7 AUBES5202 AUBES3178
 24.8 AUBES4022
 25.0 AUBES3350
 25.1 AUBES2927 AUBES2764
 25.2 AUBES4720
 25.4 AUBES3568 AUBES3160
 AUBES4540
 25.5 AUBES2634 AUBES4992
 AUBES5191 AUBES4729
 AUBES4437 AUBES4099
 AUBES3451 AUBES4436
 AUBES4263 AUEST0345L
 AUBES3475 AUBES4139
 AUBES4800 AUBES4860
 AUBES4764 AUSNP000013
 AUBES2839 AUBES4861
 AUBES5165 AUBES1691
 AUBES3565 AUBES2627
 AUBES5120 AUBES4650
 AUBES3923 AUBES3452
 AUBES2049
 25.8 AUBES2954 AUBES2358
 AUBES3567 AUBES4624
 AUBES3209
 26.2 AUBES2446 AUBES4641
 26.3 AUBES2953
 26.5 AUBES2067
 26.7 AUBES1527
 26.8 AUBES1803
 27.1 AUBES4541
 27.2 AUBES5061
 27.5 AUBES5198
 28.1 AUBES4468
 28.6 AUBES3108
 29.2 AUBES5183
 30.1 AUBES2110
 32.4 AUBES0793
 33.6 AUBES5119
 34.4 AUEST0936
 37.8 AUBES3993
 38.8 AUBES5317
 39.3 AUBES3421
 39.4 AUBES3420
 39.8 AUBES3992
 40.0 AUBES3745
 40.1 AUBES3752 AUBES4483
 40.8 AUEST0572
 41.9 AUBES3688 AUSNP000052
 AUSNP000077 AUSNP000038
 42.0 AUBES2695
 42.1 AUBES1792
 44.4 AUEST0803
 44.5 AUBES4321 AUEST0002
 44.8 AUBES4724
 46.1 AUNGS5096
 47.8 AUBES2082
 48.3 AUBES5344 AUBES3403
 AUBES3404
 48.4 AUBES1378
 49.5 AUBES1597
 50.2 AUBES5327
 51.0 AUBES4310
 51.9 AUBES4758
 55.3 AUEST0900
 68.2 AUBES4414
 68.5 AUEST0220U AUEST0220L
 69.0 AUEST0755
 69.1 AUBES1075
 76.6 AUEST0132

0.0 AUBES1263
 0.5 AUBES1868
 1.9 AUBES4268
 3.8 AUBES4170
 4.7 AUBES1947
 6.0 AUBES3080
 6.7 AUBES5080
 11.0 AUBES4698
 13.2 AUBES2884
 13.6 AUBES2885
 16.7 AUBES4165
 19.4 AUBES1881
 20.6 AUBES3952
 25.2 AUEST0610
 26.4 AUBES3395
 26.5 AUBES2258
 33.1 AUBES3626
 34.3 AUBES3394
 34.7 IpCG0007_U24
 35.4 AUBES1586
 35.6 AUBES5410
 36.5 AUEST0771
 37.0 AUBES3625
 38.0 IpCG0134_U24
 38.6 AUEST0714
 39.0 AUBES4162
 39.6 AUBES4789
 39.7 AUBES4487
 40.1 AUBES5146
 40.4 AUBES1592
 40.6 AUBES3627
 40.9 AUBES5044
 41.3 AUBES5300
 41.8 AUBES3633
 AUBES3628 IpCG0130_U24
 AUBES4163 AUBES4434
 AUBES2279 AUSNP000078
 AUEST0514
 42.0 AUBES4435 AUBES5387
 42.2 AUBES3758
 42.3 IpCG0182_U24 AUBES3082
 42.4 AUBES3858 AUBES3036
 42.5 AUBES3238
 42.7 AUBES5001
 42.9 AUBES1701
 43.3 AUBES2676
 44.2 IpCG0297_U24
 45.1 AUBES3988 AUBES3978
 45.4 AUBES4111
 46.2 AUBES1842
 46.5 AUBES2085 AUBES1853
 46.7 AUBES1615
 46.9 AUBES5241
 47.5 AUBES5412
 47.6 AUBES4269
 49.1 AUEST0670
 50.8 AUEST0836
 51.3 AUBES4457
 51.7 IpCG0293_U24
 52.5 AUBES2036
 53.1 AUBES4456
 55.4 AUBES3183
 55.8 AUBES3184
 56.4 AUBES4633
 59.0 AUBES3215
 63.9 AUBES5046
 64.9 AUBES3995
 65.6 AUEST0106
 67.5 AUEST0998
 70.2 AUBES4858 AUBES5408
 71.1 AUBES4859
 71.9 AUBES2551
 72.5 AUBES5332
 75.3 AUEST0472
 79.9 AUBES2152

0.0 AUEST0981
 0.1 IpCG0136_U5
 4.6 AUBES4824
 6.5 AUBES1073
 9.0 AUBES5154 AUBES5124
 10.8 AUEST0815
 25.2 AUEST0356B AUEST0356A
 30.2 AUBES4476
 30.9 AUBES4740
 32.0 AUBES4718
 33.4 AUBES4690
 34.4 IpCG0124_U5
 37.1 AUBES5331
 38.6 AUBES3895
 42.2 AUBES4395
 42.8 AUBES5169
 44.9 AUEST0783
 47.4 IpCG0233_U5
 48.3 AUBES1811
 48.5 AUBES5048
 49.4 AUBES5168
 51.8 AUBES3536
 54.0 AUBES1186
 54.1 AUBES3065
 54.3 AUEST0838
 57.7 AUBES1590
 58.4 AUBES3544
 58.6 AUBES4343
 59.4 AUBES3771
 61.0 AUBES3074
 61.7 AUBES2347
 62.1 AUBES1846
 62.4 AUBES2748
 62.9 AUBES1742
 63.0 AUBES1781
 63.6 AUBES4784 AUBES4254
 AUEST0829U AUBES4350
 AUBES2595 AUSNP000072
 AUEST0635U
 64.6 AUBES5148 AUBES4950
 64.8 AUBES2555 AUBES4702
 65.0 AUBES4769
 65.2 AUBES2052
 65.4 AUBES2815
 IpCG0290_U5 AUBES3646
 65.5 AUBES5229 IpCG0088_U5
 AUBES3879
 AUBES4462 AUBES4271
 AUBES1697 AUBES3327
 AUBES4044
 66.1 AUBES3139
 66.2 AUBES3880 AUBES3647
 66.5 AUBES3491
 67.5 AUBES1626
 68.0 AUBES2984
 68.8 AUBES2097
 71.2 AUBES5176
 72.3 AUBES2550
 72.8 AUBES4830
 73.2 AUBES2926
 73.3 AUBES2086 AUEST0753
 73.9 AUBES5336
 74.3 AUBES2423 AUBES4578
 74.4 AUBES4593
 74.5 AUBES5232 AUBES5259
 AUBES4228
 74.6 AUBES4876 AUBES5297
 IgH_U5
 74.9 AUBES4970
 75.2 AUBES4875
 75.4 AUBES3913
 75.9 AUBES4502
 76.2 AUBES2113
 76.9 AUBES2091
 77.0 AUBES2095
 AUBES1963
 79.8 AUBES4974 AUBES2411
 AUBES5067 AUNGS5105
 79.9 AUBES1381
 80.8 AUBES4976
 81.4 AUBES2958
 81.6 AUBES3443
 81.7 AUBES2837
 82.0 AUBES3444 AUBES2421
 AUBES4704
 83.1 AUBES4704
 83.8 AUEST0406
 85.0 AUBES2915
 99.9 AUBES4620

0.0 AUBES1740
 17.1 AUBES5273
 18.1 AUBES2353
 23.2 AUSNP000020 AUBES1795
 26.4 AUBES4570
 AUBES4936
 28.6 AUBES1327
 31.5 AUBES5203
 35.4 AUBES5266
 35.5 AUBES5234
 37.1 AUBES4904
 37.7 AUSNP000076
 45.3 AUBES2399
 50.0 IpCG0232_U6
 50.8 IpCG0230_U6
 52.3 IpCG0159_U12
 52.4 IpCG0158_U6
 AUBES5177
 AUEST0678
 AUBES4460
 AUBES1153
 55.0 IpCG0012_U6
 55.5 AUBES4496
 55.7 AUBES4257
 55.8 AUEST0288
 56.0 AUBES4565
 AUEST0305
 56.4 AUBES3780
 AUEST0505 AUBES3638
 AUBES4354
 57.0 AUBES4743 AUBES1413
 57.3 AUEST0508
 AUBES2792 AUBES5397
 AUBES3639
 AUBES4036
 AUBES2427
 AUBES1841 AUBES1810
 AUBES4084
 AUBES1230 AUBES4083
 AUBES4276 IpCG0192_U6
 AUBES3012 AUBES4972
 AUBES2459 AUBES2078
 AUBES2403 AUBES2682
 AUBES3576 AUBES2600
 IpCG0309_U6 AUBES5296
 AUBES5193 AUBES1103
 AUBES4939 AUBES4681
 AUBES4070 AUBES4071
 AUBES3306 AUBES1926
 AUBES4480
 58.1 AUBES1555 AUBES3694
 AUBES3171 AUBES4869
 AUBES1617
 AUBES3468 AUBES2084
 AUBES4906
 AUBES4881
 AUBES2829
 AUBES3376
 AUBES4543
 AUBES1319
 AUBES5388 AUBES5134
 AUBES4971 AUBES4708
 AUBES2505 AUBES4270
 AUBES4709
 AUBES3760
 AUBES3312
 AUEST0424
 60.3 AUBES2617
 60.8 AUBES5409
 61.1 AUBES3608
 61.5 AUBES3607
 61.7 AUBES5377
 61.8 AUBES2921
 62.2 AUBES3154
 63.0 AUBES5267
 65.3 AUBES5380
 66.4 AUEST0052
 69.4 AUBES0364
 74.0 IpCG0273_U6
 77.0 AUBES4498
 86.1 AUBES2508
 87.9 AUBES2508
 88.3 AUEST0960

| 5 | 6 | 7 | 8 | | |
|------|------------------------|------|------------------------|------|--------------------------|
| 0.0 | AUSNP000084 | 0.0 | AUBES1144 | 0.0 | AUBES4813 |
| 1.1 | AUEST0789 | 3.0 | AUBES5284 | 4.0 | AUBES3538 |
| 5.2 | AUEST0618 | 6.5 | AUEST0774 AUBES4993 | 6.1 | AUBES4368 |
| 9.1 | AUBES5362 | 8.2 | AUBES1616 | 6.2 | AUBES4367 AUBES3573 |
| 15.7 | AUBES3782 | 8.4 | AUBES4389 | 6.2 | AUBES3574 |
| 16.4 | AUBES4842 | 17.2 | AUBES3799 | 10.1 | AUBES3328 |
| 19.9 | AUBES5346 | 20.5 | AUEST0699L | 10.5 | AUBES3357 |
| 22.3 | AUBES2883 | 22.0 | AUBES3798 | 10.6 | AUBES2576 |
| 24.3 | AUBES3002 | 25.1 | AUBES3804 AUBES3806 | 10.7 | AUBES3144 |
| 29.8 | AUBES4868 | 26.0 | AUBES3805 | 13.5 | AUBES4472 |
| 34.6 | AUBES4991 | 29.7 | AUBES2492 | 15.5 | AUBES5275 |
| 37.3 | AUBES3695 | 32.1 | AUBES2343 | 15.8 | AUBES1932 |
| 37.5 | AUBES4244 | 35.9 | AUBES1884 | 16.8 | AUBES4546 |
| 39.1 | AUBES2759 | 37.3 | AUEST0707 | 17.6 | AUBES3316 |
| 40.0 | IpCG0307_U11 | 37.8 | AUBES3004 | 17.6 | AUBES5328 |
| 40.6 | AUBES1952 | 38.1 | AUBES3793 | 20.6 | AUBES2722 |
| 41.1 | AUBES1422 | 38.4 | AUBES3777 | 25.1 | AUBES3380 |
| 41.5 | AUBES2457 | 38.7 | AUBES2689 | 28.9 | AUBES3203 |
| 41.9 | AUBES2559 | 39.0 | AUBES4144 | 30.6 | AUBES3203 |
| 42.7 | AUBES4357 | 39.1 | AUBES3934 AUBES4108 | 32.3 | AUBES3326 |
| 43.1 | AUBES4529 | 39.4 | AUBES5235 | 34.4 | AUBES1354 |
| 43.4 | AUBES5089 | 39.6 | AUBES4143 | 36.0 | AUEST0359 |
| 43.8 | AUEST0517 | 40.0 | AUBES3812 | 36.7 | AUBES4086 |
| 44.1 | AUBES4339 AUBES3629 | 40.2 | AUBES4003 AUBES3397 | 37.5 | AUBES1353 |
| 44.4 | AUBES2557 | 40.3 | AUBES2805 AUBES2642 | 38.0 | AUBES1990 |
| 44.5 | AUSNP000033 AUBES4024 | 40.3 | AUBES4637 AUBES3690 | 38.4 | AUBES5277 |
| 44.5 | AUBES4574 AUBES4374 | 40.4 | AUBES3791 AUBES3774 | 38.5 | AUBES5036 |
| 44.5 | AUBES3630 AUBES3596 | 40.6 | AUBES3809 | 38.9 | AUBES4126 |
| 44.7 | AUBES4346 AUSNP000027 | 40.6 | AUBES2034 AUBES3701 | 39.2 | AUEST0779 AUBES4610 |
| 44.7 | AUBES2993 | 40.8 | AUEST0414 AUBES4802 | 39.6 | IpCG0189_U18 |
| 44.8 | AUBES4052 | 40.8 | AUBES3359 AUBES3423 | 41.0 | AUBES2532 |
| 44.9 | AUBES4528 | 40.8 | AUBES3514 AUBES3017 | 41.4 | AUBES5306 |
| 45.3 | AUBES4425 | 40.8 | AUBES5370 AUBES3794 | 41.9 | AUBES4302 |
| 45.6 | AUBES4440 | 41.0 | AUBES2811 AUBES3282 | 42.0 | AUSNP000059 |
| 45.7 | AUBES4441 AUBES3590 | 41.0 | AUBES4371 AUBES3307 | 42.4 | AUBES3747 |
| 45.8 | AUBES2975 AUBES3274 | 41.1 | AUBES3692 AUBES2734 | 42.8 | AUBES3365 AUBES1113 |
| 45.8 | AUBES4688 IpCG0137_U11 | 41.1 | AUBES4963 AUBES1306 | 42.8 | AUBES4229 |
| 45.9 | AUSNP000062 AUBES4406 | 41.1 | AUBES3773 AUBES3955 | 43.1 | AUBES4427 AUBES4694 |
| 46.0 | AUBES2478 | 41.1 | AUBES3772 AUBES3795 | 43.2 | AUBES4443 |
| 46.0 | AUBES2005 AUBES4700 | 41.1 | AUBES3900 AUBES3892 | 43.3 | AUBES4401 |
| 46.0 | AUBES4331 AUBES2438 | 41.1 | AUBES4707 | 43.7 | AUBES1610 |
| 46.1 | AUBES4424 | 41.1 | AUBES3614 AUBES3852 | 43.8 | AUBES4591 |
| 46.3 | AUBES3117 | 41.1 | AUBES3792 AUBES3458 | 43.9 | AUBES2448 |
| 46.4 | AUBES4929 AUBES4897 | 41.1 | AUBES3613 AUBES3434 | 44.0 | AUBES4351 AUBES1918 |
| 46.4 | AUBES3446 AUBES2638 | 41.1 | AUBES2602 AUBES2606 | 44.1 | AUBES5305 AUBES3256 |
| 46.5 | AUBES5076 | 41.1 | AUBES3155 AUBES3759 | 44.2 | AUBES3194 |
| 46.7 | AUBES3237 | 41.1 | AUBES2623 AUBES3789 | 44.3 | AUBES3484 AUBES1730 |
| 46.8 | AUBES3445 | 41.1 | AUBES3457 AUBES2062 | 44.3 | IpCG0139-1_U18 AUBES5006 |
| 47.1 | AUBES4035 | 41.1 | AUBES1935 AUBES3698 | 44.4 | AUBES3381 AUBES5090 |
| 47.4 | AUBES3170 | 41.1 | AUBES3766 AUBES3845 | 44.4 | AUBES1942 AUBES3322 |
| 47.9 | AUBES1703 | 41.1 | AUEST0066 AUBES1793 | 44.4 | AUBES4627 |
| 48.8 | AUBES3402 AUBES4349 | 41.1 | AUBES3899 AUBES3255 | 44.5 | AUBES5330 AUBES3051 |
| 49.7 | IpCG0090_U11 | 41.1 | AUBES2195 AUBES2227 | 44.5 | AUBES3257 AUBES2057 |
| 52.3 | AUBES5218 | 41.3 | AUBES3015 AUBES3824 | 44.6 | AUBES4923 AUBES3324 |
| 53.0 | AUBES3595 | 41.3 | AUBES2952 AUBES2729 | 44.6 | AUBES5268 |
| 53.6 | AUBES4699 | 41.3 | IpCG0071_U22 AUBES3681 | 44.6 | AUBES1555 IpCG0217_U18 |
| 54.3 | AUBES3594 | 41.3 | AUBES3016 AUBES5342 | 44.6 | AUBES1786 AUBES3717 |
| 56.4 | AUEST0694 | 41.3 | AUBES4782 AUBES3323 | 44.6 | AUBES3485 AUBES2801 |
| 57.8 | AUBES2269 | 41.8 | AUBES3664 AUBES4049 | 44.6 | AUBES2597 AUSNP000009 |
| 58.4 | AUBES4567 AUSNP000086 | 41.8 | AUBES3309 AUEST0507 | 44.7 | AUBES4426 AUBES3749 |
| 59.0 | AUBES5039 | 41.8 | AUEST0473 AUBES4304 | 44.7 | AUBES2424 |
| 59.5 | AUBES3878 | 41.8 | AUBES3846 AUEST0427 | 44.7 | AUBES2802 |
| 60.1 | AUBES4685 | 41.8 | AUBES1185 AUBES4247 | 45.0 | AUBES3750 |
| 60.3 | AUBES2942 | 41.9 | AUBES3844 AUBES3398 | 45.2 | AUBES1763 AUBES1882 |
| 60.8 | AUBES1265 | 41.9 | AUBES3954 AUBES2779 | 45.4 | AUBES2731 |
| 61.1 | AUEST0944 | 42.0 | AUBES3097 | 45.6 | AUBES4442 AUBES3321 |
| 61.7 | AUEST1014 | 42.0 | AUBES3384 | 45.8 | AUBES4507 |
| 62.0 | AUBES4938 | 42.3 | AUSNP000040 | 46.1 | AUBES3855 |
| 62.1 | AUBES4686 | 42.4 | AUBES1564 | 46.6 | AUBES2263 |
| 62.5 | IpCG0157_U11 | 42.4 | AUBES3355 | 46.6 | AUSNP000098 |
| 63.0 | AUBES1630 | 42.8 | AUBES3280 | 46.7 | AUEST0922 |
| 63.4 | AUBES4774 | 43.0 | AUBES3591 | 47.0 | IpCG0110_U18 |
| 63.8 | AUBES2982 | 43.1 | AUBES3591 | 47.4 | IpCG0280_U18 |
| 64.0 | AUBES4127 | 43.5 | AUBES3683 | 48.6 | AUBES4345 AUBES4400 |
| 64.6 | AUBES4644 | 43.7 | AUBES3433 | 48.8 | AUBES1635 |
| 65.6 | AUEST0628L | 43.9 | AUBES3823 | 49.6 | AUBES5252 |
| 65.9 | AUBES2814 | 44.1 | AUBES1282 | 50.7 | IpCG0118_U18 |
| 66.5 | AUEST0671 | 44.2 | AUBES3103 | 50.9 | AUBES4249 |
| 67.6 | AUBES2182 AUBES4341 | 44.7 | AUBES3831 | 51.1 | AUBES4075 |
| 68.5 | AUBES1752 | 45.2 | IpCG0178_U22 | 51.4 | AUBES2886 |
| 69.5 | AUEST0628 | 45.8 | AUBES2987 | 52.3 | AUBES2754 |
| 70.0 | AUBES3940 | 48.0 | AUBES5151 | 52.7 | AUBES3115 |
| | | 54.0 | AUBES3784 | 53.0 | AUBES5286 |
| | | 71.6 | AUBES2386 | 62.1 | AUBES4778 |
| | | | | 65.3 | AUBES1287 |
| | | | | 68.4 | AUBES2257 AUBES1283 |
| | | | | 69.0 | AUBES3569 |
| | | | | 72.5 | AUBES4366 |
| | | | | 73.2 | AUEST0713 |
| | | | | 74.9 | AUBES4000 |
| | | | | 78.6 | AUBES5197 AUBES5373 |
| | | | | 79.1 | AUBES4399 |
| | | | | 79.5 | AUBES5231 AUBES4493 |
| | | | | | AUBES2204 |
| | | | | | AUBES2316 |
| | | | | | AUBES156 |

0.0 AUBES5199
 1.5 AUBES5227
 2.6 AUBES2104
 5.3 AUSNP000035
 5.8 AUBES3833
 6.2 AUBES1600
 6.6 AUBES3819
 6.9 AUBES1761 AUBES1607
 7.0 AUBES1871
 7.4 AUBES4658
 7.5 AUBES5357
 7.6 AUBES3055
 7.9 AUBES1843
 8.0 AUBES1435 AUBES4986
 8.1 AUEST0429 AUBES3025
 8.2 AUEST0840
 8.2 AUBES1348
 8.4 AUEST0691 AUBES3048
 AUBES3533 AUBES4642
 AUBES4166 AUBES3253
 AUBES2103 AUSNP000073
 AUBES5343 AUBES2916
 AUBES2561 AUBES4639
 AUNGS5111 AUBES5245
 AUBES2051 AUSNP000018
 AUBES3781 AUBES3259
 AUBES1343 AUBES2809
 AUBES3166 AUBES3105
 AUEST0592
 AUBES3970
 AUBES3818 AUBES3118
 AUBES4666 AUBES4280
 AUBES2668 AUBES4973
 AUEST0395 AUBES4689
 AUBES2938
 AUBES4274 AUBES3720
 AUBES2709
 AUBES5391
 AUBES3162
 AUBES5257
 AUBES5055
 AUBES3499
 AUBES3817
 AUEST0368
 AUEST0295
 AUBES2893
 AUBES5347
 AUBES4060
 AUBES1410
 AUBES4080
 AUSNP000071
 AUBES4840
 AUBES4659
 AUBES5078
 AUBES4571
 AUBES3653
 AUBES3716
 AUBES1368 AUBES3713
 AUBES4815 AUBES3229
 AUBES4501
 AUSNP000031
 AUBES2379
 AUBES3373
 IpCG0026_U1
 AUBES3199
 IpCG0093_U1
 AUBES1436
 AUSNP000016
 AUBES3230
 IpCG0275_U1

0.0 MFAP3
 1.8 MFAP2
 3.5 MFAP1
 5.8 AUEST0796
 6.5 IpCG0150_U27
 6.9 AUEST0277U
 7.8 AUEST0943
 9.2 AUSNP000093
 9.4 AUBES1885
 11.0 AUBES4226
 11.7 AUBES4677
 19.0 IpCG0094_U27
 20.6 AUBES4506
 29.4 AUEST0760
 31.2 AUBES2260
 32.6 CT53_U27
 35.0 AUEST0959
 41.8 AUBES3739
 43.5 AUBES3317
 44.1 AUBES5050
 47.8 AUBES3769
 48.9 AUBES3302
 51.3 AUBES2437
 55.9 AUBES5056
 59.0 AUBES5311
 59.5 AUEST0954
 59.9 AUBES2580
 60.5 AUBES3070
 61.7 AUBES1949
 63.5 AUBES2523
 64.0 AUNGS5104L
 64.7 AUBES1867
 65.2 AUBES2863
 65.3 AUBES3225
 65.9 AUBES4924
 66.2 AUBES4612
 66.5 AUBES2906
 66.7 AUBES4956
 66.9 AUBES3500
 67.1 AUEST0829L
 67.3 AUBES3501
 67.7 AUBES4850
 68.2 AUEST0422
 69.2 AUBES3600 AUBES3939
 69.5 AUBES4665
 70.0 AUBES5304
 71.5 AUBES3601
 72.2 AUBES4478 AUEST0310
 73.5 AUBES3980
 75.1 IpCG0030_U30
 76.1 AUBES5309 AUBES5016
 76.6 AUBES5224
 76.8 AUBES4407 AUBES5319
 76.9 IpCG0049_U30
 76.9 AUBES3632
 77.0 AUBES3545 AUBES3942
 77.3 AUBES3631
 77.5 AUBES4828
 77.6 AUBES3412
 79.5 AUBES3943
 79.9 AUEST0413
 84.8 AUBES2444
 98.0 AUEST0074

0.0 AUEST0813
 22.6 IpCG0061_U2
 23.7 AUBES1904
 25.1 AUBES1864
 26.7 AUBES4756
 29.3 AUBES3649 AUBES3424
 29.6 AUBES3425
 38.0 AUBES3204
 39.4 AUBES2944
 40.3 AUBES1859
 41.0 AUBES2859
 41.3 AUBES4763 AUBES3712
 41.6 AUBES2816
 42.0 AUEST0731
 42.3 AUBES4475
 42.6 AUBES2979
 42.7 AUBES2601
 42.8 AUSNP000095
 42.9 AUBES4231
 43.1 AUBES2371
 43.4 AUBES2712
 43.8 AUBES4781
 43.9 AUBES2512
 44.1 AUBES3527
 44.2 AUBES4372 AUBES3577
 44.2 AUBES5141 AUBES4491
 44.3 AUBES3867 AUBES3872
 44.3 AUBES3448 AUBES2717
 44.5 AUBES4293
 44.6 AUBES2520 AUBES5041
 44.6 AUBES5255
 44.7 AUBES4315 AUSNP000032
 44.7 AUBES1377 AUBES3665
 44.8 AUSNP000083 AUBES2076
 44.8 AUBES2123 AUBES3871
 44.9 IpCG0085_U2 AUBES3914
 44.9 AUBES4373
 45.0 AUBES3474 AUBES4385
 AUBES3714 AUBES2670
 AUBES3837 AUBES3775
 AUBES3090 AUBES3050
 AUBES5361 AUBES4294
 45.2 AUBES5019
 45.3 AUEST0027
 45.4 AUBES1137
 45.6 AUBES2266
 45.7 AUBES3473
 45.9 AUBES5258
 46.1 AUBES1538
 46.6 AUBES2610
 46.7 AUBES2703
 47.0 AUBES5372
 47.5 AUEST0856
 47.7 IpCG0152_U2
 48.2 AUBES1183
 48.4 AUBES4829
 48.8 AUBES3866
 49.4 AUBES3648
 49.9 AUBES3315
 50.6 AUEST0945
 51.2 AUBES1765
 51.7 AUEST0889
 55.2 AUBES2481
 61.1 AUBES3480
 70.6 AUBES4643
 71.3 AUBES1612
 71.9 AUBES2844
 72.7 AUBES3278
 73.6 AUBES4744
 78.7 AUBES4192
 81.2 AUBES2217
 83.9 AUBES2525

0.0 AUBES4575
 10.0 AUSNP000045
 18.1 AUBES1407
 19.4 AUBES4384
 19.9 AUBES4827
 20.6 AUBES2374
 21.1 AUBES4383
 21.3 AUBES3612
 22.5 AUBES1764
 23.3 AUBES5287
 24.2 AUBES4586
 24.7 AUSNP000058
 24.9 AUBES4713
 25.1 AUBES4714
 25.2 IpCG0107_U28
 25.6 IpCG0219a_U23,U28 IpCG0219_U23,U28
 26.7 AUBES2211
 31.5 AUBES5054
 32.1 AUBES2406 AUBES1396
 34.9 IpCG0160_U28
 35.9 AUEST0835
 37.0 IpCG0096_U28 AUBES2420
 AUSNP000042 AUBES2571
 37.1 AUBES3342 AUBES3049
 AUBES4069
 37.3 AUBES3124
 37.6 AUEST0383
 37.9 AUBES1888
 38.0 AUBES2075
 38.1 AUBES5186 AUBES4949
 38.4 AUBES5011
 38.7 AUBES4232
 40.0 AUBES4913
 40.5 AUBES4233
 41.9 AUBES2277
 42.1 AUBES3201
 43.4 AUBES2664
 44.3 AUBES1726
 44.9 AUEST0800
 45.5 AUBES2050
 45.9 AUBES4919
 46.0 AUEST0898
 46.1 AUBES1273
 AUBES4888 AUBES3233
 AUBES5116 AUBES3708
 AUBES4887 AUBES4928
 AUSNP000023 AUBES3542
 AUBES3967 AUBES3622
 AUBES4225 AUBES2773
 AUBES2115 AUBES2579
 47.2 AUBES1725
 48.1 AUBES1345
 48.4 AUBES4138 AUBES4101
 48.8 AUBES3054
 49.0 AUBES3111
 50.1 AUBES2497
 50.9 AUBES3513
 52.2 AUBES5130
 52.9 AUBES3076
 53.2 AUBES4843
 53.3 AUBES3345
 61.8 AUBES3546
 64.6 AUBES3469
 66.7 AUBES4066
 67.9 AUBES3416
 69.0 AUBES3470
 71.6 AUBES1430
 72.2 AUBES3497
 72.8 AUBES5160
 74.3 AUBES3496
 76.4 AUEST0138
 77.0 AUBES5222
 77.6 AUEST0961
 78.1 AUBES1178
 78.6 AUSNP000049
 82.4 AUEST0070
 82.7 AUBES5175
 83.2 AUEST0151
 84.8 AUBES3989
 85.5 AUEST0315
 86.0 AUBES5392
 86.3 AUBES4839
 87.2 AUBES5350
 87.3 AUBES5029
 88.4 AUBES5007
 88.9 AUEST0867
 90.7 AUBES4838
 94.5

0.0 AUBES4983
 10.6 AUEST0876
 11.7 AUBES5323 AUBES5384
 12.3 AUEST0790
 14.0 IpCG0304_U12
 15.7 AUBES1959
 16.1 AUBES1723
 16.6 AUBES4017 AUBES4759
 17.4 AUBES2039
 17.6 AUBES2228
 18.1 AUBES5415
 18.5 AUBES4885
 20.6 AUBES2791 AUBES3311
 32.3 AUBES4517
 34.2 AUBES4516
 35.0 AUEST0378
 36.0 AUBES1567
 39.1 AUBES5174
 41.4 AUBES2071
 43.4 AUBES2775
 44.2 AUBES2795
 46.0 AUBES2908
 46.7 AUBES3089
 46.8 AUBES1794
 47.8 AUBES3555
 47.9 AUBES3702 AUBES2609
 48.2 AUBES3110
 48.3 AUBES1887
 48.5 AUBES3734
 48.7 AUBES3486
 48.9 AUBES4007
 49.0 AUBES4082 IpCG0226_U12
 49.3 AUBES5281
 AUBES3060 AUBES3393
 49.6 AUBES3733 AUBES3149
 AUBES3557
 AUBES3439 AUBES4907
 49.7 AUBES2761 AUBES3392
 AUBES4622
 AUBES3678 AUSNP000029
 49.8 AUBES2637 AUSNP000021
 AUBES3476 AUBES2422
 AUSNP000019 AUBES5087
 49.9 AUBES2045
 50.3 AUBES5411
 50.4 AUBES3440
 50.5 AUSNP000064
 50.8 AUEST0628U
 51.1 AUBES2704
 51.3 AUBES4464
 51.5 AUBES2864
 54.0 AUBES4918
 54.6 AUBES4362
 54.9 IpCG0227_U12
 55.1 AUBES4006
 56.8 AUBES1594 AUBES2425
 61.0 AUSNP000046
 61.1 AUBES3030
 61.3 AUBES5058
 61.9 AUBES2924
 64.4 AUBES4761
 68.0 AUBES5329
 68.7 AUEST0650
 71.1 AUBES1331
 74.7 AUBES1856
 75.9 AUBES1896
 77.9 AUBES2158
 81.2 AUBES4264
 83.1 AUBES2538
 84.6 AUBES5015
 84.8 AUBES2678 AUBES2977
 88.7 AUBES4150
 90.3 AUBES4149
 90.8 AUBES5381
 92.1 AUBES5240
 93.6 IpCG0222_U12
 94.7 AUBES4118
 99.0 AUEST0635
 100.7 AUBES4397
 101.5 AUBES4820
 105.1 AUBES2510
 108.1 AUSNP000053
 109.7 AUBES2526
 110.4 AUEST0409
 114.2 AUEST0377

0.0 AUEST0054
 3.5 AUSNP000056
 4.2 AUEST0776
 4.5 AUEST0034
 7.1 AUBES4604
 8.7 AUBES4605
 9.6 AUBES2398
 11.8 AUEST0870
 15.6 AUBES4467
 18.0 AUBES5401
 19.2 AUBES2433
 27.1 AUBES4783
 30.4 AUBES3987
 43.4 AUEST0526
 45.2 AUEST0479
 48.0 AUBES3932
 48.9 AUBES5037
 49.3 IpCG0033_2pt
 49.7 AUBES4322
 50.4 AUBES2235
 51.8 AUBES4872
 52.3 AUBES4871
 52.8 AUBES2352
 52.9 AUBES4155
 53.3 AUBES4473
 53.6 AUBES4447
 53.9 AUBES3584
 54.1 AUBES4431
 54.2 AUSNP000028
 54.4 AUBES5278
 54.8 AUBES3585
 AUBES2566 AUBES1340
 54.9 AUBES5034 AUBES2753
 55.1 AUBES4811 AUBES1166
 55.4 AUBES4430
 55.5 AUBES5325
 56.0 AUBES4154
 56.4 AUBES5324
 57.0 AUEST0537
 57.7 AUBES5399 AUBES3618
 57.9 AUBES3617
 58.4 AUBES5150
 58.6 AUBES3435
 58.8 AUBES2079
 58.9 AUBES3214 AUBES3616
 AUBES3615 AUBES3254
 59.8 AUBES2456
 59.9 AUBES1112
 60.5 AUBES1855
 61.0 AUEST0286L
 61.6 AUBES3436 AUBES3426
 62.9 AUBES3549
 63.3 AUBES1922
 64.5 AUBES3329
 65.9 AUBES5339
 67.4 AUSNP000087 AUSNP000082
 70.2 AUBES4982
 71.0 AUBES3640
 71.5 AUBES2767
 72.6 AUEST0777
 72.9 AUEST0516 AUEST0762
 73.2 AUBES4455
 74.3 AUBES1965
 75.3 AUBES4361
 75.8 AUSNP000081
 76.0 AUBES3957
 76.3 AUSNP000041
 77.0 AUBES1529
 78.2 IpCG0120_U26
 80.1 AUBES1575
 83.2 AUEST0307
 87.0 AUEST0953

0.0 AUBES3581
 2.8 AUBES2891
 3.7 IpCG0113_U4
 4.6 AUBES3541
 5.2 AUBES1775
 6.5 AUBES3304 AUBES3873
 7.7 AUBES3875 AUBES2999
 8.3 AUEST0060
 8.4 AUBES1906
 8.4 AUBES3407 IpCG0238_U4
 9.0 AUBES3132
 9.9 AUBES2357
 11.3 AUEST0685
 11.4 IpCG0179_U4 AUBES5403
 AUBES2479 AUEST0059
 12.6 IpCG0268_U4
 15.2 AUBES2404
 17.5 AUBES3620
 20.7 AUBES1737
 22.0 AUBES3040
 24.6 AUEST0782
 25.7 AUBES3031
 28.0 AUBES3937
 28.8 IpCG0263_U4
 29.4 AUBES5310
 30.1 AUBES2861
 30.8 AUBES2522
 31.0 AUBES3131
 31.3 AUBES3728
 31.5 AUBES3431
 31.9 AUBES5038 AUSNP000024
 32.1 AUBES4931 AUBES3619
 32.2 AUBES2570
 32.4 AUBES3072 AUBES2725
 32.5 IpCG0002_U4
 32.8 AUBES3938
 33.0 AUBES3965
 33.2 AUBES2903
 33.5 AUBES3506
 33.6 AUBES3071 AUBES4240
 AUBES2943 AUBES1912
 33.9 AUBES3265 AUSNP000022
 AUBES4124 AUBES2752
 AUBES2391
 34.0 AUBES3354 AUBES2599
 34.1 AUBES3100 AUBES4621
 34.4 AUBES3191 AUBES2622
 34.6 AUBES2581
 34.8 AUBES2469
 35.0 AUEST0750 AUBES3432
 35.1 AUBES3736
 35.4 AUBES3158
 35.7 AUBES1728
 35.8 AUBES1733
 36.4 AUBES2881
 36.7 AUBES1936
 37.4 AUBES3507
 38.7 IpCG0145_U4
 40.0 AUBES5265
 40.9 AUBES4848
 41.8 AUBES4208
 42.7 AUBES5379
 42.9 AUBES3314
 44.1 AUBES1571
 44.7 AUBES3835
 46.0 AUBES5363
 46.1 AUEST0509
 47.6 AUEST1006
 48.6 AUBES2783
 49.2 AUBES2831
 49.4 AUBES5215
 51.1 IpCG0289_U4
 51.6 AUBES4030
 57.0 AUEST0126
 57.6 AUBES4739
 59.4 IpCG0054_U4
 59.7 AUEST0727
 64.1 AUBES5223
 69.5 AUBES2344
 82.1 AUEST0804
 83.2 AUBES4329
 88.3 AUEST0330
 90.5 AUEST0802
 93.4 AUBES5358
 93.7 AUBES1869

0.0 AUBES2910
 11.4 AUBES2679
 12.9 AUBES5243
 14.3 AUBES3586
 15.8 AUBES4305
 18.0 AUBES3587
 18.1 AUBES4629 AUBES4799
 19.8 AUBES4628
 24.4 AUBES4445 AUBES4429
 AUBES4428
 28.0 IpCG0104_U13
 30.5 AUBES2072
 37.1 AUBES4835
 45.1 AUBES2431
 46.0 AUBES2488
 50.4 AUBES4314
 50.6 AUBES1374
 50.9 AUBES5375
 54.6 AUBES3014
 60.9 AUBES4818
 62.3 AUEST0277Ma
 63.1 AUEST0502
 63.4 AUBES3366
 64.0 AUBES2749
 64.2 AUBES1950
 64.3 AUBES2758
 64.8 AUBES3562
 65.7 AUBES5115
 66.3 AUBES3915
 69.5 AUBES2620
 70.8 AUBES3723
 71.2 AUBES2611
 71.6 AUBES2274
 71.9 AUBES3783
 72.1 AUEST0350
 72.3 AUBES3919
 72.4 AUBES4808
 72.8 AUEST0381
 73.1 AUBES3224 AUBES2387
 IpCG0262_U13
 73.2 AUBES3023 AUBES3196
 AUBES3362 AUBES2069
 AUBES3861 AUBES2632
 73.3 AUBES2786 AUBES3368
 AUBES5360 AUBES4910
 73.4 AUBES3151 AUBES2397
 73.5 AUBES4883
 IpCG0296_U22 AUBES3249
 73.7 AUBES3348 AUBES2594
 AUBES1876
 74.0 IpCG0083_U13
 AUBES3353 AUBES4234
 74.2 AUBES3219
 74.5 AUSNP000070
 74.8 IpCG0221_U13
 75.1 AUBES3190
 75.3 AUBES4948
 75.7 IpCG0298_U13
 76.2 AUBES4905
 76.5 AUBES2588
 77.3 AUBES3788 AUBES4806
 77.4 AUBES3637
 77.5 AUBES1886
 78.1 AUBES3112
 78.7 AUEST0064
 79.5 AUBES5022
 80.2 AUBES5145
 81.5 AUBES2978
 82.5 AUBES2940
 83.1 IpCG0267_U13
 83.2 AUBES2877
 83.5 AUBES1852
 84.4 AUBES1096
 87.3 AUBES4954
 88.6 AUEST0476
 92.4 AUBES5210
 96.2 AUEST0664
 97.5 AUBES4534
 102.8 AUBES4433
 103.8 AUBES4432
 105.9 AUBES4965 AUSNP000034
 107.2 AUEST0744
 109.5 AUBES5383
 111.6 AUBES4063

0.0 | IpCG0127_U16
 1.8 | IpCG0278_U16
 2.1 | AUEST0658
 2.7 | IpCG0108_U16
 3.2 | AUEST0668 AUEST0715
 3.4 | AUEST0389
 3.6 | IpCG0305_U16
 3.8 | AUEST0819
 4.1 | AUBES4415
 4.2 | AUBES3213
 4.6 | AUBES3742 AUBES1536
 AUBES4853 AUBES4969
 AUBES2616 AUBES2974
 4.7 | AUBES3222
 4.9 | AUBES3300
 AUBES1550
 5.2 | AUEST0051 AUBES4664
 AUBES4185 AUBES5035
 AUEST0137 AUBES2466
 AUBES3609 AUBES2659
 AUBES4320 AUBES3221
 AUBES3085 AUBES3168
 AUBES2604 AUBES2730
 AUBES4375 AUBES2636
 AUBES5083 AUBES4663
 AUEST0100 AUBES3551
 AUBES4416 IpCG0057_U16
 AUBES5135 AUBES3924
 AUBES1704 AUBES4009
 AUBES2054 AUBES2121
 AUBES2750 AUBES4896
 AUEST0825 AUBES4242
 AUBES2605 AUBES4750
 AUSNP000015 AUBES3466
 AUEST0773 AUBES3379
 AUBES2417 AUBES5233
 AUBES4512 AUBES3779
 AUBES4323 AUBES2108
 AUSNP000017 AUBES4402
 AUSNP000030 AUBES5082
 AUBES3347 AUBES2955
 AUBES3583 AUBES3374
 AUBES2392
 AUBES3579
 AUBES4403 AUBES2567
 AUBES3454 AUBES3947
 AUBES2873
 AUBES4279
 AUBES3437
 AUBES4884
 AUBES4909
 AUBES1982
 AUBES3346
 AUBES1916
 AUEST0593
 AUBES2267
 AUBES4369
 AUBES3465
 AUBES2002
 AUBES3580
 AUEST0402

0.0 | AUBES2930
 0.6 | AUBES5251
 AUBES2067
 3.3 | AUBES3449 AUBES3552
 8.7 | AUBES4933
 AUBES5314 AUBES5390
 9.6 | AUBES4933
 9.7 | AUBES5314 AUBES5390
 10.5 | AUEST0988
 11.8 | AUBES2968
 12.6 | AUBES4183
 13.5 | AUBES1325
 15.3 | AUBES2650
 18.7 | AUBES5345
 19.2 | AUBES5333
 20.6 | AUBES1619
 25.2 | AUBES4260
 25.7 | AUBES4182
 27.6 | AUBES2900
 28.3 | AUEST0866L
 29.1 | IpCG0193_U14
 30.3 | AUBES2696
 30.4 | AUBES3785
 30.9 | AUBES3361
 31.7 | AUBES2826
 32.3 | AUEST0353
 32.7 | AUBES3303
 32.8 | AUBES3391
 32.9 | AUBES4051
 33.3 | AUEST0347
 AUBES5374 AUBES2608
 AUBES4912
 AUBES4682 IpCG0046_U14
 AUBES5271 AUBES2932
 AUBES2812 AUBES5242
 AUBES1539 AUBES3310
 AUBES3415 AUBES5389
 AUBES3414 AUBES3689
 AUBES3263 AUBES2501
 IpCG0063_U14 AUBES1772
 AUBES1768
 33.7 | AUBES1768
 33.9 | AUBES3208 AUBES3161
 34.2 | AUBES1980
 34.4 | AUBES2549
 34.9 | AUBES3088
 35.1 | AUEST0043
 37.0 | AUBES4285
 39.5 | AUBES5018
 39.6 | AUBES4615
 39.9 | AUBES4856
 40.1 | AUBES2686
 41.3 | AUBES2341
 42.7 | AUEST0348P
 43.3 | AUBES3991
 44.2 | AUBES2102
 44.9 | AUBES2856
 45.9 | AUBES5136
 67.7 | AUEST0067
 69.2 | AUBES5334
 70.5 | AUEST0786
 73.6 | AUBES4738

0.0 | AUEST0032
 5.6 | AUEST0286U
 8.9 | AUEST0999
 19.0 | AUBES4224
 21.1 | AUBES4754
 22.6 | AUBES5338 AUBES1090
 26.3 | AUBES2101
 27.4 | AUBES3979
 27.6 | AUBES1971
 31.1 | AUBES2909
 31.6 | AUBES4241
 33.2 | IpCG0149_U31
 33.5 | AUBES1892
 34.1 | AUBES2348
 34.5 | AUBES2612
 35.7 | AUBES3516
 38.1 | AUEST0992
 39.2 | AUBES2245
 39.7 | AUBES2509
 40.4 | AUBES3755
 40.9 | AUBES5366
 41.0 | AUBES5326
 41.2 | AUBES1699
 41.3 | AUBES3296
 41.6 | AUEST0349
 41.7 | AUBES1880 AUBES2919
 41.9 | AUBES4005
 42.4 | AUBES4863
 43.0 | AUEST0814
 43.4 | AUBES1946 AUBES2354
 43.9 | AUBES4034
 44.0 | AUBES2746 AUSNP000066
 44.3 | AUBES5369
 44.7 | AUBES4947
 45.2 | AUEST0023
 47.6 | AUBES3933
 48.2 | AUBES2641
 51.1 | AUBES2463
 55.0 | AUBES5159
 57.5 | AUBES3763
 60.7 | AUBES5365
 62.5 | AUBES4942
 63.2 | AUBES2163
 64.0 | AUBES4259
 64.7 | AUBES3770
 68.0 | AUBES1332
 70.0 | AUBES4585
 71.9 | AUBES1544
 76.1 | AUBES5021
 80.0 | AUBES1284
 90.9 | AUBES4479

0.0 | AUBES1434
 1.1 | AUBES4526
 4.1 | AUBES4021
 5.6 | AUBES3009 AUBES3801
 AUBES3320 AUBES4020
 AUBES2798 AUBES2996
 AUBES5288
 5.9 | AUBES3802
 6.0 | AUBES2415
 6.5 | AUBES4379
 7.3 | AUBES2019
 7.9 | AUEST0152
 8.9 | AUBES3909
 11.1 | AUBES2618
 12.5 | AUBES1161
 16.6 | AUBES3741
 17.2 | AUBES3270
 17.8 | AUEST0842
 18.7 | AUBES2694
 19.9 | AUBES5382
 21.5 | AUBES2724
 24.4 | AUEST0596
 28.5 | AUSNP000060
 29.0 | AUBES1338
 29.8 | AUBES3494
 30.4 | AUSNP000065
 30.6 | AUEST0086
 31.6 | IpCG0181_U21
 33.0 | AUBES2059
 34.2 | AUBES5010
 34.8 | AUEST1013
 37.2 | AUBES1759
 37.4 | AUBES5353
 38.3 | AUBES4525
 39.5 | AUBES5004
 39.7 | AUBES2367
 40.7 | AUBES5178
 41.8 | AUBES4019
 42.1 | AUBES4749
 43.1 | AUBES2889
 43.8 | AUBES1271
 44.2 | AUEST0696
 45.0 | AUBES4787
 45.5 | AUBES5320
 47.0 | AUBES1277
 47.4 | AUBES2990
 47.5 | AUBES4746
 47.6 | AUBES3746 AUBES1750
 48.2 | AUBES3560
 49.3 | AUBES2701
 49.3 | AUBES4776
 49.8 | AUEST0720
 50.4 | AUBES2928 AUSNP000057
 AUEST0663
 AUBES3535
 50.5 | AUBES4660 AUBES3839
 AUBES3390
 51.0 | AUBES4662 AUBES4661
 AUBES1351 AUBES3228
 51.1 | AUBES3227
 51.2 | AUBES3905
 53.0 | IpCG0204_U21
 53.5 | AUBES1591
 54.0 | AUBES3313
 54.3 | AUEST0417
 54.4 | AUBES3133
 54.6 | AUBES2716
 54.9 | AUBES4497
 55.0 | AUBES3539
 AUBES2933
 55.1 | AUBES2822 AUBES1710
 AUBES5294 AUBES5316
 AUBES4311 AUBES3382
 AUBES2127 AUBES3621
 AUBES3520 AUBES4695
 IpCG0287_U21
 55.5 | AUBES4236 IpCG0106_U21
 AUBES2596 AUBES5250
 AUBES4237 AUBES5253
 AUSNP000079 AUBES4064
 AUSNP000055
 AUBES4045 AUBES3464
 56.0 | AUBES3463
 56.3 | AUBES5030
 56.5 | AUBES2778
 56.6 | AUSNP000014
 57.0 | AUBES3079
 57.6 | AUBES4283
 58.1 | AUBES2467
 58.5 | AUBES2147
 59.6 | AUBES2882
 60.3 | IpCG0148_U21
 60.9 | AUBES1245
 61.4 | IpCG0076_U21
 61.8 | AUBES4711
 62.3 | AUEST0752
 63.8 | AUBES4857
 64.7 | AUBES4536
 67.3 | IpCG0264_U21
 68.3 | AUBES3234
 70.0 | IpCG0171_U21
 83.5 | AUBES5047
 91.0 | AUSNP77558

21

0.0 AUBES2564
 0.8 AUBES3001 AUEST0275
 1.4 AUBES2876
 1.7 AUBES5013
 2.4 AUBES3336
 5.1 AUBES3087
 5.8 AUEST0298
 6.6 AUBES2607
 6.9 AUBES3360
 7.4 AUBES3147
 7.5 AUBES1569
 8.3 AUBES2874
 8.8 AUBES1629
 8.9 AUBES4803
 9.5 AUBES2808
 9.6 AUBES2603 AUBES3169
 9.9 AUBES3948
 10.3 AUBES1973
 10.4 AUBES5307
 10.5 AUBES3757
 AUBES5221 AUBES2936
 AUBES2511 AUBES3218
 AUBES1879
 AUBES2735
 AUBES1502
 AUBES3084 AUSNP000088
 AUBES3927
 AUBES3142
 AUSNP000085
 AUBES3352
 AUBES1700
 AUBES2619
 AUBES1168
 AUBES3295
 AUBES5086
 AUBES2212
 AUBES2099
 AUBES3643 AUBES3642
 AUBES3534
 AUBES2755
 AUBES3523
 AUBES5069
 AUBES5012
 AUBES3232
 AUBES1418
 IpCG0038_U23
 IpCG0147_U23
 AUBES4997
 AUBES4095
 AUEST0393
 AUBES4096
 AUBES5283
 AUBES3242
 AUBES5405
 AUBES4419 AUBES1945
 AUBES1624
 AUEST0010
 AUBES3972
 AUBES3971
 AUBES3556
 AUBES4405
 AUEST0022
 AUBES4404
 AUBES1299
 AUBES1298
 AUBES1405
 AUEST0017

22

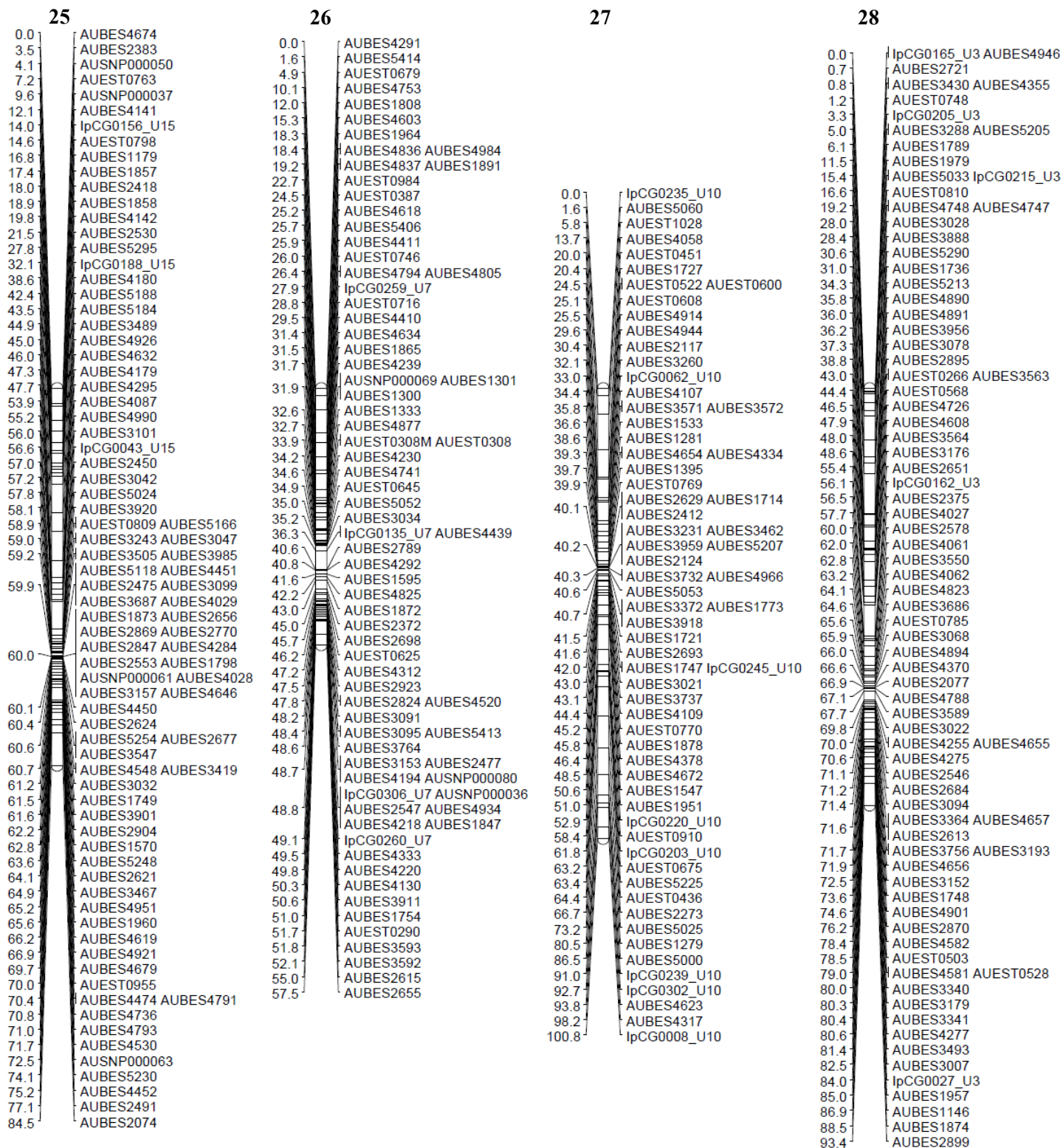
0.0 AUBES4026
 0.1 AUEST0757 AUBES4025
 3.9 AUBES4775
 6.2 AUBES5239
 12.9 AUBES5368
 14.7 AUBES4459
 20.3 AUBES4094
 26.0 AUBES1448
 26.7 AUEST0794
 27.1 AUBES4779
 28.7 AUBES1941
 30.3 AUBES4723
 40.4 AUBES3925
 42.9 AUEST0322
 54.8 IpCG0024_U17
 AUBES3167 AUBES2635
 AUBES2232
 AUBES3378
 AUBES3163
 AUBES1863
 AUBES1593
 AUBES4854
 AUBES3814 AUBES2593
 AUBES3553
 AUBES4930
 AUBES1323
 AUBES1968
 AUBES4670
 AUBES3156
 AUBES3815
 AUBES3059
 AUBES4488 AUBES2830
 AUBES3729 AUBES4844
 AUBES4845
 AUBES2565 AUBES3406
 AUBES2817 AUBES1996
 AUBES2369 AUBES3187
 AUBES2591
 AUBES4470 AUBES3297
 AUBES3198 AUBES3719
 AUBES5393 AUBES1227
 AUBES4558 AUBES3456
 AUBES2737 AUBES3192
 AUBES3038 AUBES1717
 AUBES3292 AUBES3813
 AUBES1702 AUBES2645
 AUBES3405 AUBES5031
 AUBES3916
 AUBES3518
 AUEST0369
 AUBES3807
 AUBES2271
 AUBES5209
 AUBES2237
 AUBES2888
 AUBES2047 AUBES2389
 AUBES3519
 AUBES3109
 AUEST0466
 AUEST0477
 AUEST0780
 IpCG0231_U17

23

0.0 AUBES4636
 0.6 AUBES4266 AUBES2875
 AUBES4200
 AUBES4804
 AUEST0704
 AUBES5091
 AUBES3033
 AUBES3847
 AUBES4735
 AUBES4392
 AUBES2255
 AUBES3046
 AUBES2736
 IpCG0228_U19
 AUBES3102
 AUBES4900
 AUBES2025
 IpCG0169_U19
 AUBES3188
 AUBES1606
 IpCG0139-2_U18
 AUBES5129
 AUBES3159 AUBES4137
 AUBES5394
 AUBES3217 AUBES1361
 AUBES2251 AUBES2484
 AUBES3691 AUBES4412
 AUBES2937
 AUBES1330 AUBES4010
 AUBES5354 IpCG0183_U19
 AUBES4132 AUBES2625
 AUBES4113 AUBES5084
 AUBES5359
 AUBES4136 AUBES5065
 AUBES1801
 AUBES3657 AUBES5009
 AUBES4148 AUEST0348C
 AUBES4147 AUBES5301
 AUBES5285
 AUBES5302
 AUEST0149
 AUBES4313
 AUBES1506
 AUBES5386
 AUBES5211
 AUBES2962
 AUBES5238
 AUBES4683
 IpCG0011_U19
 AUBES4327
 AUBES1900
 AUBES1411
 AUBES4116
 AUBES4115
 AUBES1877
 IpCG0031_U19
 AUBES4032
 AUBES4580 AUBES4676
 AUBES1328
 AUBES4031
 AUBES5291
 AUBES4290
 AUBES4289
 AUSNP000012

24

0.0 IpCG0072_U8
 4.8 AUBES3062
 5.2 AUBES2490
 7.2 AUBES1978
 9.1 IpCG0285_U8
 11.2 AUBES2563 AUBES2583
 12.5 AUBES3281
 12.9 AUBES3931
 13.7 AUBES4630
 14.1 AUBES3711
 AUBES2513 AUBES3902
 AUSNP000026 AUBES2788
 AUBES2848 AUBES3305
 AUBES2658 AUSNP000010
 AUBES3335 AUBES3073
 AUBES4742
 AUBES4995 AUBES3481
 AUBES4917 AUBES5008
 AUBES3375 AUBES3206
 AUBES3041
 AUBES1551 AUBES2720
 AUEST0866U
 AUSNP000096
 AUBES3693
 AUBES4826
 AUBES3910
 AUBES5179
 AUBES5063
 AUBES4865
 AUBES2681
 AUBES4360
 IpCG0265_U8
 AUBES4864
 AUBES3503
 AUBES3502
 IpCG0112_U8
 AUBES4728
 AUBES4616
 AUBES2732
 AUBES3926
 AUBES1334
 AUBES1956
 AUEST0242
 AUBES2068
 AUBES5003
 AUBES4807
 IpCG0236_U8
 AUBES4381
 AUBES3944
 AUEST0385



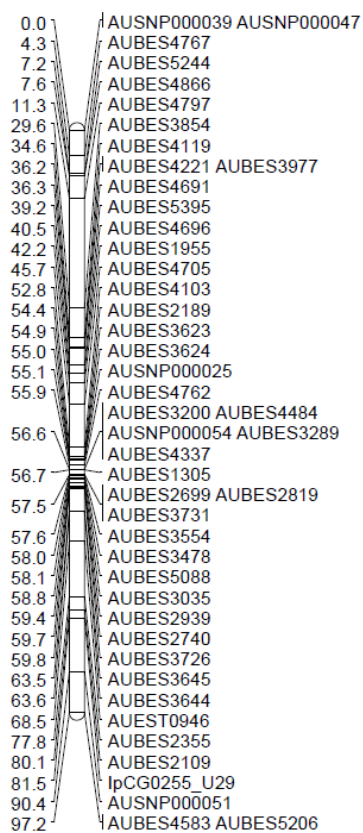


Figure S1 A sex-averaged linkage map of channel catfish. Genetic map distance was given in centimorgans (Kosambi's mapping function) to the left of the markers positions. The vertical straight lines indicated markers placed at the same positions.