

# Supplementary Information

## Average $dN$ , $dS$ , $\omega$ Values Per Gene

Table S1: Per gene  $dN$ ,  $dS$ , and  $\omega$  values calculated for *E. coli*.

| <i>Escherichia coli</i> |         |         |          |
|-------------------------|---------|---------|----------|
| Gene                    | $dN$    | $dS$    | $\omega$ |
| gene_name               | dN      | dS      | omega    |
| b0031                   | 0.007   | 0.2454  | 0.0287   |
| b0062                   | 0.0066  | 0.3173  | 0.02067  |
| b0072                   | 0.0031  | 0.3414  | 0.00894  |
| b0123                   | 0.0177  | 0.2745  | 0.06441  |
| b0131                   | 0       | 0.2121  | 0        |
| b0139                   | 0.4938  | 16.721  | 0.02953  |
| b0145                   | 0       | 0.029   | 0        |
| b0147                   | 0.0239  | 0.1129  | 0.21218  |
| b0148                   | 0.0143  | 0.3403  | 0.04204  |
| b0159                   | 0       | 0.0885  | 0        |
| b0207                   | 0.0347  | 0.1135  | 0.30568  |
| b0222                   | 0.0025  | 0.3515  | 0.0071   |
| b0223                   | 0.0038  | 0.2536  | 0.015    |
| b0227                   | 0.043   | 0.6404  | 0.06707  |
| b0231                   | 0.0098  | 0.3756  | 0.0261   |
| b0289                   | 0.0291  | 0.1975  | 0.14753  |
| b0292                   | 0.0162  | 0.1513  | 0.10679  |
| b0308                   | 0.0213  | 0.085   | 0.25021  |
| b0310                   | 0.0543  | 0.1318  | 0.4118   |
| b0315                   | 0.0151  | 0.3192  | 0.04717  |
| b0329                   | 0.0215  | 0.3277  | 0.06566  |
| b0331                   | 0.006   | 0.5788  | 0.01033  |
| b0367                   | 0       | 0.3408  | 0        |
| b0369                   | 0.0015  | 0.2367  | 0.00619  |
| b0383                   | 0.0105  | 0.2108  | 0.04981  |
| b0387                   | 0.0061  | 0.159   | 0.03833  |
| b0391                   | 0       | 0.0766  | 0        |
| b0397                   | 0.0164  | 0.1714  | 0.09582  |
| b0398                   | 0.0107  | 0.135   | 0.07944  |
| b0399                   | 0       | 0.1042  | 0        |
| b0403                   | 0.0222  | 0.284   | 0.07825  |
| b0404                   | 0.01515 | 0.34815 | 0.047355 |
| b0405                   | 0.0066  | 0.3334  | 0.01986  |
| b0406                   | 0       | 0.0943  | 0        |
| b0414                   | 0.0272  | 0.3644  | 0.07473  |
| b0415                   | 0       | 0.0343  | 0        |
| b0418                   | 0.0028  | 0.497   | 0.00567  |
| b0424                   | 0.0053  | 0.3324  | 0.01585  |
| b0426                   | 0       | 0.1522  | 0        |

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| Gene  | $dN$    | $dS$   | $\omega$ |
|-------|---------|--------|----------|
| b0440 | 0       | 0.0231 | 0        |
| b0457 | 0.0138  | 0.0957 | 0.14434  |
| b0458 | 0       | 0.116  | 0        |
| b0459 | 0.0214  | 0.0623 | 0.34304  |
| b0460 | 0       | 0.0623 | 0        |
| b0461 | 0       | 0.0732 | 0        |
| b0469 | 0.0026  | 0.0984 | 0.02681  |
| b0474 | 0.0022  | 0.2549 | 0.00873  |
| b0512 | 0.0156  | 0.2577 | 0.06055  |
| b0514 | 0.0093  | 0.2871 | 0.03252  |
| b0567 | 0.0207  | 0.2221 | 0.09305  |
| b0585 | 0.0351  | 0.1813 | 0.19382  |
| b0587 | 0.0914  | 0.4176 | 0.21881  |
| b0589 | 0.0238  | 0.3479 | 0.06841  |
| b0600 | 0.0158  | 0.3349 | 0.04725  |
| b0602 | 0.0082  | 0.2285 | 0.03587  |
| b0603 | 0.0432  | 1.1731 | 0.03686  |
| b0613 | 0.0281  | 0.1498 | 0.18786  |
| b0622 | 0.0146  | 0.1978 | 0.07386  |
| b0634 | 0.0014  | 0.0922 | 0.01533  |
| b0637 | 0       | 0.0966 | 0        |
| b0643 | 0.003   | 0.1436 | 0.02085  |
| b0657 | 0.0116  | 0.2507 | 0.04619  |
| b0677 | 0.0039  | 0.1319 | 0.02991  |
| b0686 | 0.0186  | 0.2144 | 0.08665  |
| b0709 | 0.0088  | 0.3132 | 0.02806  |
| b0722 | 0.009   | 0.0851 | 0.10553  |
| b0726 | 0.001   | 0.169  | 0.00584  |
| b0734 | 0       | 0.0952 | 0        |
| b0739 | 0       | 0.0552 | 0        |
| b0755 | 0       | 0.1743 | 0        |
| b0757 | 0.0026  | 0.1884 | 0.01354  |
| b0764 | 0.009   | 0.2314 | 0.03872  |
| b0796 | 0       | 0.2572 | 0        |
| b0802 | 0.0118  | 0.1627 | 0.07231  |
| b0823 | 0.0053  | 0.2402 | 0.02208  |
| b0829 | 0.0133  | 0.1243 | 0.10672  |
| b0837 | 0.018   | 0.074  | 0.24356  |
| b0848 | 0.0041  | 0.1587 | 0.02579  |
| b0862 | 0.0121  | 0.1888 | 0.06411  |
| b0866 | 0.00005 | 0.4495 | 0.00005  |
| b0867 | 0.014   | 0.2009 | 0.06947  |
| b0881 | 0       | 0.0168 | 0        |
| b0890 | 0.0027  | 0.2322 | 0.0117   |
| b0903 | 0.0015  | 0.0746 | 0.02032  |
| b0904 | 0       | 0.1349 | 0        |
| b0912 | 0       | 0.0228 | 0        |

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Table S1 – continued from previous page

| Gene  | $dN$   | $dS$   | $\omega$ |
|-------|--------|--------|----------|
| b0917 | 0      | 0.096  | 0        |
| b0929 | 0.0412 | 0.3697 | 0.11145  |
| b0947 | 0.0147 | 0.143  | 0.10303  |
| b0955 | 0.0133 | 0.0882 | 0.15033  |
| b0995 | 0.0043 | 0.1779 | 0.02403  |
| b1015 | 0.0046 | 0.2739 | 0.01697  |
| b1019 | 0.0114 | 0.3662 | 0.03108  |
| b1033 | 0.0254 | 0.1183 | 0.21466  |
| b1035 | 0.0203 | 0.1684 | 0.12072  |
| b1051 | 0.0202 | 0.1107 | 0.18213  |
| b1053 | 0.0017 | 0.1577 | 0.0105   |
| b1057 | 0.0385 | 0.1685 | 0.22838  |
| b1061 | 0      | 0.0984 | 0        |
| b1070 | 0.0356 | 0.1244 | 0.28625  |
| b1071 | 0.0052 | 0.1095 | 0.0472   |
| b1072 | 0.0477 | 0.1817 | 0.2628   |
| b1075 | 0.0081 | 0.1224 | 0.06587  |
| b1105 | 0      | 0.155  | 0        |
| b1107 | 0.0129 | 0.2817 | 0.04591  |
| b1136 | 0.0034 | 0.2676 | 0.01271  |
| b1174 | 0      | 0.09   | 0        |
| b1178 | 0.01   | 0.1331 | 0.07493  |
| b1179 | 0.0082 | 0.1714 | 0.04781  |
| b1180 | 0.0047 | 0.1274 | 0.03722  |
| b1187 | 0      | 0.1347 | 0        |
| b1199 | 0.0246 | 0.1187 | 0.20708  |
| b1213 | 0.019  | 0.173  | 0.10996  |
| b1223 | 0.0031 | 0.1014 | 0.03081  |
| b1232 | 0.0034 | 0.2077 | 0.01628  |
| b1243 | 0.0072 | 0.0954 | 0.07513  |
| b1248 | 0      | 0.097  | 0        |
| b1250 | 0.0022 | 0.1163 | 0.01919  |
| b1263 | 0.0037 | 0.4012 | 0.00915  |
| b1276 | 0.0129 | 0.203  | 0.06364  |
| b1281 | 0.0223 | 0.1844 | 0.12073  |
| b1287 | 0.0475 | 0.023  | 2.06691  |
| b1329 | 0.0072 | 0.1558 | 0.04591  |
| b1377 | 0.0279 | 0.1279 | 0.21796  |
| b1380 | 0.003  | 0.1418 | 0.02128  |
| b1411 | 0.0525 | 0.1822 | 0.28832  |
| b1412 | 0.0167 | 0.274  | 0.06084  |
| b1466 | 0      | 0.2118 | 0        |
| b1468 | 0.0105 | 0.3076 | 0.03429  |
| b1469 | 0.0073 | 0.1906 | 0.03852  |
| b1478 | 0.0073 | 0.3054 | 0.02399  |
| b1493 | 0.003  | 0.2115 | 0.01442  |
| b1502 | 0.0312 | 0.2586 | 0.12067  |

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| Gene  | $dN$   | $dS$   | $\omega$ |
|-------|--------|--------|----------|
| b1533 | 0.0369 | 0.76   | 0.04851  |
| b1535 | 0.0152 | 0.1445 | 0.1055   |
| b1589 | 0      | 0.1102 | 0        |
| b1605 | 0.0022 | 0.1302 | 0.01687  |
| b1606 | 0.0215 | 0.1205 | 0.17845  |
| b1607 | 0.0046 | 0.1124 | 0.04054  |
| b1610 | 0.0189 | 0.1972 | 0.09563  |
| b1611 | 0.0042 | 0.2393 | 0.01742  |
| b1626 | 0.0106 | 0.0902 | 0.11761  |
| b1634 | 0.0048 | 0.1478 | 0.0325   |
| b1640 | 0.009  | 0.1813 | 0.04978  |
| b1643 | 0.0079 | 0.0624 | 0.12664  |
| b1675 | 0      | 0.0422 | 0        |
| b1677 | 0      | 0      | 0        |
| b1680 | 0.0071 | 0.2115 | 0.03337  |
| b1687 | 0.0098 | 0.2223 | 0.0442   |
| b1706 | 0.022  | 0.1688 | 0.13009  |
| b1722 | 0.0037 | 0.1457 | 0.02539  |
| b1724 | 0.0095 | 0.07   | 0.1353   |
| b1726 | 0.0095 | 0.1569 | 0.06075  |
| b1739 | 0.0046 | 0.0181 | 0.25497  |
| b1746 | 0.0707 | 0.3167 | 0.22332  |
| b1749 | 0.0041 | 0.2967 | 0.01387  |
| b1750 | 0.0375 | 0.1624 | 0.23092  |
| b1758 | 0.0282 | 0.467  | 0.06033  |
| b1759 | 0.0453 | 0.1131 | 0.40094  |
| b1772 | 0.0282 | 0.1157 | 0.244    |
| b1781 | 0.03   | 0.1737 | 0.17269  |
| b1783 | 0      | 0.2104 | 0        |
| b1784 | 0.0033 | 0.2329 | 0.01401  |
| b1785 | 0.0056 | 0.1152 | 0.049    |
| b1792 | 0.0164 | 0.1258 | 0.13069  |
| b1807 | 0.0176 | 0.4795 | 0.03393  |
| b1816 | 0.0009 | 0.1154 | 0.00815  |
| b1817 | 0.0044 | 0.0781 | 0.05583  |
| b1820 | 0.0069 | 0.0789 | 0.08702  |
| b1836 | 0      | 0.1269 | 0        |
| b1838 | 0.0337 | 0.1313 | 0.25691  |
| b1841 | 0.0249 | 0.0925 | 0.26956  |
| b1844 | 0.0021 | 0.081  | 0.0254   |
| b1847 | 0.008  | 0.1062 | 0.07506  |
| b1873 | 0.0338 | 0.3124 | 0.10834  |
| b1875 | 0.0188 | 0.1871 | 0.10066  |
| b1901 | 0.0036 | 0.2489 | 0.01452  |
| b1912 | 0      | 0.1158 | 0        |
| b1924 | 0.2084 | 4.6225 | 0.04509  |
| b1926 | 0.0331 | 0.1734 | 0.19066  |

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| Gene  | $dN$    | $dS$     | $\omega$  |
|-------|---------|----------|-----------|
| b1945 | 0.0014  | 0.1567   | 0.00896   |
| b1973 | 0.0142  | 0.1835   | 0.07749   |
| b1987 | 0.0192  | 0.1656   | 0.11564   |
| b2009 | 0.0255  | 0.1237   | 0.20625   |
| b2025 | 0.0136  | 0.2686   | 0.0508    |
| b2027 | 0.0756  | 2.1644   | 0.03493   |
| b2043 | 0.0336  | 0.592    | 0.05683   |
| b2048 | 0.0177  | 0.3855   | 0.04581   |
| b2056 | 0.0106  | 0.1551   | 0.06825   |
| b2065 | 0.0074  | 0.1529   | 0.04844   |
| b2069 | 0.0188  | 0.2762   | 0.06816   |
| b2072 | 0.1175  | 0.6795   | 0.17286   |
| b2077 | 0.0161  | 0.3921   | 0.04118   |
| b2078 | 0.0185  | 0.5005   | 0.03701   |
| b2080 | 0.0131  | 0.1739   | 0.0751    |
| b2098 | 0.0077  | 0.1905   | 0.04055   |
| b2104 | 0.03845 | 0.271    | 0.162845  |
| b2114 | 0.0072  | 0.4241   | 0.0169    |
| b2120 | 0.0384  | 0.4162   | 0.09236   |
| b2164 | 0.0165  | 0.7069   | 0.02329   |
| b2172 | 0.0236  | 0.1893   | 0.12473   |
| b2177 | 0.0168  | 0.1785   | 0.09425   |
| b2196 | 0.0045  | 0.287    | 0.01576   |
| b2198 | 0       | 0.1066   | 0         |
| b2213 | 0.022   | 0.2488   | 0.0884    |
| b2229 | 0.0458  | 0.27     | 0.1695    |
| b2233 | 0.10585 | 0.94845  | 0.1354025 |
| b2242 | 0.0427  | 0.8003   | 0.05332   |
| b2255 | 0.0108  | 0.1433   | 0.07568   |
| b2283 | 0.0009  | 0.1933   | 0.00485   |
| b2297 | 0.0027  | 0.1252   | 0.02117   |
| b2308 | 0.0042  | 0.2513   | 0.01656   |
| b2324 | 0.03885 | 0.328475 | 0.127015  |
| b2325 | 0.0051  | 0.1712   | 0.02955   |
| b2326 | 0.01375 | 0.3356   | 0.04268   |
| b2327 | 0.0018  | 0.4757   | 0.00385   |
| b2328 | 0.0181  | 0.1978   | 0.09175   |
| b2336 | 0.355   | 2.6487   | 0.13404   |
| b2342 | 0.0344  | 0.3324   | 0.10337   |
| b2367 | 0.0037  | 0.2063   | 0.01817   |
| b2374 | 0.0033  | 0.1147   | 0.0289    |
| b2381 | 0       | 0.1234   | 0         |
| b2382 | 0.0118  | 0.2739   | 0.04319   |
| b2386 | 0.0067  | 0.3379   | 0.01983   |
| b2389 | 0.0199  | 0.1943   | 0.10241   |
| b2412 | 0.0071  | 0.1188   | 0.05983   |
| b2453 | 0.0178  | 0.4293   | 0.04137   |

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Table S1 – continued from previous page

| Gene  | $dN$    | $dS$   | $\omega$ |
|-------|---------|--------|----------|
| b2463 | 0.0025  | 0.2674 | 0.00921  |
| b2467 | 0.0201  | 0.1556 | 0.12886  |
| b2474 | 0.0753  | 0.1761 | 0.42759  |
| b2476 | 0.002   | 0.1372 | 0.01486  |
| b2477 | 0.006   | 0.0374 | 0.16154  |
| b2493 | 0.0056  | 0.3107 | 0.01796  |
| b2496 | 0       | 0.0846 | 0        |
| b2501 | 0.0007  | 0.128  | 0.00557  |
| b2502 | 0.0009  | 0.1745 | 0.00523  |
| b2505 | 0.0028  | 0.1132 | 0.02466  |
| b2514 | 0.0023  | 0.1195 | 0.01888  |
| b2515 | 0.0013  | 0.1703 | 0.00744  |
| b2516 | 0.02655 | 0.1293 | 0.18361  |
| b2518 | 0.0034  | 0.1245 | 0.027    |
| b2548 | 0.0128  | 0.2643 | 0.04845  |
| b2549 | 0.056   | 0.2655 | 0.21083  |
| b2573 | 0       | 0.0101 | 0        |
| b2576 | 0.0011  | 0.279  | 0.0038   |
| b2605 | 0.0117  | 0.0851 | 0.13699  |
| b2606 | 0       | 0      | 0        |
| b2607 | 0       | 0.0427 | 0        |
| b2608 | 0       | 0.0685 | 0        |
| b2609 | 0       | 0      | 0        |
| b2610 | 0.001   | 0.2584 | 0.00394  |
| b2611 | 0.0018  | 0.1441 | 0.01282  |
| b2614 | 0.0023  | 0.1857 | 0.01244  |
| b2615 | 0.0063  | 0.2321 | 0.02705  |
| b2616 | 0.012   | 0.1666 | 0.07183  |
| b2659 | 0.0397  | 0.3086 | 0.12873  |
| b2687 | 0.0119  | 0.0789 | 0.15052  |
| b2688 | 0.0055  | 0.2031 | 0.02726  |
| b2689 | 0.0068  | 0.0759 | 0.08964  |
| b2704 | 0.0228  | 0.1145 | 0.19887  |
| b2710 | 0.003   | 0.2091 | 0.01457  |
| b2734 | 0.1486  | 1.3089 | 0.11351  |
| b2749 | 0.0438  | 0.41   | 0.10672  |
| b2751 | 0.0062  | 0.2933 | 0.02112  |
| b2764 | 0.0196  | 0.2992 | 0.06549  |
| b2768 | 0.0099  | 0.3627 | 0.0274   |
| b2776 | 0.0203  | 0.4275 | 0.04744  |
| b2777 | 0.0045  | 0.3419 | 0.01312  |
| b2779 | 0       | 0.1023 | 0        |
| b2785 | 0.0205  | 0.1191 | 0.17209  |
| b2789 | 0.0031  | 0.1985 | 0.01558  |
| b2793 | 0.0059  | 0.0897 | 0.06564  |
| b2800 | 0.0068  | 0.1083 | 0.06325  |
| b2817 | 0       | 0.1915 | 0        |

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Table S1 – continued from previous page

| Gene  | $dN$    | $dS$    | $\omega$ |
|-------|---------|---------|----------|
| b2818 | 0.0011  | 0.1002  | 0.01105  |
| b2819 | 0.0072  | 0.3857  | 0.01857  |
| b2828 | 0       | 0.1546  | 0        |
| b2831 | 0.0066  | 0.2371  | 0.02797  |
| b2886 | 0.0392  | 0.205   | 0.19098  |
| b2891 | 0.0034  | 0.1392  | 0.02422  |
| b2892 | 0.0112  | 0.2209  | 0.05056  |
| b2906 | 0.021   | 0.2147  | 0.09757  |
| b2916 | 0.0017  | 0.2428  | 0.00691  |
| b2921 | 0.0163  | 0.1629  | 0.1002   |
| b2928 | 0.0462  | 0.3784  | 0.12204  |
| b2933 | 0.008   | 0.3041  | 0.02644  |
| b2950 | 0.0267  | 0.4599  | 0.058    |
| b2954 | 0.0309  | 0.1857  | 0.16644  |
| b2955 | 0.0369  | 2.7333  | 0.01352  |
| b2987 | 0.0175  | 0.3772  | 0.04634  |
| b2988 | 0.0053  | 0.2815  | 0.01873  |
| b2989 | 0.0144  | 0.4626  | 0.03109  |
| b3005 | 0       | 0.101   | 0        |
| b3018 | 0.0059  | 0.1743  | 0.03379  |
| b3029 | 0.0046  | 0.3016  | 0.01527  |
| b3050 | 0.0302  | 0.2554  | 0.11834  |
| b3052 | 0.0042  | 0.3182  | 0.01308  |
| b3055 | 0.0047  | 0.1598  | 0.02925  |
| b3060 | 0.0046  | 0.2389  | 0.01915  |
| b3061 | 0.0095  | 0.3733  | 0.02541  |
| b3074 | 0.0138  | 0.1276  | 0.10827  |
| b3076 | 0.0135  | 0.2314  | 0.05829  |
| b3086 | 0.0466  | 0.6232  | 0.07481  |
| b3087 | 0.01445 | 0.2935  | 0.076855 |
| b3089 | 0.0086  | 0.2154  | 0.03972  |
| b3098 | 0       | 0.1131  | 0        |
| b3118 | 0.0015  | 0.1186  | 0.0125   |
| b3131 | 0.0018  | 0.2178  | 0.00808  |
| b3132 | 0.0187  | 0.1723  | 0.10833  |
| b3133 | 0.01    | 0.1047  | 0.09572  |
| b3136 | 0.0156  | 0.18295 | 0.083645 |
| b3137 | 0.005   | 0.1262  | 0.03987  |
| b3138 | 0.0131  | 0.0877  | 0.14882  |
| b3181 | 0       | 0.0437  | 0        |
| b3184 | 0.0014  | 0.072   | 0.0191   |
| b3198 | 0.0082  | 0.0977  | 0.08359  |
| b3199 | 0.003   | 0.0264  | 0.11224  |
| b3202 | 0.0021  | 0.076   | 0.02699  |
| b3203 | 0       | 0.0188  | 0        |
| b3220 | 0.1153  | 0.3715  | 0.31046  |
| b3224 | 0.0061  | 0.1712  | 0.0354   |

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| Gene  | $dN$   | $dS$   | $\omega$ |
|-------|--------|--------|----------|
| b3257 | 0.0136 | 0.1149 | 0.11859  |
| b3260 | 0      | 0.0445 | 0        |
| b3263 | 0.0066 | 0.0396 | 0.1661   |
| b3267 | 0.0066 | 0.1756 | 0.03747  |
| b3269 | 0.0088 | 0.2833 | 0.0311   |
| b3296 | 0      | 0      | 0        |
| b3309 | 0.005  | 0.0186 | 0.26856  |
| b3344 | 0.0298 | 0.1958 | 0.15211  |
| b3347 | 0.0034 | 0.1265 | 0.02668  |
| b3352 | 0.003  | 0.1815 | 0.01636  |
| b3356 | 0      | 0.1686 | 0        |
| b3368 | 0.0033 | 0.3069 | 0.01064  |
| b3390 | 0      | 0.047  | 0        |
| b3402 | 0.0412 | 0.1581 | 0.26087  |
| b3403 | 0.0035 | 0.2494 | 0.01395  |
| b3412 | 0.0103 | 0.2799 | 0.03676  |
| b3415 | 0      | 0.1371 | 0        |
| b3417 | 0.0041 | 0.2052 | 0.01982  |
| b3422 | 0.0351 | 0.5875 | 0.05967  |
| b3424 | 0.0068 | 0.1581 | 0.0432   |
| b3426 | 0.0194 | 0.3898 | 0.04988  |
| b3437 | 0.0059 | 0.228  | 0.02593  |
| b3438 | 0.0043 | 0.2967 | 0.01448  |
| b3439 | 0.0145 | 0.3315 | 0.04388  |
| b3440 | 0.0138 | 0.3092 | 0.0445   |
| b3441 | 0.0614 | 0.4614 | 0.13319  |
| b3486 | 0.0084 | 0.3363 | 0.02487  |
| b3494 | 0      | 0.0255 | 0        |
| b3496 | 0.0123 | 0.2019 | 0.06112  |
| b3498 | 0.0022 | 0.3939 | 0.00548  |
| b3506 | 0.0023 | 0.1313 | 0.0173   |
| b3510 | 0.0083 | 0.0486 | 0.17133  |
| b3513 | 0.0042 | 0.1207 | 0.03445  |
| b3514 | 0.0047 | 0.1769 | 0.02651  |
| b3517 | 0.0042 | 0.1762 | 0.02356  |
| b3532 | 0.0065 | 0.2257 | 0.02862  |
| b3543 | 0.0028 | 0.3682 | 0.0075   |
| b3546 | 0.0083 | 0.3005 | 0.02762  |
| b3564 | 0.0202 | 0.2355 | 0.08585  |
| b3598 | 0.0123 | 0.1304 | 0.09417  |
| b3604 | 0.0113 | 0.2182 | 0.05184  |
| b3605 | 0.0037 | 0.3898 | 0.00951  |
| b3608 | 0.0014 | 0.2425 | 0.00594  |
| b3653 | 0.006  | 0.2242 | 0.0267   |
| b3660 | 0.013  | 0.3268 | 0.03986  |
| b3666 | 0.001  | 0.1834 | 0.00563  |
| b3675 | 0      | 0.0784 | 0        |

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Table S1 – continued from previous page

| Gene  | $dN$    | $dS$    | $\omega$ |
|-------|---------|---------|----------|
| b3676 | 0.0094  | 0.1751  | 0.05388  |
| b3690 | 0.088   | 0.3177  | 0.27701  |
| b3698 | 0.0349  | 0.3047  | 0.11459  |
| b3708 | 0.001   | 0.2414  | 0.00411  |
| b3712 | 0.0176  | 0.0896  | 0.19597  |
| b3724 | 0       | 0.2571  | 0        |
| b3728 | 0.00205 | 0.22295 | 0.00727  |
| b3741 | 0.0007  | 0.1611  | 0.00465  |
| b3746 | 0.0072  | 0.1097  | 0.05845  |
| b3747 | 0.0015  | 0.1218  | 0.01255  |
| b3748 | 0.0127  | 0.084   | 0.15124  |
| b3752 | 0.0047  | 0.1232  | 0.0379   |
| b3753 | 0       | 0.1332  | 0        |
| b3754 | 0.0052  | 0.1143  | 0.04562  |
| b3755 | 0.0079  | 0.128   | 0.06184  |
| b3769 | 0       | 0.0347  | 0        |
| b3771 | 0.013   | 0.502   | 0.02588  |
| b3793 | 0.0064  | 0.1818  | 0.03533  |
| b3804 | 0.0146  | 0.0673  | 0.2168   |
| b3821 | 0.0061  | 0.1713  | 0.03587  |
| b3850 | 0.0128  | 0.3716  | 0.03451  |
| b3856 | 0.0289  | 0.1701  | 0.16991  |
| b3886 | 0.0017  | 0.2105  | 0.00821  |
| b3894 | 0       | 0.236   | 0        |
| b3945 | 0.0082  | 0.3868  | 0.0211   |
| b3947 | 0.0228  | 0.2513  | 0.09092  |
| b3949 | 0.0057  | 0.2235  | 0.02558  |
| b3953 | 0.0125  | 0.2952  | 0.0425   |
| b3957 | 0.0058  | 0.2695  | 0.02143  |
| b3959 | 0.0104  | 0.2005  | 0.05171  |
| b3986 | 0       | 0.0211  | 0        |
| b3987 | 0       | 0.0908  | 0        |
| b3988 | 0.001   | 0.0855  | 0.01163  |
| b4012 | 0.0472  | 0.3052  | 0.15483  |
| b4033 | 0.0054  | 0.2305  | 0.02327  |
| b4037 | 0.0049  | 0.1539  | 0.03171  |
| b4055 | 0.0141  | 0.0889  | 0.15902  |
| b4062 | 0       | 0.2412  | 0        |
| b4067 | 0.0026  | 0.3824  | 0.00678  |
| b4073 | 0.0259  | 0.2055  | 0.12585  |
| b4074 | 0.02535 | 0.2053  | 0.119295 |
| b4075 | 0.0417  | 0.13    | 0.32108  |
| b4076 | 0.0383  | 0.2028  | 0.18884  |
| b4077 | 0.0021  | 0.1912  | 0.0111   |
| b4111 | 0.0048  | 0.1204  | 0.03995  |
| b4117 | 0.0031  | 0.1118  | 0.0275   |
| b4128 | 0.0048  | 0.1397  | 0.03439  |

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Table S1 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$ |
|--------------|----------------------|--------------------|----------|
| b4133        | 0.0097               | 0.113              | 0.08599  |
| b4140        | 0.0031               | 0.202              | 0.01515  |
| b4146        | 0.0219               | 0.1621             | 0.13495  |
| b4147        | 0                    | 0.0913             | 0        |
| b4150        | 0.0423               | 0.1448             | 0.29216  |
| b4152        | 0.0079               | 0.063              | 0.12556  |
| b4153        | 0.0018               | 0.0538             | 0.034    |
| b4154        | 0.0064               | 0.0997             | 0.06465  |
| b4169        | 0.0218               | 0.22465            | 0.125005 |
| b4175        | 0                    | 0.0847             | 0        |
| b4177        | 0                    | 0.1099             | 0        |
| b4181        | 0.0323               | 0.1397             | 0.23145  |
| b4185        | 0.0487               | 0.4055             | 0.12009  |
| b4187        | 0.0142               | 0.2069             | 0.06866  |
| b4235        | 0.0053               | 0.3258             | 0.01642  |
| b4243        | 0                    | 0.2542             | 0        |
| b4254        | 0.0325               | 1.9179             | 0.01694  |
| b4263        | 0.0356               | 0.5019             | 0.07101  |
| b4324        | 0.0132               | 0.2552             | 0.05162  |
| b4355        | 0.1017               | 0.1735             | 0.58596  |
| b4357        | 0.0764666666666667   | 8.794566666666667  | 0.02139  |
| b4359        | 0.0052               | 0.1707             | 0.03055  |
| b4365        | 0.0021               | 0.0622             | 0.03394  |
| b4378        | 0.0522               | 0.4312             | 0.1211   |
| b4391        | 0.0022               | 0.1727             | 0.01264  |
| b4460        | 0                    | 0.1661             | 0        |
| b4465        | 0.0228               | 0.3502             | 0.06507  |
| b4475        | 0.03945              | 0.3126             | 0.17199  |
| b4480        | 0.0119               | 0.1712             | 0.06979  |
| ECIAI39_0018 | 0                    | 0.0307             | 0        |
| ECIAI39_0019 | 0                    | 0.1961             | 0        |
| ECIAI39_0021 | 0.006766666666666667 | 0.1907333333333333 | 0.04286  |
| ECIAI39_0022 | 0                    | 0.1406             | 0        |
| ECIAI39_0023 | 0.0046               | 0.2932             | 0.01572  |
| ECIAI39_0024 | 0.023                | 0.4289             | 0.05359  |
| ECIAI39_0026 | 0.0074               | 0.2183             | 0.03382  |
| ECIAI39_0027 | 0.00485              | 0.33235            | 0.01464  |
| ECIAI39_0030 | 0.02025              | 0.11955            | 0.16873  |
| ECIAI39_0031 | 0.0077               | 0.1404             | 0.05466  |
| ECIAI39_0032 | 0.0309               | 0.201              | 0.15353  |
| ECIAI39_0033 | 0.007                | 0.2125             | 0.03296  |
| ECIAI39_0034 | 0.00185              | 0.15505            | 0.01187  |
| ECIAI39_0035 | 0.0093               | 0.1094             | 0.08523  |
| ECIAI39_0037 | 0.02                 | 0.1605             | 0.12481  |
| ECIAI39_0038 | 0.0034               | 0.16825            | 0.01352  |
| ECIAI39_0039 | 0.0033               | 0.2286             | 0.01429  |
| ECIAI39_0040 | 0.007                | 0.24135            | 0.02624  |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_0041 | 0.00425            | 0.17925            | 0.023305           |
| ECIAI39_0042 | 0.0086             | 0.1528             | 0.05601            |
| ECIAI39_0043 | 0.0051             | 0.0608             | 0.047795           |
| ECIAI39_0044 | 0.0243             | 0.1178             | 0.20596            |
| ECIAI39_0046 | 0                  | 0.1085             | 0                  |
| ECIAI39_0047 | 0.0066             | 0.1488             | 0.04415            |
| ECIAI39_0048 | 0.0049             | 0.1771             | 0.02743            |
| ECIAI39_0053 | 0.0086             | 0.1761             | 0.04869            |
| ECIAI39_0055 | 0.001              | 0.1995             | 0.005              |
| ECIAI39_0057 | 0.02365            | 0.3089             | 0.08431            |
| ECIAI39_0058 | 0.0121             | 0.3011             | 0.04021            |
| ECIAI39_0061 | 0.0186             | 0.2613             | 0.07101            |
| ECIAI39_0062 | 0.011              | 0.2369333333333333 | 0.0454066666666667 |
| ECIAI39_0063 | 0.0341             | 0.4757             | 0.07145            |
| ECIAI39_0064 | 0.0214             | 0.484              | 0.04429            |
| ECIAI39_0065 | 0.0199             | 0.3781             | 0.05264            |
| ECIAI39_0066 | 0.0398             | 0.6272             | 0.06339            |
| ECIAI39_0067 | 0.0112             | 0.4135             | 0.0272             |
| ECIAI39_0069 | 0.0053             | 0.2762             | 0.01934            |
| ECIAI39_0071 | 0.0027             | 0.3476             | 0.00767            |
| ECIAI39_0072 | 0.0105             | 0.1981             | 0.05278            |
| ECIAI39_0074 | 0.0147             | 0.3414             | 0.04293            |
| ECIAI39_0075 | 0.00455            | 0.1679             | 0.02289            |
| ECIAI39_0077 | 0.0042             | 0.05645            | 0.088195           |
| ECIAI39_0078 | 0                  | 0.0072             | 0                  |
| ECIAI39_0079 | 0.0025             | 0.1245             | 0.02012            |
| ECIAI39_0080 | 0.012              | 0.1788             | 0.0673             |
| ECIAI39_0081 | 0.0042             | 0.1998             | 0.02123            |
| ECIAI39_0082 | 0.0079             | 0.3029             | 0.02593            |
| ECIAI39_0083 | 0                  | 0.1804             | 0                  |
| ECIAI39_0084 | 0.0042             | 0.128              | 0.0332             |
| ECIAI39_0086 | 0.0028             | 0.1643             | 0.01718            |
| ECIAI39_0087 | 0.0114             | 0.1522             | 0.07463            |
| ECIAI39_0088 | 0.00185            | 0.05235            | 0.038335           |
| ECIAI39_0089 | 0                  | 0.0883             | 0                  |
| ECIAI39_0090 | 0                  | 0.0614             | 0                  |
| ECIAI39_0091 | 0.0058             | 0.1318             | 0.04396            |
| ECIAI39_0092 | 0.001              | 0.1616             | 0.00646            |
| ECIAI39_0094 | 0.0195             | 0.1098             | 0.168215           |
| ECIAI39_0095 | 0.0091             | 0.0523             | 0.17472            |
| ECIAI39_0096 | 0.0015             | 0.1394             | 0.01047            |
| ECIAI39_0097 | 0.0346             | 0.2102             | 0.16547            |
| ECIAI39_0098 | 0.02405            | 0.17035            | 0.14221            |
| ECIAI39_0099 | 0.02675            | 0.18895            | 0.136445           |
| ECIAI39_0100 | 0.0049             | 0.1379             | 0.03586            |
| ECIAI39_0101 | 0.0119666666666667 | 0.2465             | 0.0653366666666667 |
| ECIAI39_0103 | 0                  | 0.0726             | 0                  |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$              | $\omega$          |
|--------------|--------------------|-------------------|-------------------|
| ECIAI39_0105 | 0.001              | 0.1647            | 0.00611           |
| ECIAI39_0107 | 0.00715            | 0.165             | 0.043145          |
| ECIAI39_0109 | 0                  | 0.1387            | 0                 |
| ECIAI39_0111 | 0.0594             | 0.56685           | 0.103215          |
| ECIAI39_0112 | 0.0481333333333333 | 0.289433333333333 | NA                |
| ECIAI39_0113 | 0.0011             | 0.2912            | 0.00382           |
| ECIAI39_0114 | 0.00185            | 0.2459            | 0.015315          |
| ECIAI39_0115 | 0.00085            | 0.1593            | 0.00617           |
| ECIAI39_0117 | 0.0041             | 0.3665            | 0.01119           |
| ECIAI39_0118 | 0.003525           | 0.16215           | 0.02218           |
| ECIAI39_0120 | 0.0635             | 0.2751            | 0.23083           |
| ECIAI39_0121 | 0.0257             | 0.2131            | 0.12049           |
| ECIAI39_0123 | 0.0177             | 0.4941            | 0.03894           |
| ECIAI39_0124 | 0.0261             | 0.6333            | 0.03687           |
| ECIAI39_0127 | 0.425              | 8.9931            | 0.048065          |
| ECIAI39_0128 | 0.282833333333333  | 7.64586666666667  | 0.036896666666667 |
| ECIAI39_0129 | 0.6877             | 10.4519           | 0.0658            |
| ECIAI39_0130 | 0.67885            | 16.12105          | 0.063745          |
| ECIAI39_0132 | 0.0345             | 0.6825            | 0.0505            |
| ECIAI39_0134 | 0.0042             | 0.2447            | 0.01701           |
| ECIAI39_0135 | 0.0273             | 0.3473            | 0.07852           |
| ECIAI39_0138 | 0.0103             | 0.0632            | 0.16339           |
| ECIAI39_0140 | 0.0233             | 0.1997            | 0.11673           |
| ECIAI39_0141 | 0.0292             | 0.1977            | 0.14775           |
| ECIAI39_0143 | 0.0028             | 0.2839            | 0.0098            |
| ECIAI39_0145 | 0.0247             | 0.5876            | 0.04205           |
| ECIAI39_0146 | 0.1605             | 2.6315            | 0.061             |
| ECIAI39_0147 | 0.00915            | 0.2761            | 0.032155          |
| ECIAI39_0148 | 0.0149             | 0.3879            | 0.03832           |
| ECIAI39_0150 | 0.0154             | 0.4347            | 0.03549           |
| ECIAI39_0152 | 0.0049             | 0.1889            | 0.027385          |
| ECIAI39_0153 | 0.0041             | 0.0906            | 0.050086666666667 |
| ECIAI39_0154 | 0.0095             | 0.1594            | 0.05953           |
| ECIAI39_0155 | 0.0039             | 0.2087            | 0.01885           |
| ECIAI39_0157 | 0.00125            | 0.27435           | 0.00526           |
| ECIAI39_0158 | 0.0037             | 0.2311            | 0.01585           |
| ECIAI39_0159 | 0.0064             | 0.3134            | 0.02049           |
| ECIAI39_0162 | 0                  | 0.1675            | 0                 |
| ECIAI39_0163 | 0.0019             | 0.0104            | 0.18434           |
| ECIAI39_0164 | 0                  | 0.0293            | 0                 |
| ECIAI39_0165 | 0                  | 0.02795           | 0                 |
| ECIAI39_0166 | 0.0024             | 0.0479            | 0.05091           |
| ECIAI39_0167 | 0                  | 0.0549            | 0                 |
| ECIAI39_0168 | 0.0078             | 0.0778            | 0.10068           |
| ECIAI39_0169 | 0.0037             | 0.0831            | 0.06765           |
| ECIAI39_0171 | 0                  | 0.0721            | 0                 |
| ECIAI39_0172 | 0.0027             | 0.0914            | 0.02979           |

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Table S1 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$  |
|--------------|---------|---------|-----------|
| ECIAI39_0173 | 0.0026  | 0.0396  | 0.0657    |
| ECIAI39_0175 | 0.0083  | 0.2032  | 0.04106   |
| ECIAI39_0176 | 0.01345 | 0.22765 | 0.065705  |
| ECIAI39_0179 | 0.0036  | 0.175   | 0.02044   |
| ECIAI39_0180 | 0.0025  | 0.13835 | 0.025945  |
| ECIAI39_0181 | 0.0064  | 0.2586  | 0.02465   |
| ECIAI39_0182 | 0.0069  | 0.0866  | 0.07941   |
| ECIAI39_0183 | 0.0502  | 0.426   | 0.11777   |
| ECIAI39_0184 | 0.0489  | 0.3302  | 0.14815   |
| ECIAI39_0185 | 0.00975 | 0.16965 | 0.058355  |
| ECIAI39_0186 | 0.0188  | 0.1862  | 0.10079   |
| ECIAI39_0187 | 0.03355 | 0.26455 | 0.1225925 |
| ECIAI39_0188 | 0.006   | 0.1466  | 0.039335  |
| ECIAI39_0189 | 0.0038  | 0.1448  | 0.026715  |
| ECIAI39_0190 | 0.0057  | 0.1619  | 0.03547   |
| ECIAI39_0191 | 0.0076  | 0.1282  | 0.05933   |
| ECIAI39_0198 | 0.00955 | 0.12555 | 0.09383   |
| ECIAI39_0199 | 0.0637  | 0.1469  | 0.43383   |
| ECIAI39_0201 | 0.00905 | 0.1263  | 0.065685  |
| ECIAI39_0202 | 0.0119  | 0.1674  | 0.0712    |
| ECIAI39_0203 | 0.0061  | 0.3002  | 0.02017   |
| ECIAI39_0204 | 0.0098  | 0.1848  | 0.05285   |
| ECIAI39_0206 | 0.018   | 0.2307  | 0.07793   |
| ECIAI39_0207 | 0.0029  | 0.1548  | 0.01878   |
| ECIAI39_0208 | 0.0034  | 0.343   | 0.01003   |
| ECIAI39_0210 | 0       | 0.2082  | 0         |
| ECIAI39_0221 | 0.0873  | 0.2177  | 0.40086   |
| ECIAI39_0222 | 0.0039  | 0.2083  | 0.01887   |
| ECIAI39_0224 | 0.0073  | 0.1223  | 0.06667   |
| ECIAI39_0226 | 0.009   | 0.3644  | 0.02465   |
| ECIAI39_0228 | 0.00665 | 0.27515 | 0.02025   |
| ECIAI39_0229 | 0.0107  | 0.3389  | 0.03163   |
| ECIAI39_0273 | 0.0022  | 0.3786  | 0.00582   |
| ECIAI39_0275 | 0.0079  | 0.1067  | 0.07365   |
| ECIAI39_0277 | 0.013   | 0.1461  | 0.08895   |
| ECIAI39_0279 | 0.0167  | 0.1395  | 0.11975   |
| ECIAI39_0280 | 0.0056  | 0.1371  | 0.04059   |
| ECIAI39_0284 | 0.015   | 0.077   | 0.19464   |
| ECIAI39_0285 | 0.0116  | 0.11305 | 0.10121   |
| ECIAI39_0286 | 0.0082  | 0.0645  | 0.12642   |
| ECIAI39_0287 | 0.0088  | 0.077   | 0.11445   |
| ECIAI39_0288 | 0.0308  | 0.3658  | 0.08431   |
| ECIAI39_0291 | 0.0186  | 0.4844  | 0.03834   |
| ECIAI39_0293 | 0.0426  | 0.4291  | 0.09933   |
| ECIAI39_0294 | 0.0212  | 0.3397  | 0.06234   |
| ECIAI39_0295 | 0.0266  | 0.3008  | 0.08834   |
| ECIAI39_0297 | 0.0014  | 0.2211  | 0.00624   |

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Table S1 – continued from previous page

| Gene         | $dN$                 | $dS$                | $\omega$            |
|--------------|----------------------|---------------------|---------------------|
| ECIAI39_0299 | 0.1271               | 1.6406              | 0.07749             |
| ECIAI39_0301 | 0.0183               | 0.393               | 0.04566             |
| ECIAI39_0303 | 0.0769               | 0.3228              | 0.23833             |
| ECIAI39_0304 | 0.0397               | 0.3744              | 0.10596             |
| ECIAI39_0305 | 0.04565              | 0.1593              | 0.32077             |
| ECIAI39_0306 | 0.0276               | 0.47                | 0.05873             |
| ECIAI39_0308 | 0.0132               | 0.467               | 0.02833             |
| ECIAI39_0309 | 0.0211               | 0.4175              | 0.05044             |
| ECIAI39_0315 | 0.0052               | 0.2343              | 0.02233             |
| ECIAI39_0316 | 0.08105              | 0.4238              | 0.20928             |
| ECIAI39_0317 | 0.0259               | 0.5523              | 0.04688             |
| ECIAI39_0318 | 0.0049               | 0.2822              | 0.01748             |
| ECIAI39_0320 | 0.0087               | 0.2402              | 0.0361              |
| ECIAI39_0322 | 0.0075               | 0.3059              | 0.02453             |
| ECIAI39_0324 | 0.0071               | 0.2332              | 0.03028             |
| ECIAI39_0325 | 0.011                | 0.2194              | 0.05018             |
| ECIAI39_0330 | 0.0497               | 0.2425              | 0.20486             |
| ECIAI39_0331 | 0.0049               | 0.1062              | 0.04651             |
| ECIAI39_0332 | 0.0227               | 0.18635             | 0.118445            |
| ECIAI39_0333 | 0.056                | 0.271               | 0.20653             |
| ECIAI39_0334 | 0.0196               | 0.1996              | 0.103495            |
| ECIAI39_0343 | 0.0225               | 0.2536              | 0.08867             |
| ECIAI39_0344 | 0.04813333333333333  | 0.18893333333333333 | 0.6042766666666667  |
| ECIAI39_0345 | 0.002566666666666667 | 0.1557              | 0.01700333333333333 |
| ECIAI39_0349 | 0.0136               | 0.3658              | 0.03708             |
| ECIAI39_0350 | 0.0221               | 0.6191              | 0.03576             |
| ECIAI39_0351 | 0.0161               | 0.2256              | 0.07136             |
| ECIAI39_0354 | 0.024                | 0.5143              | 0.04667             |
| ECIAI39_0362 | 0.0021               | 0.1615              | 0.01331             |
| ECIAI39_0363 | 0.0074               | 0.2385              | 0.031               |
| ECIAI39_0364 | 0.0047               | 0.1362              | 0.03461             |
| ECIAI39_0365 | 0.00845              | 0.10785             | 0.083855            |
| ECIAI39_0366 | 0.00505              | 0.1177              | 0.044755            |
| ECIAI39_0367 | 0.0162               | 0.1161              | 0.13915             |
| ECIAI39_0370 | 0                    | 0.2878              | 0                   |
| ECIAI39_0371 | 0.00825              | 0.1204              | 0.07185             |
| ECIAI39_0372 | 0.008033333333333333 | 0.15523333333333333 | 0.03487333333333333 |
| ECIAI39_0374 | 0.0016               | 0.1521              | 0.01048             |
| ECIAI39_0375 | 0.01225              | 0.152               | 0.092695            |
| ECIAI39_0378 | 0.0303               | 0.1628              | 0.18618             |
| ECIAI39_0379 | 0.0833               | 0.3221              | 0.2585              |
| ECIAI39_0381 | 0.0057               | 0.1232              | 0.04601             |
| ECIAI39_0384 | 0.0035               | 0.1317              | 0.02631             |
| ECIAI39_0385 | 0.001                | 0.1771              | 0.00559             |
| ECIAI39_0388 | 0                    | 0.0627              | 0                   |
| ECIAI39_0389 | 0.0008               | 0.1352              | 0.00596             |
| ECIAI39_0391 | 0                    | 0.2096              | 0                   |

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Table S1 – continued from previous page

| Gene         | $dN$                | $dS$               | $\omega$ |
|--------------|---------------------|--------------------|----------|
| ECIAI39_0392 | 0.0076              | 0.2127             | 0.03557  |
| ECIAI39_0393 | 0                   | 0.0521             | 0        |
| ECIAI39_0396 | 0                   | 0.0504             | 0        |
| ECIAI39_0398 | 0.0088              | 0.1867             | 0.04707  |
| ECIAI39_0400 | 0.0086              | 0.3938             | 0.02182  |
| ECIAI39_0401 | 0.0053              | 0.2834             | 0.01878  |
| ECIAI39_0402 | 0.0035              | 0.14045            | 0.01996  |
| ECIAI39_0403 | 0.011               | 0.2662             | 0.0412   |
| ECIAI39_0406 | 0.0098              | 0.2288             | 0.04294  |
| ECIAI39_0408 | 0.0162              | 0.2464             | 0.06587  |
| ECIAI39_0409 | 0.0031              | 0.1802             | 0.01746  |
| ECIAI39_0410 | 0.00465             | 0.1421             | 0.035895 |
| ECIAI39_0412 | 0                   | 0.108              | 0        |
| ECIAI39_0413 | 0.0072              | 0.0873             | 0.08221  |
| ECIAI39_0414 | 0.0062              | 0.1507             | 0.04133  |
| ECIAI39_0416 | 0.0036              | 0.0619             | 0.029155 |
| ECIAI39_0418 | 0.0011              | 0.0667             | 0.01701  |
| ECIAI39_0419 | 0                   | 0.1125             | 0        |
| ECIAI39_0420 | 0                   | 0.2369             | 0        |
| ECIAI39_0423 | 0.0012              | 0.141              | 0.00848  |
| ECIAI39_0428 | 0.0037              | 0.1392             | 0.02684  |
| ECIAI39_0429 | 0.0363              | 0.1322             | 0.27459  |
| ECIAI39_0430 | 0.0136              | 0.2869             | 0.0473   |
| ECIAI39_0431 | 0.0113              | 0.16465            | 0.0702   |
| ECIAI39_0432 | 0.0107              | 0.0657             | 0.16326  |
| ECIAI39_0433 | 0                   | 0.0774             | 0        |
| ECIAI39_0434 | 0.0087              | 0.2231             | 0.03902  |
| ECIAI39_0435 | 0.0254              | 0.3347             | 0.07601  |
| ECIAI39_0437 | 0.0057              | 0.2595             | 0.02212  |
| ECIAI39_0438 | 0                   | 0.0914             | 0        |
| ECIAI39_0439 | 0.0034              | 0.2482             | 0.01366  |
| ECIAI39_0440 | 0.0016              | 0.2055             | 0.00774  |
| ECIAI39_0441 | 0.0077              | 0.2331             | 0.034105 |
| ECIAI39_0442 | 0                   | 0.1761             | 0        |
| ECIAI39_0445 | 0.0026              | 0.0637             | 0.04043  |
| ECIAI39_0446 | 0.0067              | 0.0763             | 0.08729  |
| ECIAI39_0449 | 0.003               | 0.2361             | 0.01287  |
| ECIAI39_0451 | 0.03783333333333333 | 0.2672333333333333 | 0.10497  |
| ECIAI39_0454 | 0.0061              | 0.1331             | 0.0456   |
| ECIAI39_0455 | 0                   | 0.1105             | 0        |
| ECIAI39_0456 | 0.0024              | 0.1295             | 0.01875  |
| ECIAI39_0460 | 0.0008              | 0.1848             | 0.00409  |
| ECIAI39_0463 | 0.0108              | 0.2046             | 0.05278  |
| ECIAI39_0464 | 0.0235              | 0.1298             | 0.1812   |
| ECIAI39_0466 | 0                   | 0.2074             | 0        |
| ECIAI39_0481 | 0.0341              | 0.4108             | 0.08313  |
| ECIAI39_0482 | 0.0015              | 0.2811             | 0.00545  |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_0483 | 0.0137             | 0.1536             | 0.08908            |
| ECIAI39_0484 | 0.0037             | 0.1504             | 0.02446            |
| ECIAI39_0512 | 0.0238             | 0.201              | 0.11853            |
| ECIAI39_0513 | 0.0022             | 0.2202             | 0.0102             |
| ECIAI39_0515 | 0.0279             | 0.2612             | 0.1069             |
| ECIAI39_0516 | 0.0141             | 0.2597             | 0.05422            |
| ECIAI39_0517 | 0.0281             | 0.2712             | 0.10369            |
| ECIAI39_0519 | 0.0186             | 0.2173             | 0.08577            |
| ECIAI39_0522 | 0.0131             | 0.2242             | 0.05834            |
| ECIAI39_0523 | 0.0397             | 0.216              | 0.18362            |
| ECIAI39_0525 | 0.0178             | 0.2390333333333333 | 0.07628            |
| ECIAI39_0527 | 0.0182             | 0.2189             | 0.08314            |
| ECIAI39_0528 | 0.01165            | 0.2612             | 0.03523            |
| ECIAI39_0529 | 0.0164             | 0.1974             | 0.08291            |
| ECIAI39_0530 | 0.01232            | 0.23366            | 0.05414            |
| ECIAI39_0531 | 0.0053             | 0.196              | 0.02719            |
| ECIAI39_0559 | 0.0157             | 0.1246             | 0.1263             |
| ECIAI39_0563 | 0.01496            | 0.29056            | 0.054498           |
| ECIAI39_0564 | 0.01245            | 0.19065            | 0.065225           |
| ECIAI39_0566 | 0.006              | 0.238              | 0.02516            |
| ECIAI39_0568 | 0.0065             | 0.2086             | 0.03095            |
| ECIAI39_0569 | 0.0046             | 0.1512             | 0.03056            |
| ECIAI39_0570 | 0.0128             | 0.1962             | 0.06518            |
| ECIAI39_0571 | 0.0233             | 0.1776666666666667 | 0.15577            |
| ECIAI39_0575 | 0.062              | 0.4374             | 0.130605           |
| ECIAI39_0578 | 0.0484             | 0.184              | 0.26301            |
| ECIAI39_0579 | 0.0385             | 0.26               | 0.14822            |
| ECIAI39_0580 | 0.0468             | 0.3377             | 0.13849            |
| ECIAI39_0581 | 0.0315             | 0.4192             | 0.07519            |
| ECIAI39_0583 | 0.0382             | 0.2555             | 0.14944            |
| ECIAI39_0584 | 0.0036             | 0.3643             | 0.00992            |
| ECIAI39_0586 | 0.0077             | 0.3363             | 0.02289            |
| ECIAI39_0587 | 0.0059             | 0.3172             | 0.01861            |
| ECIAI39_0588 | 0.0181             | 0.2513             | 0.07204            |
| ECIAI39_0589 | 0.01               | 0.1955             | 0.05104            |
| ECIAI39_0591 | 0.011              | 0.34455            | 0.028895           |
| ECIAI39_0592 | 0.0088             | 0.1627             | 0.0541             |
| ECIAI39_0594 | 0.0094             | 0.30995            | 0.03055            |
| ECIAI39_0595 | 0.00275            | 0.3973             | 0.007045           |
| ECIAI39_0597 | 0.0222             | 0.4349             | 0.056515           |
| ECIAI39_0598 | 0.0138             | 0.1753             | 0.07844            |
| ECIAI39_0600 | 0.0189             | 0.4221             | 0.04473            |
| ECIAI39_0603 | 0.0647666666666667 | 1.4543             | 0.0418466666666667 |
| ECIAI39_0604 | 0                  | 0.0338             | 0                  |
| ECIAI39_0606 | 0.0009             | 0.2115             | 0.00424            |
| ECIAI39_0607 | 0.014              | 0.4837             | 0.02897            |
| ECIAI39_0610 | 0.00715            | 0.13265            | 0.05911            |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_0611 | 0                  | 0.1207             | 0                  |
| ECIAI39_0612 | 0.004              | 0.202              | 0.01991            |
| ECIAI39_0613 | 0.0121             | 0.0666             | 0.18119            |
| ECIAI39_0615 | 0.0075             | 0.1662             | 0.04526            |
| ECIAI39_0616 | 0.0064             | 0.1559             | 0.0413             |
| ECIAI39_0617 | 0.0076666666666667 | 0.0673333333333333 | 0.09684            |
| ECIAI39_0618 | 0.0049             | 0.2136             | 0.02279            |
| ECIAI39_0619 | 0.0023             | 0.1124             | 0.02029            |
| ECIAI39_0620 | 0.001              | 0.1494             | 0.00701            |
| ECIAI39_0623 | 0.00975            | 0.0868             | 0.06156            |
| ECIAI39_0624 | 0                  | 0.05635            | 0                  |
| ECIAI39_0626 | 0.0647             | 0.1253             | 0.51669            |
| ECIAI39_0627 | 0.0047             | 0.1481             | 0.03157            |
| ECIAI39_0628 | 0.0006             | 0.07655            | 0.005335           |
| ECIAI39_0629 | 0.0068             | 0.1339             | 0.05084            |
| ECIAI39_0631 | 0                  | 0.0751             | 0                  |
| ECIAI39_0632 | 0.0411             | 0.2717             | 0.15145            |
| ECIAI39_0633 | 0.0067             | 0.1265             | 0.05303            |
| ECIAI39_0634 | 0.0267333333333333 | 0.279866666666667  | 0.0654333333333333 |
| ECIAI39_0636 | 0.006              | 0.1798             | 0.03346            |
| ECIAI39_0646 | 0.0141             | 0.2109             | 0.06687            |
| ECIAI39_0647 | 0.01               | 0.3702             | 0.02692            |
| ECIAI39_0648 | 0.0043             | 0.384              | 0.01127            |
| ECIAI39_0650 | 0.0086             | 0.2864             | 0.0325             |
| ECIAI39_0654 | 0.0050666666666667 | 0.1296             | 0.0360733333333333 |
| ECIAI39_0656 | 0.0169             | 0.3667             | 0.034155           |
| ECIAI39_0658 | 0.0051             | 0.3855             | 0.01312            |
| ECIAI39_0660 | 0                  | 0.3489             | 0                  |
| ECIAI39_0661 | 0                  | 0.235              | 0                  |
| ECIAI39_0663 | 0.0018             | 0.1581             | 0.01127            |
| ECIAI39_0665 | 0.0131             | 0.2537             | 0.05164            |
| ECIAI39_0667 | 0.0041             | 0.2614             | 0.01556            |
| ECIAI39_0669 | 0.0133             | 0.2025             | 0.06593            |
| ECIAI39_0670 | 0.0152             | 0.3023             | 0.04907            |
| ECIAI39_0671 | 0                  | 0.0979             | 0                  |
| ECIAI39_0673 | 0.00245            | 0.15345            | 0.019495           |
| ECIAI39_0674 | 0.0027             | 0.0413             | 0.06578            |
| ECIAI39_0676 | 0.0061             | 0.277              | 0.02199            |
| ECIAI39_0683 | 0.01385            | 0.338              | 0.039355           |
| ECIAI39_0684 | 0.0445             | 0.2225             | 0.19999            |
| ECIAI39_0686 | 0.0107             | 0.3109             | 0.03434            |
| ECIAI39_0687 | 0.0399             | 0.3704             | 0.096035           |
| ECIAI39_0688 | 0.0274             | 0.1547             | 0.17739            |
| ECIAI39_0697 | 0.06125            | 0.41215            | 0.153115           |
| ECIAI39_0700 | 0.002              | 0.1203             | 0.01636            |
| ECIAI39_0701 | 0.0132             | 0.2359             | 0.055735           |
| ECIAI39_0702 | 0.0584             | 0.1799             | 0.32487            |

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Table S1 – continued from previous page

| Gene         | $dN$                  | $dS$              | $\omega$           |
|--------------|-----------------------|-------------------|--------------------|
| ECIAI39_0703 | 0.02495               | 0.3695            | 0.08408            |
| ECIAI39_0710 | 0                     | 0.2351            | 0                  |
| ECIAI39_0713 | 0.0039                | 0.035             | 0.11088            |
| ECIAI39_0714 | 0.0008                | 0.2776            | 0.00295            |
| ECIAI39_0715 | 0.004                 | 0.062             | 0.06462            |
| ECIAI39_0719 | 0.0046                | 0.1235            | 0.03698            |
| ECIAI39_0720 | 0                     | 0.1213            | 0                  |
| ECIAI39_0722 | 0                     | 0.2529            | 0                  |
| ECIAI39_0728 | 0                     | 0.0812            | 0                  |
| ECIAI39_0731 | 0                     | 0.0782            | 0                  |
| ECIAI39_0732 | 0                     | 0.03              | 0                  |
| ECIAI39_0733 | 0.001                 | 0.0985            | 0.006225           |
| ECIAI39_0734 | 0.0097                | 0.1406            | 0.06928            |
| ECIAI39_0735 | 0                     | 0.1519            | 0                  |
| ECIAI39_0736 | 0.0027                | 0.0517            | 0.05175            |
| ECIAI39_0738 | 0.0107                | 0.0566            | 0.18917            |
| ECIAI39_0740 | 0.01785               | 0.1349            | 0.133035           |
| ECIAI39_0741 | 0.0062                | 0.1516            | 0.04103            |
| ECIAI39_0742 | 0.0073                | 0.1481            | 0.04914            |
| ECIAI39_0743 | 0.0093                | 0.2456            | 0.03794            |
| ECIAI39_0745 | 0.0108                | 0.1653            | 0.06554            |
| ECIAI39_0749 | 0.0098                | 0.1842            | 0.05318            |
| ECIAI39_0750 | 0.0014                | 0.1238            | 0.01108            |
| ECIAI39_0751 | 0.0119                | 0.2129            | 0.0557             |
| ECIAI39_0752 | 0                     | 0.1362            | 0                  |
| ECIAI39_0753 | 0                     | 0.033             | 0                  |
| ECIAI39_0754 | 0.0135                | 0.1863            | 0.07272            |
| ECIAI39_0755 | 0.00955               | 0.2167            | 0.043315           |
| ECIAI39_0756 | 0.0087                | 0.3071            | 0.02833            |
| ECIAI39_0757 | 0.0015                | 0.1454            | 0.01055            |
| ECIAI39_0763 | 0.0032                | 0.4351            | 0.0073             |
| ECIAI39_0764 | 0.0116                | 0.2286            | 0.05084            |
| ECIAI39_0766 | 0.0078                | 0.2281            | 0.0344             |
| ECIAI39_0767 | 0.0124                | 0.1922            | 0.06463            |
| ECIAI39_0768 | 0.0157                | 0.2546            | 0.06166            |
| ECIAI39_0769 | 0.0026                | 0.3648            | 0.00715            |
| ECIAI39_0770 | 0.0444                | 0.311966666666667 | 0.15727            |
| ECIAI39_0771 | 0.0352                | 0.28675           | 0.122115           |
| ECIAI39_0773 | 0.0014                | 0.3217            | 0.00433            |
| ECIAI39_0775 | 0.0075                | 0.2922            | 0.02531            |
| ECIAI39_0776 | 0.013125              | 0.162775          | 0.0972175          |
| ECIAI39_0777 | 0.0125                | 0.3627            | 0.03442            |
| ECIAI39_0778 | 0.0414                | 0.27505           | 0.15184            |
| ECIAI39_0780 | 0.0012                | 0.2636            | 0.00439            |
| ECIAI39_0782 | 0.0016333333333333333 | 0.1529            | 0.0105666666666667 |
| ECIAI39_0784 | 0                     | 0.2973            | 0                  |
| ECIAI39_0786 | 0.00565               | 0.2903            | 0.018545           |

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Table S1 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$  |
|--------------|----------------------|--------------------|-----------|
| ECIAI39_0788 | 0.00125              | 0.29945            | 0.004855  |
| ECIAI39_0789 | 0.0676               | 0.4207             | 0.16057   |
| ECIAI39_0791 | 0.0046               | 0.3306             | 0.01403   |
| ECIAI39_0793 | 0.02025              | 0.2005             | 0.10097   |
| ECIAI39_0795 | 0.01975              | 0.2125             | 0.091425  |
| ECIAI39_0796 | 0.0099               | 0.2186             | 0.04518   |
| ECIAI39_0797 | 0.013                | 0.1495             | 0.154605  |
| ECIAI39_0798 | 0.0195               | 0.2161             | 0.09009   |
| ECIAI39_0799 | 0.0071               | 0.2855             | 0.02499   |
| ECIAI39_0800 | 0.002                | 0.13515            | 0.013145  |
| ECIAI39_0801 | 0                    | 0.0741             | 0         |
| ECIAI39_0802 | 0                    | 0.0555             | 0         |
| ECIAI39_0803 | 0.005                | 0.1159             | 0.04323   |
| ECIAI39_0804 | 0                    | 0.0512             | 0         |
| ECIAI39_0805 | 0.0132               | 0.1252             | 0.10575   |
| ECIAI39_0806 | 0.0063               | 0.1336             | 0.04718   |
| ECIAI39_0807 | 0.01125              | 0.23715            | 0.03675   |
| ECIAI39_0809 | 0                    | 0.2351             | 0         |
| ECIAI39_0810 | 0.0129               | 0.1346             | 0.09592   |
| ECIAI39_0811 | 0.0053               | 0.3875             | 0.01358   |
| ECIAI39_0814 | 0.0277               | 0.21255            | 0.1274    |
| ECIAI39_0815 | 0.0237               | 0.2368             | 0.10002   |
| ECIAI39_0816 | 0.0254               | 0.4342             | 0.05846   |
| ECIAI39_0817 | 0.0254               | 0.2317             | 0.105545  |
| ECIAI39_0818 | 0.01605              | 0.09375            | 0.152455  |
| ECIAI39_0821 | 0.0084               | 0.1399             | 0.06027   |
| ECIAI39_0823 | 0.0015               | 0.1409             | 0.01064   |
| ECIAI39_0824 | 0.0049               | 0.1853             | 0.02655   |
| ECIAI39_0827 | 0.0097               | 0.1683             | 0.05792   |
| ECIAI39_0830 | 0.001                | 0.097              | 0.01067   |
| ECIAI39_0831 | 0                    | 0.0068             | 0         |
| ECIAI39_0834 | 0.0024               | 0.0746             | 0.03175   |
| ECIAI39_0835 | 0.0024               | 0.1403             | 0.01685   |
| ECIAI39_0836 | 0.0076               | 0.1958             | 0.03873   |
| ECIAI39_0837 | 0.00475              | 0.1442             | 0.049595  |
| ECIAI39_0839 | 0.00885              | 0.0833             | 0.3149    |
| ECIAI39_0840 | 0.016                | 0.1865             | 0.08588   |
| ECIAI39_0841 | 0.0049               | 0.1657             | 0.02983   |
| ECIAI39_0842 | 0.0158               | 0.1133             | 0.13981   |
| ECIAI39_0844 | 0                    | 0.1722             | 0         |
| ECIAI39_0846 | 0.017625             | 0.061325           | 0.4723425 |
| ECIAI39_0848 | 0                    | 0.0844             | 0         |
| ECIAI39_0849 | 0.0051               | 0.5129             | 0.00995   |
| ECIAI39_0850 | 0.01                 | 0.3346             | 0.02992   |
| ECIAI39_0851 | 0.0081               | 0.3351             | 0.02432   |
| ECIAI39_0852 | 0.010733333333333333 | 0.2657666666666667 | 0.03091   |
| ECIAI39_0853 | 0.0134               | 0.4725             | 0.02841   |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_0854 | 0.0106             | 0.412              | 0.021585           |
| ECIAI39_0855 | 0.0057             | 0.4123             | 0.01391            |
| ECIAI39_0857 | 0                  | 0.0611             | 0                  |
| ECIAI39_0858 | 0.0014             | 0.1819             | 0.00761            |
| ECIAI39_0860 | 0.014              | 0.2789             | 0.05018            |
| ECIAI39_0861 | 0.0135             | 0.2997             | 0.04497            |
| ECIAI39_0862 | 0                  | 0.1668             | 0                  |
| ECIAI39_0863 | 0.0159             | 0.32415            | 0.062295           |
| ECIAI39_0864 | 0.0034             | 0.2352             | 0.01463            |
| ECIAI39_0865 | 0.0082             | 0.1977             | 0.04153            |
| ECIAI39_0866 | 0.0068             | 0.1892             | 0.03581            |
| ECIAI39_0867 | 0.0018             | 0.2234             | 0.00797            |
| ECIAI39_0870 | 0.0073             | 0.1322             | 0.05547            |
| ECIAI39_0872 | 0.01               | 0.1161             | 0.08628            |
| ECIAI39_0873 | 0.009              | 0.154              | 0.05845            |
| ECIAI39_0874 | 0                  | 0.0138             | 0                  |
| ECIAI39_0876 | 0                  | 0.193              | 0                  |
| ECIAI39_0878 | 0                  | 0                  | 0                  |
| ECIAI39_0879 | 0.0081             | 0.1919             | 0.04207            |
| ECIAI39_0880 | 0.0115             | 0.1579             | 0.07265            |
| ECIAI39_0881 | 0.0041333333333333 | 0.1335666666666667 | 0.0247333333333333 |
| ECIAI39_0882 | 0                  | 0.0522             | 0                  |
| ECIAI39_0883 | 0.01985            | 0.1652             | 0.119985           |
| ECIAI39_0887 | 0                  | 0.053              | 0                  |
| ECIAI39_0888 | 0.0032             | 0.232              | 0.01371            |
| ECIAI39_0890 | 0                  | 0.1209             | 0                  |
| ECIAI39_0892 | 0.0071             | 0.2743             | 0.02589            |
| ECIAI39_0893 | 0.0097333333333333 | 0.2026333333333333 | 0.04643            |
| ECIAI39_0894 | 0.00775            | 0.17175            | 0.04631            |
| ECIAI39_0896 | 0                  | 0.07225            | 0                  |
| ECIAI39_0897 | 0.0092             | 0.1754             | 0.05259            |
| ECIAI39_0900 | 0.0067             | 0.2637             | 0.02534            |
| ECIAI39_0901 | 0.01038            | 0.30026            | 0.034374           |
| ECIAI39_0902 | 0.0102             | 0.21465            | 0.03085            |
| ECIAI39_0903 | 0                  | 0.0245             | 0                  |
| ECIAI39_0906 | 0.0878             | 0.1379             | 0.63645            |
| ECIAI39_0908 | 0.0177333333333333 | 0.1491             | 0.1392233333333333 |
| ECIAI39_0909 | 0.0221             | 0.1061             | 0.20833            |
| ECIAI39_0911 | 0.0202             | 0.1374             | 0.14665            |
| ECIAI39_0913 | 0.0078             | 0.2126             | 0.03685            |
| ECIAI39_0914 | 0.0037             | 0.0854             | 0.04307            |
| ECIAI39_0915 | 0.0022             | 0.1836             | 0.01219            |
| ECIAI39_0916 | 0.0018             | 0.0919             | 0.01983            |
| ECIAI39_0917 | 0.003              | 0.1759             | 0.01682            |
| ECIAI39_0918 | 0.00315            | 0.1184             | 0.017165           |
| ECIAI39_0920 | 0.0049             | 0.27               | 0.01797            |
| ECIAI39_0925 | 0.0118             | 0.1136             | 0.10399            |

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Table S1 – continued from previous page

| Gene         | $dN$    | $dS$               | $\omega$           |
|--------------|---------|--------------------|--------------------|
| ECIAI39_0926 | 0.0059  | 0.10905            | 0.06214            |
| ECIAI39_0927 | 0.006   | 0.1186             | 0.05062            |
| ECIAI39_0928 | 0       | 0.0794             | 0                  |
| ECIAI39_0929 | 0.0182  | 0.3836             | 0.04753            |
| ECIAI39_0930 | 0.0021  | 0.1448             | 0.01428            |
| ECIAI39_0933 | 0.0074  | 0.1438             | 0.05151            |
| ECIAI39_0936 | 0.0105  | 0.3533             | 0.02962            |
| ECIAI39_0938 | 0.01772 | 0.36596            | 0.049644           |
| ECIAI39_0939 | 0.038   | 0.5186             | 0.07336            |
| ECIAI39_0943 | 0.0028  | 0.1697             | 0.01632            |
| ECIAI39_0944 | 0.0078  | 0.2565             | 0.03041            |
| ECIAI39_0946 | 0.0078  | 0.2316             | 0.034405           |
| ECIAI39_0948 | 0.0034  | 0.1517             | 0.02259            |
| ECIAI39_0949 | 0.0035  | 0.099              | 0.03516            |
| ECIAI39_0950 | 0.0106  | 0.2091             | 0.05049            |
| ECIAI39_0952 | 0.0029  | 0.1018             | 0.01421            |
| ECIAI39_0953 | 0.003   | 0.125              | 0.02364            |
| ECIAI39_0954 | 0.0072  | 0.0891             | 0.08035            |
| ECIAI39_0955 | 0.0108  | 0.14164            | 0.11078            |
| ECIAI39_0957 | 0.0042  | 0.1536             | 0.02762            |
| ECIAI39_0958 | 0.0102  | 0.0794             | 0.12864            |
| ECIAI39_0960 | 0.0101  | 0.1233             | 0.08194            |
| ECIAI39_0962 | 0.00595 | 0.11685            | 0.045275           |
| ECIAI39_0963 | 0.0059  | 0.14005            | 0.022475           |
| ECIAI39_0964 | 0.015   | 0.1769             | 0.08488            |
| ECIAI39_0965 | 0.0212  | 0.22925            | 0.08525            |
| ECIAI39_0966 | 0.0045  | 0.1398             | 0.03222            |
| ECIAI39_0967 | 0.0025  | 0.1877             | 0.01357            |
| ECIAI39_0968 | 0.0047  | 0.2447             | 0.01917            |
| ECIAI39_0969 | 0.0335  | 0.3686             | 0.0798             |
| ECIAI39_0970 | 0.021   | 0.16985            | 0.12873            |
| ECIAI39_0971 | 0.0055  | 0.108              | 0.05129            |
| ECIAI39_0972 | 0.0067  | 0.1931             | 0.03463            |
| ECIAI39_0973 | 0.0204  | 0.1716             | 0.11872            |
| ECIAI39_0983 | 0       | 0.0962             | 0                  |
| ECIAI39_0984 | 0       | 0.12               | 0                  |
| ECIAI39_0985 | 0.0391  | 0.1362             | 0.28746            |
| ECIAI39_0987 | 0.0264  | 0.2071             | 0.12767            |
| ECIAI39_0988 | 0.0728  | 0.3364             | 0.21638            |
| ECIAI39_0989 | 0.0294  | 0.1716333333333333 | 0.1889133333333333 |
| ECIAI39_0990 | 0.00435 | 0.1994             | 0.02517            |
| ECIAI39_0992 | 0.013   | 0.2166             | 0.06018            |
| ECIAI39_0994 | 0.0597  | 0.2632             | 0.22677            |
| ECIAI39_0995 | 0.0049  | 0.155              | 0.03157            |
| ECIAI39_0996 | 0.0123  | 0.0939             | 0.13149            |
| ECIAI39_0998 | 0.0152  | 0.2024             | 0.07492            |
| ECIAI39_0999 | 0       | 0.0368             | 0                  |

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Table S1 – continued from previous page

| Gene         | $dN$                | $dS$               | $\omega$           |
|--------------|---------------------|--------------------|--------------------|
| ECIAI39_1001 | 0.0155              | 0.2375             | 0.06545            |
| ECIAI39_1002 | 0.02185             | 0.2565             | 0.08441            |
| ECIAI39_1003 | 0.02195             | 0.12955            | 0.179865           |
| ECIAI39_1004 | 0.0253              | 0.1804             | 0.14044            |
| ECIAI39_1005 | 0.0075              | 0.2476             | 0.03015            |
| ECIAI39_1006 | 0.0068              | 0.2243             | 0.03018            |
| ECIAI39_1008 | 0.0085              | 0.2827             | 0.03009            |
| ECIAI39_1017 | 0.0141              | 0.2391             | 0.0589             |
| ECIAI39_1018 | 0.0625              | 0.4772             | 0.1309             |
| ECIAI39_1022 | 0.0037              | 0.0753             | 0.04852            |
| ECIAI39_1035 | 0.0038              | 0.2075             | 0.01818            |
| ECIAI39_1038 | 0.0238              | 0.1133             | 0.2104             |
| ECIAI39_1039 | 0.0017              | 0.1942             | 0.00869            |
| ECIAI39_1040 | 0.0031              | 0.129866666666667  | 0.0234166666666667 |
| ECIAI39_1042 | 0.0029              | 0.051              | 0.05685            |
| ECIAI39_1043 | 0.01425             | 0.3513             | 0.14426            |
| ECIAI39_1044 | 0.01425             | 0.1372             | 0.09753            |
| ECIAI39_1045 | 0.008               | 0.1709             | 0.04709            |
| ECIAI39_1046 | 0.0052              | 0.1797             | 0.02869            |
| ECIAI39_1048 | 0.001               | 0.1123             | 0.00846            |
| ECIAI39_1050 | 0.01035             | 0.20155            | 0.04784            |
| ECIAI39_1055 | 0.0046              | 0.094              | 0.04847            |
| ECIAI39_1056 | 0.0106              | 0.1869             | 0.05661            |
| ECIAI39_1058 | 0.0052              | 0.1711             | 0.03029            |
| ECIAI39_1059 | 0.0169              | 0.1694             | 0.09978            |
| ECIAI39_1060 | 0.0156              | 0                  | NA                 |
| ECIAI39_1061 | 0.00835             | 0.1865             | 0.044315           |
| ECIAI39_1062 | 0                   | 0.0577             | 0                  |
| ECIAI39_1063 | 0.0041              | 0.0911             | 0.052115           |
| ECIAI39_1064 | 0.01475             | 0.17785            | 0.08488            |
| ECIAI39_1065 | 0.0019              | 0.1712             | 0.0111             |
| ECIAI39_1068 | 0.0097              | 0.103              | 0.09392            |
| ECIAI39_1069 | 0                   | 0.1179             | 0                  |
| ECIAI39_1070 | 0.0122              | 0.23506            | 0.049776           |
| ECIAI39_1071 | 0.00105             | 0.1436             | 0.007525           |
| ECIAI39_1073 | 0.0106              | 0.1566             | 0.06751            |
| ECIAI39_1074 | 0.012788888888889   | 0.132811111111111  | 0.089901111111111  |
| ECIAI39_1075 | 0.00625714285714286 | 0.0663571428571429 | 0.0971257142857143 |
| ECIAI39_1076 | 0.0086              | 0.1551             | 0.05542            |
| ECIAI39_1077 | 0.0087              | 0.18305            | 0.06161            |
| ECIAI39_1078 | 0                   | 0.0509             | 0                  |
| ECIAI39_1081 | 0.01295             | 0.07665            | 0.56286            |
| ECIAI39_1082 | 0.0272              | 0.0381             | 0.71543            |
| ECIAI39_1084 | 0.0048              | 0.3155             | 0.01531            |
| ECIAI39_1086 | 0.0056              | 0.1685             | 0.03341            |
| ECIAI39_1087 | 0.0052              | 0.1191             | 0.04391            |
| ECIAI39_1088 | 0.0195              | 0.1261             | 0.15498            |

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Table S1 – continued from previous page

| Gene         | $dN$    | $dS$               | $\omega$           |
|--------------|---------|--------------------|--------------------|
| ECIAI39_1089 | 0.0057  | 0.1354             | 0.050555           |
| ECIAI39_1091 | 0.0067  | 0.2387             | 0.02825            |
| ECIAI39_1094 | 0.0221  | 0.2415             | 0.0914             |
| ECIAI39_1095 | 0.0496  | 0.2921             | 0.16994            |
| ECIAI39_1096 | 0       | 0.2536             | 0                  |
| ECIAI39_1097 | 0.0061  | 0.4054             | 0.01506            |
| ECIAI39_1098 | 0.0116  | 0.2625             | 0.04428            |
| ECIAI39_1101 | 0.00495 | 0.25425            | 0.03852            |
| ECIAI39_1105 | 0.0065  | 0.323              | 0.02022            |
| ECIAI39_1106 | 0.0019  | 0.2468             | 0.00762            |
| ECIAI39_1107 | 0.0019  | 0.1745             | 0.01079            |
| ECIAI39_1109 | 0.0027  | 0.1217             | 0.02188            |
| ECIAI39_1111 | 0.0027  | 0.1118             | 0.02395            |
| ECIAI39_1113 | 0.0065  | 0.1706             | 0.03823            |
| ECIAI39_1115 | 0.00505 | 0.1568             | 0.0408             |
| ECIAI39_1118 | 0.0031  | 0.1535             | 0.02044            |
| ECIAI39_1119 | 0.0046  | 0.1446             | 0.03192            |
| ECIAI39_1121 | 0.0216  | 0.2354333333333333 | 0.0766866666666667 |
| ECIAI39_1155 | 0       | 0.0796             | 0                  |
| ECIAI39_1156 | 0.0042  | 0.0686             | 0.06095            |
| ECIAI39_1157 | 0.0285  | 0.0775             | 0.36742            |
| ECIAI39_1161 | 0.0151  | 0.0646             | 0.1929             |
| ECIAI39_1163 | 0.00975 | 0.13645            | 0.07262            |
| ECIAI39_1164 | 0.0085  | 0.1027             | 0.08274            |
| ECIAI39_1165 | 0.0097  | 0.3102             | 0.03131            |
| ECIAI39_1167 | 0.0027  | 0.1502             | 0.01771            |
| ECIAI39_1169 | 0.0011  | 0.1628             | 0.00672            |
| ECIAI39_1170 | 0.0123  | 0.1654             | 0.0741             |
| ECIAI39_1171 | 0.0055  | 0.2686             | 0.02052            |
| ECIAI39_1173 | 0.02065 | 0.13165            | 0.132645           |
| ECIAI39_1174 | 0.0331  | 0.1527             | 0.21659            |
| ECIAI39_1175 | 0.0245  | 0.1608             | 0.15237            |
| ECIAI39_1176 | 0.0047  | 0.1678             | 0.0281             |
| ECIAI39_1177 | 0.02065 | 0.09085            | 0.221115           |
| ECIAI39_1178 | 0.0068  | 0.1008             | 0.06709            |
| ECIAI39_1179 | 0.0117  | 0.06005            | 0.21862            |
| ECIAI39_1187 | 0.0013  | 0.1561             | 0.00828            |
| ECIAI39_1188 | 0.0026  | 0.0926             | 0.02856            |
| ECIAI39_1189 | 0       | 0.0603             | 0                  |
| ECIAI39_1190 | 0.0054  | 0.2117             | 0.02561            |
| ECIAI39_1192 | 0       | 0.0433             | 0                  |
| ECIAI39_1193 | 0.00955 | 0.1589             | 0.075505           |
| ECIAI39_1194 | 0.0126  | 0.3773             | 0.03346            |
| ECIAI39_1195 | 0       | 0.1496             | 0                  |
| ECIAI39_1196 | 0.0224  | 0.1903             | 0.11755            |
| ECIAI39_1198 | 0.0017  | 0.1271             | 0.01387            |
| ECIAI39_1200 | 0.0092  | 0.1357             | 0.06809            |

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Table S1 – continued from previous page

| Gene         | $dN$    | $dS$               | $\omega$           |
|--------------|---------|--------------------|--------------------|
| ECIAI39_1201 | 0.0114  | 0.18235            | 0.087195           |
| ECIAI39_1203 | 0.008   | 0.1177             | 0.06764            |
| ECIAI39_1204 | 0.0089  | 0.1477             | 0.06038            |
| ECIAI39_1205 | 0.00355 | 0.1175             | 0.03163            |
| ECIAI39_1214 | 0.0037  | 0.2594             | 0.01423            |
| ECIAI39_1216 | 0.0072  | 0.2511             | 0.02634            |
| ECIAI39_1219 | 0.0257  | 0.1409             | 0.18247            |
| ECIAI39_1220 | 0.0015  | 0.1394             | 0.011465           |
| ECIAI39_1221 | 0.0015  | 0.1217             | 0.01213            |
| ECIAI39_1222 | 0       | 0.0533             | 0                  |
| ECIAI39_1223 | 0.0069  | 0.065              | 0.10632            |
| ECIAI39_1228 | 0.0011  | 0.1013             | 0.01076            |
| ECIAI39_1232 | 0.0023  | 0.0894             | 0.02623            |
| ECIAI39_1236 | 0       | 0.1595             | 0                  |
| ECIAI39_1237 | 0.00515 | 0.1477             | 0.03522            |
| ECIAI39_1238 | 0.0014  | 0.1796             | 0.00804            |
| ECIAI39_1240 | 0.002   | 0.1756             | 0.01116            |
| ECIAI39_1245 | 0.0065  | 0.115325           | 0.0537075          |
| ECIAI39_1246 | 0.0051  | 0.1388             | 0.03698            |
| ECIAI39_1247 | 0.006   | 0.0848             | 0.07026            |
| ECIAI39_1248 | 0.0127  | 0.1746333333333333 | 0.1003633333333333 |
| ECIAI39_1249 | 0.0278  | 0.332              | 0.08386            |
| ECIAI39_1250 | 0.0046  | 0.3498             | 0.01323            |
| ECIAI39_1251 | 0.0323  | 0.1601             | 0.20192            |
| ECIAI39_1252 | 0.0439  | 0.2708             | 0.16204            |
| ECIAI39_1254 | 0.0237  | 0.2871             | 0.08264            |
| ECIAI39_1255 | 0.0137  | 0.1341             | 0.10244            |
| ECIAI39_1257 | 0       | 0.27               | 0                  |
| ECIAI39_1262 | 0.01395 | 0.42745            | 0.0281             |
| ECIAI39_1263 | 0.0207  | 0.1666             | 0.12402            |
| ECIAI39_1265 | 0.0104  | 0.2345             | 0.04418            |
| ECIAI39_1267 | 0       | 0.0833             | 0                  |
| ECIAI39_1268 | 0.0027  | 0.1777             | 0.01505            |
| ECIAI39_1269 | 0.0015  | 0.1456             | 0.01057            |
| ECIAI39_1270 | 0.0327  | 0.1448             | 0.22606            |
| ECIAI39_1272 | 0.0028  | 0.0556             | 0.04992            |
| ECIAI39_1273 | 0.0161  | 0.1097             | 0.1463             |
| ECIAI39_1274 | 0.01585 | 0.14035            | 0.16194            |
| ECIAI39_1277 | 0.01365 | 0.1787             | 0.100625           |
| ECIAI39_1278 | 0.0037  | 0.2102             | 0.0174             |
| ECIAI39_1279 | 0.0132  | 0.1866             | 0.0705             |
| ECIAI39_1281 | 0.0046  | 0.1049             | 0.04377            |
| ECIAI39_1283 | 0.0588  | 0.1792             | 0.32795            |
| ECIAI39_1285 | 0.0037  | 0.0927             | 0.03982            |
| ECIAI39_1287 | 0.0035  | 0.1985             | 0.01771            |
| ECIAI39_1288 | 0       | 0.2346             | 0                  |
| ECIAI39_1289 | 0.00545 | 0.187              | 0.034125           |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_1290 | 0.007              | 0.1919             | 0.03642            |
| ECIAI39_1292 | 0.0166             | 0.0687             | 0.24096            |
| ECIAI39_1300 | 0.0118             | 0.2989             | 0.03936            |
| ECIAI39_1302 | 0.0124             | 0.173              | 0.07162            |
| ECIAI39_1303 | 0.0086             | 0.0656             | 0.081155           |
| ECIAI39_1304 | 0.00945            | 0.13715            | 0.08784            |
| ECIAI39_1319 | 0.0103             | 0.5062             | 0.02036            |
| ECIAI39_1320 | 0.0112             | 0.3602             | 0.03096            |
| ECIAI39_1322 | 0.0109             | 0.1549333333333333 | 0.0923033333333333 |
| ECIAI39_1324 | 0.0082             | 0.1794             | 0.04542            |
| ECIAI39_1329 | 0.0084             | 0.1721             | 0.04861            |
| ECIAI39_1332 | 0                  | 0.1462             | 0                  |
| ECIAI39_1333 | 0.003              | 0.0986             | 0.03069            |
| ECIAI39_1334 | 0.0104             | 0.1981             | 0.03832            |
| ECIAI39_1340 | 0.0148             | 0.1623             | 0.090855           |
| ECIAI39_1342 | 0                  | 0.1697             | 0                  |
| ECIAI39_1344 | 0.0169             | 0.1964             | 0.08584            |
| ECIAI39_1346 | 0.0061             | 0.1904             | 0.03186            |
| ECIAI39_1368 | 0.00505            | 0.11865            | 0.06141            |
| ECIAI39_1371 | 0.01025            | 0.1708             | 0.069515           |
| ECIAI39_1375 | 0.0109             | 0.2                | 0.05428            |
| ECIAI39_1377 | 0.1183666666666667 | 1.168066666666667  | 0.1046633333333333 |
| ECIAI39_1403 | 0.0590333333333333 | 0.3896666666666667 | 0.1459966666666667 |
| ECIAI39_1404 | 0.0835             | 0.1782             | 0.46839            |
| ECIAI39_1405 | 0.04405            | 0.36865            | 0.1171             |
| ECIAI39_1406 | 0.046              | 0.2434             | 0.18908            |
| ECIAI39_1410 | 0.0059             | 0.3987             | 0.0147             |
| ECIAI39_1415 | 0.0205             | 0.1694             | 0.12083            |
| ECIAI39_1456 | 0.0427             | 0.687              | 0.06208            |
| ECIAI39_1457 | 0.0282             | 0.1798             | 0.15701            |
| ECIAI39_1458 | 0.0221             | 0.3042             | 0.07276            |
| ECIAI39_1459 | 0.0597             | 0.3555             | 0.16782            |
| ECIAI39_1460 | 0.0524333333333333 | 1.093633333333333  | 0.0473866666666667 |
| ECIAI39_1461 | 0.0235             | 0.2341             | 0.10028            |
| ECIAI39_1462 | 0.0053             | 0.4517             | 0.01173            |
| ECIAI39_1465 | 0.0168             | 0.3472             | 0.04832            |
| ECIAI39_1470 | 0.0092             | 0.2128             | 0.04337            |
| ECIAI39_1472 | 0.0062             | 0.0737             | 0.08469            |
| ECIAI39_1473 | 0.0066             | 0.1366             | 0.04835            |
| ECIAI39_1478 | 0.0033             | 0.2483             | 0.01319            |
| ECIAI39_1479 | 0.0082             | 0.142              | 0.096775           |
| ECIAI39_1492 | 0.0084             | 0.0527             | 0.16003            |
| ECIAI39_1495 | 0.0075             | 0.168              | 0.0449             |
| ECIAI39_1497 | 0.0076             | 0.0871             | 0.08721            |
| ECIAI39_1502 | 0.0206             | 0.1024             | 0.2015             |
| ECIAI39_1511 | 0.0101             | 0.1642             | 0.06165            |
| ECIAI39_1512 | 0.0064             | 0.1429             | 0.04469            |

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Table S1 – continued from previous page

| Gene         | $dN$    | $dS$               | $\omega$           |
|--------------|---------|--------------------|--------------------|
| ECIAI39_1514 | 0.0175  | 0.12               | 0.14603            |
| ECIAI39_1515 | 0.0863  | 0.2119             | 0.40721            |
| ECIAI39_1517 | 0.0091  | 0.1908             | 0.04791            |
| ECIAI39_1518 | 0.0203  | 0.2152             | 0.09445            |
| ECIAI39_1537 | 0.0618  | 0.2564             | 0.24099            |
| ECIAI39_1539 | 0.0084  | 0.2117             | 0.0398             |
| ECIAI39_1540 | 0.007   | 0.2268             | 0.03073            |
| ECIAI39_1542 | 0.01215 | 0.18145            | 0.06605            |
| ECIAI39_1543 | 0.003   | 0.181              | 0.01677            |
| ECIAI39_1544 | 0.0147  | 0.2011             | 0.07299            |
| ECIAI39_1547 | 0.0037  | 0.2113             | 0.01772            |
| ECIAI39_1549 | 0.0044  | 0.1865             | 0.02355            |
| ECIAI39_1550 | 0.0083  | 0.1583             | 0.05217            |
| ECIAI39_1551 | 0.0321  | 0.3267333333333333 | 0.0975733333333333 |
| ECIAI39_1554 | 0.0199  | 0.2694             | 0.07388            |
| ECIAI39_1558 | 0.0384  | 0.0443             | 0.86672            |
| ECIAI39_1559 | 0.0119  | 0.2011             | 0.0592             |
| ECIAI39_1560 | 0.0097  | 0.1102             | 0.08841            |
| ECIAI39_1561 | 0.0038  | 0.0987             | 0.03874            |
| ECIAI39_1562 | 0.0134  | 0.13325            | 0.080135           |
| ECIAI39_1582 | 0.0251  | 0.12505            | 0.206345           |
| ECIAI39_1583 | 0.0046  | 0.2265             | 0.02022            |
| ECIAI39_1584 | 0.01825 | 0.15165            | 0.148075           |
| ECIAI39_1586 | 0.0178  | 0.2144             | 0.08286            |
| ECIAI39_1589 | 0.0037  | 0.1737             | 0.02158            |
| ECIAI39_1591 | 0.0085  | 0.169              | 0.05054            |
| ECIAI39_1593 | 0.0338  | 0.1422             | 0.23779            |
| ECIAI39_1595 | 0.0139  | 0.1381             | 0.10073            |
| ECIAI39_1597 | 0.0127  | 0.1279             | 0.09936            |
| ECIAI39_1598 | 0.0023  | 0.0458             | 0.04944            |
| ECIAI39_1599 | 0.00675 | 0.15865            | 0.047065           |
| ECIAI39_1600 | 0.0055  | 0.1594             | 0.03464            |
| ECIAI39_1601 | 0.01815 | 0.10095            | 0.19008            |
| ECIAI39_1602 | 0       | 0.0776             | 0                  |
| ECIAI39_1604 | 0.00495 | 0.15795            | 0.028535           |
| ECIAI39_1605 | 0.0096  | 0.1086             | 0.08878            |
| ECIAI39_1608 | 0.003   | 0.113              | 0.02691            |
| ECIAI39_1613 | 0.0113  | 0.13435            | 0.085395           |
| ECIAI39_1617 | 0.0105  | 0.2115             | 0.050165           |
| ECIAI39_1619 | 0.0162  | 0.1943             | 0.08319            |
| ECIAI39_1621 | 0.01515 | 0.07465            | 0.441215           |
| ECIAI39_1622 | 0.0152  | 0.1314             | 0.11595            |
| ECIAI39_1625 | 0.0038  | 0.1501             | 0.0251             |
| ECIAI39_1627 | 0.0062  | 0.1750333333333333 | 0.0404666666666667 |
| ECIAI39_1628 | 0.0028  | 0.1935             | 0.01469            |
| ECIAI39_1629 | 0.0062  | 0.1489             | 0.04193            |
| ECIAI39_1630 | 0.0239  | 0.2611             | 0.09137            |

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Table S1 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$            |
|--------------|----------------------|--------------------|---------------------|
| ECIAI39_1632 | 0.0086               | 0.1274             | 0.06788             |
| ECIAI39_1633 | 0.0069               | 0.1817             | 0.03817             |
| ECIAI39_1635 | 0                    | 0.0617             | 0                   |
| ECIAI39_1636 | 0.00245              | 0.11635            | 0.020885            |
| ECIAI39_1638 | 0.034275             | 0.1397             | 0.2170175           |
| ECIAI39_1639 | 0.0101               | 0.10905            | 0.10417             |
| ECIAI39_1642 | 0.0142               | 0.1298             | 0.10966             |
| ECIAI39_1643 | 0.0049               | 0.1551             | 0.03172             |
| ECIAI39_1644 | 0.0023               | 0.0894             | 0.02567             |
| ECIAI39_1645 | 0.01455              | 0.2778             | 0.05032             |
| ECIAI39_1647 | 0.0064               | 0.11455            | 0.05212             |
| ECIAI39_1648 | 0.0135               | 0.1191             | 0.11318             |
| ECIAI39_1649 | 0.019                | 0.1895             | 0.10006             |
| ECIAI39_1651 | 0.0065               | 0.15485            | 0.04291             |
| ECIAI39_1652 | 0.0362               | 0.1872             | 0.19326             |
| ECIAI39_1653 | 0.00505              | 0.1638             | 0.030495            |
| ECIAI39_1654 | 0.0023               | 0.1175             | 0.01995             |
| ECIAI39_1662 | 0.0044               | 0.06345            | 0.24207             |
| ECIAI39_1663 | 0.0093               | 0.11155            | 0.077595            |
| ECIAI39_1665 | 0.0078               | 0.1311             | 0.05911             |
| ECIAI39_1666 | 0.0014               | 0.2048             | 0.0068              |
| ECIAI39_1667 | 0.0015               | 0.1659             | 0.00908             |
| ECIAI39_1668 | 0.0088               | 0.1345             | 0.06511             |
| ECIAI39_1669 | 0.0046               | 0.183              | 0.02502             |
| ECIAI39_1670 | 0.0023               | 0.126              | 0.01818             |
| ECIAI39_1671 | 0.0053               | 0.1384             | 0.03816             |
| ECIAI39_1672 | 0.0257               | 0.1482             | 0.17341             |
| ECIAI39_1673 | 0.0355               | 0.2292             | 0.15512             |
| ECIAI39_1674 | 0.0251               | 0.1464             | 0.17123             |
| ECIAI39_1675 | 0.01555              | 0.15335            | 0.109385            |
| ECIAI39_1676 | 0.0341               | 0.0988             | 0.34526             |
| ECIAI39_1677 | 0.0349               | 0.1206             | 0.28933             |
| ECIAI39_1679 | 0.0093               | 0.2037             | 0.0457              |
| ECIAI39_1680 | 0.0067               | 0.1375             | 0.04844             |
| ECIAI39_1682 | 0.001                | 0.0724             | 0.01398             |
| ECIAI39_1685 | 0.009                | 0.16305            | 0.05633             |
| ECIAI39_1688 | 0.0196               | 0.1841             | 0.10061             |
| ECIAI39_1689 | 0.0058               | 0.1336             | 0.04333             |
| ECIAI39_1690 | 0.0125               | 0.1585             | 0.07874             |
| ECIAI39_1691 | 0.0114               | 0.14565            | 0.078195            |
| ECIAI39_1695 | 0.004                | 0.1541             | 0.02612             |
| ECIAI39_1697 | 0.02455              | 0.1582             | 0.172525            |
| ECIAI39_1698 | 0.012133333333333333 | 0.1519666666666667 | 0.08670333333333333 |
| ECIAI39_1700 | 0.0101               | 0.1851             | 0.05465             |
| ECIAI39_1703 | 0.0078               | 0.1983             | 0.03951             |
| ECIAI39_1704 | 0.0346               | 0.113              | 0.30652             |
| ECIAI39_1705 | 0.015                | 0.1362             | 0.11007             |

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Table S1 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$           |
|--------------|----------------------|--------------------|--------------------|
| ECIAI39_1706 | 0.0198               | 0.2343333333333333 | 0.0839933333333333 |
| ECIAI39_1709 | 0.013                | 0.14468            | 0.124254           |
| ECIAI39_1710 | 0.0287               | 0.1521             | 0.18879            |
| ECIAI39_1711 | 0.009                | 0.129              | 0.0710866666666667 |
| ECIAI39_1712 | 0.019                | 0.1087             | 0.17439            |
| ECIAI39_1713 | 0                    | 0                  | 0                  |
| ECIAI39_1714 | 0.0057               | 0.2042             | 0.0278             |
| ECIAI39_1715 | 0.0015               | 0.137              | 0.01067            |
| ECIAI39_1716 | 0                    | 0.0173             | 0                  |
| ECIAI39_1717 | 0                    | 0                  | 0                  |
| ECIAI39_1718 | 0.0022               | 0.1109             | 0.01991            |
| ECIAI39_1722 | 0.0146               | 0.1674             | 0.08744            |
| ECIAI39_1723 | 0.0066               | 0.1277             | 0.05143            |
| ECIAI39_1725 | 0.0072               | 0.1464             | 0.04892            |
| ECIAI39_1726 | 0.0025               | 0.117              | 0.02178            |
| ECIAI39_1728 | 0.0096               | 0.1674             | 0.05745            |
| ECIAI39_1729 | 0.0064               | 0.0937             | 0.06877            |
| ECIAI39_1730 | 0.03296              | 0.33466            | 0.313678           |
| ECIAI39_1731 | 0.00565              | 0.15335            | 0.039465           |
| ECIAI39_1732 | 0.006                | 0.1386             | 0.04448            |
| ECIAI39_1733 | 0                    | 0                  | 0                  |
| ECIAI39_1734 | 0.0119               | 0.1976             | 0.06002            |
| ECIAI39_1735 | 0.0185               | 0.2732             | 0.06772            |
| ECIAI39_1736 | 0.0141               | 0.16752            | 0.107228           |
| ECIAI39_1738 | 0.0481               | 0.27745            | 0.17907            |
| ECIAI39_1739 | 0.0256               | 0.3489             | 0.07333            |
| ECIAI39_1741 | 0.0221               | 0.4056             | 0.05454            |
| ECIAI39_1742 | 0.0085               | 0.2232             | 0.03812            |
| ECIAI39_1743 | 0.022825             | 0.283225           | 0.08312            |
| ECIAI39_1747 | 0.0199               | 0.20445            | 0.119665           |
| ECIAI39_1748 | 0.0214               | 0.2256             | 0.09484            |
| ECIAI39_1749 | 0.0298               | 0.22885            | 0.135765           |
| ECIAI39_1750 | 0.0351               | 0.2572             | 0.13658            |
| ECIAI39_1751 | 0.0436               | 0.3499666666666667 | 0.1585333333333333 |
| ECIAI39_1752 | 0.0172               | 0.2283             | 0.07546            |
| ECIAI39_1755 | 0.0043               | 0.2262             | 0.01914            |
| ECIAI39_1756 | 0.0014               | 0.2736             | 0.00507            |
| ECIAI39_1757 | 0.0085               | 0.28375            | 0.028195           |
| ECIAI39_1758 | 0.0051               | 0.2612             | 0.01954            |
| ECIAI39_1759 | 0.0122               | 0.1915333333333333 | 0.07561            |
| ECIAI39_1760 | 0.01465              | 0.20545            | 0.061475           |
| ECIAI39_1761 | 0.01495              | 0.09755            | 0.159845           |
| ECIAI39_1762 | 0.0117               | 0.1545             | 0.07561            |
| ECIAI39_1763 | 0.0163               | 0.16805            | 0.09833            |
| ECIAI39_1764 | 0.0053               | 0.1514             | 0.03504            |
| ECIAI39_1766 | 0.009233333333333333 | 0.1009             | 0.1050766666666667 |
| ECIAI39_1767 | 0.0249               | 0.1865             | 0.172735           |

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Table S1 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| ECIAI39_1768 | 0.0037  | 0.0605  | 0.06185  |
| ECIAI39_1780 | 0.0045  | 0.115   | 0.03921  |
| ECIAI39_1782 | 0.00575 | 0.21755 | 0.063285 |
| ECIAI39_1783 | 0.0143  | 0.1337  | 0.097885 |
| ECIAI39_1785 | 0.0115  | 0.1689  | 0.06789  |
| ECIAI39_1786 | 0.0159  | 0.1286  | 0.185085 |
| ECIAI39_1787 | 0       | 0.139   | 0        |
| ECIAI39_1788 | 0.0041  | 0.07825 | 0.03643  |
| ECIAI39_1789 | 0.0156  | 0.093   | 0.187925 |
| ECIAI39_1794 | 0.004   | 0.1405  | 0.02848  |
| ECIAI39_1796 | 0.0025  | 0.34    | 0.0074   |
| ECIAI39_1797 | 0.0127  | 0.2266  | 0.05627  |
| ECIAI39_1800 | 0.0022  | 0.3131  | 0.00715  |
| ECIAI39_1802 | 0.0042  | 0.1606  | 0.02622  |
| ECIAI39_1803 | 0.023   | 0.181   | 0.12709  |
| ECIAI39_1804 | 0       | 0.1153  | 0        |
| ECIAI39_1805 | 0.0422  | 0.1361  | 0.31024  |
| ECIAI39_1806 | 0.0584  | 0.1752  | 0.33339  |
| ECIAI39_1807 | 0.0209  | 0.1837  | 0.11398  |
| ECIAI39_1809 | 0.0079  | 0.1977  | 0.04014  |
| ECIAI39_1812 | 0.0032  | 0.1907  | 0.01678  |
| ECIAI39_1813 | 0.0182  | 0.0835  | 0.21774  |
| ECIAI39_1814 | 0.0087  | 0.1177  | 0.07382  |
| ECIAI39_1818 | 0       | 0.0628  | 0        |
| ECIAI39_1820 | 0       | 0.1113  | 0        |
| ECIAI39_1823 | 0.01805 | 0.1136  | 0.15475  |
| ECIAI39_1825 | 0.0094  | 0.1538  | 0.06098  |
| ECIAI39_1827 | 0.0088  | 0.1078  | 0.08142  |
| ECIAI39_1829 | 0.012   | 0.1487  | 0.0807   |
| ECIAI39_1830 | 0.0017  | 0.1034  | 0.016    |
| ECIAI39_1831 | 0.0047  | 0.2034  | 0.02295  |
| ECIAI39_1832 | 0.0111  | 0.0416  | 0.26696  |
| ECIAI39_1834 | 0.0238  | 0.0962  | 0.24769  |
| ECIAI39_1835 | 0.0069  | 0.1918  | 0.03613  |
| ECIAI39_1836 | 0.0051  | 0.2236  | 0.02292  |
| ECIAI39_1837 | 0.005   | 0.2826  | 0.01764  |
| ECIAI39_1839 | 0.02205 | 0.37885 | 0.07689  |
| ECIAI39_1840 | 0.0138  | 0.1713  | 0.0808   |
| ECIAI39_1841 | 0.01915 | 0.11885 | 0.192605 |
| ECIAI39_1842 | 0       | 0.0627  | 0        |
| ECIAI39_1843 | 0.0089  | 0.0906  | 0.09796  |
| ECIAI39_1845 | 0.0109  | 0.1805  | 0.06036  |
| ECIAI39_1846 | 0.0241  | 0.1484  | 0.16269  |
| ECIAI39_1847 | 0       | 0.0484  | 0        |
| ECIAI39_1849 | 0.03605 | 0.2575  | 0.13646  |
| ECIAI39_1850 | 0       | 0.0521  | 0        |
| ECIAI39_1853 | 0.0018  | 0.1128  | 0.016485 |

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Table S1 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$           |
|--------------|----------------------|--------------------|--------------------|
| ECIAI39_1855 | 0.003466666666666667 | 0.1325333333333333 | 0.02697            |
| ECIAI39_1856 | 0                    | 0.1062             | 0                  |
| ECIAI39_1857 | 0.017                | 0.1027             | 0.16517            |
| ECIAI39_1859 | 0.0041               | 0.1731             | 0.02351            |
| ECIAI39_1860 | 0.0031               | 0.2172333333333333 | 0.0117333333333333 |
| ECIAI39_1862 | 0.0182               | 0.281              | 0.0648             |
| ECIAI39_1863 | 0                    | 0.4343             | 0                  |
| ECIAI39_1865 | 0.0019               | 0.1791             | 0.01061            |
| ECIAI39_1866 | 0.0105               | 0.1369             | 0.07703            |
| ECIAI39_1868 | 0.0057               | 0.182              | 0.03128            |
| ECIAI39_1870 | 0.0116               | 0.26745            | 0.066705           |
| ECIAI39_1871 | 0.0065               | 0.1293             | 0.04891            |
| ECIAI39_1873 | 0.01275              | 0.4043             | 0.03291            |
| ECIAI39_1874 | 0.0169               | 0.3437             | 0.04912            |
| ECIAI39_1877 | 0.0337               | 0.0771             | 0.43666            |
| ECIAI39_1880 | 0.0048               | 0.1711             | 0.02833            |
| ECIAI39_1881 | 0.0366               | 0.2531             | 0.14445            |
| ECIAI39_1882 | 0.0042               | 0.2097             | 0.02019            |
| ECIAI39_1883 | 0.0087               | 0.1717             | 0.05074            |
| ECIAI39_1884 | 0.00295              | 0.11005            | 0.02758            |
| ECIAI39_1885 | 0.0041               | 0.1714             | 0.02363            |
| ECIAI39_1886 | 0.0119               | 0.1265             | 0.09396            |
| ECIAI39_1890 | 0.0077               | 0.1248             | 0.06171            |
| ECIAI39_1891 | 0.0028               | 0.0928             | 0.03064            |
| ECIAI39_1893 | 0.0082               | 0.1181             | 0.06971            |
| ECIAI39_1896 | 0.006                | 0.2289             | 0.02636            |
| ECIAI39_1897 | 0.0078               | 0.102              | 0.07655            |
| ECIAI39_1898 | 0.0041               | 0.0612             | 0.0669             |
| ECIAI39_1902 | 0.0297               | 0.0978             | 0.30421            |
| ECIAI39_1904 | 0.0099               | 0.1509666666666667 | 0.0644466666666667 |
| ECIAI39_1906 | 0.0028               | 0.1233             | 0.02256            |
| ECIAI39_1907 | 0.0232               | 0.3727             | 0.06225            |
| ECIAI39_1909 | 0                    | 0.0988             | 0                  |
| ECIAI39_1913 | 0.0114               | 0.197              | 0.04278            |
| ECIAI39_1914 | 0.0061               | 0.186              | 0.03304            |
| ECIAI39_1915 | 0.0041               | 0.1306             | 0.03145            |
| ECIAI39_1918 | 0                    | 0.2188             | 0                  |
| ECIAI39_1919 | 0.0021               | 0.0952             | 0.02218            |
| ECIAI39_1920 | 0.0057               | 0                  | NA                 |
| ECIAI39_1921 | 0.0227               | 0.1672             | 0.13545            |
| ECIAI39_1922 | 0.0116               | 0.2493             | 0.04636            |
| ECIAI39_1923 | 0.0021               | 0.2759             | 0.00745            |
| ECIAI39_1924 | 0.012                | 0.0987             | 0.12151            |
| ECIAI39_1925 | 0.0034               | 0.2558             | 0.01347            |
| ECIAI39_1926 | 0.01273333333333333  | 0.1363666666666667 | 0.08148            |
| ECIAI39_1928 | 0.018                | 0.8058             | 0.02237            |
| ECIAI39_1930 | 0.0288               | 0.963              | 0.02991            |

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Table S1 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$  |
|--------------|---------|---------|-----------|
| ECIAI39_1931 | 0.0602  | 1.2844  | 0.04686   |
| ECIAI39_1932 | 0.1582  | 1.1101  | 0.14249   |
| ECIAI39_1933 | 0.0522  | 2.54    | 0.02055   |
| ECIAI39_1934 | 0.08845 | 3.214   | 0.035835  |
| ECIAI39_1935 | 0.0109  | 0.1397  | 0.07792   |
| ECIAI39_1936 | 0.0064  | 0.3842  | 0.01672   |
| ECIAI39_1937 | 0.00645 | 0.19625 | 0.03571   |
| ECIAI39_1938 | 0       | 0.2108  | 0         |
| ECIAI39_1939 | 0.0171  | 0.1533  | 0.11162   |
| ECIAI39_1944 | 0.0189  | 0.1784  | 0.10581   |
| ECIAI39_1946 | 0.014   | 0.1815  | 0.07708   |
| ECIAI39_1951 | 0.01545 | 0.1832  | 0.082955  |
| ECIAI39_1952 | 0.0257  | 0.0983  | 0.2418    |
| ECIAI39_1953 | 0.0032  | 0.1241  | 0.02552   |
| ECIAI39_1955 | 0.0127  | 0.22315 | 0.061435  |
| ECIAI39_1956 | 0.0046  | 0.17615 | 0.025955  |
| ECIAI39_1957 | 0       | 0.2039  | 0         |
| ECIAI39_1958 | 0.0107  | 0.1725  | 0.06223   |
| ECIAI39_1960 | 0.0063  | 0.0439  | 0.1441    |
| ECIAI39_1961 | 0       | 0.04245 | 0         |
| ECIAI39_1962 | 0.029   | 0.147   | 0.19737   |
| ECIAI39_1964 | 0.0157  | 0.1706  | 0.09202   |
| ECIAI39_1965 | 0.0105  | 0.12505 | 0.1052225 |
| ECIAI39_1966 | 0.0151  | 0.2088  | 0.07234   |
| ECIAI39_1968 | 0.0109  | 0.1915  | 0.05676   |
| ECIAI39_1969 | 0.0397  | 0.1468  | 0.27024   |
| ECIAI39_1971 | 0.0106  | 0.1741  | 0.0606    |
| ECIAI39_1973 | 0.0099  | 0.1309  | 0.07561   |
| ECIAI39_1974 | 0.0234  | 0.2042  | 0.11472   |
| ECIAI39_1976 | 0.0108  | 0.1685  | 0.06405   |
| ECIAI39_1977 | 0.0103  | 0.1936  | 0.05311   |
| ECIAI39_1979 | 0.018   | 0.1418  | 0.12661   |
| ECIAI39_1982 | 0.026   | 0.1714  | 0.15193   |
| ECIAI39_1988 | 0.017   | 0.064   | 0.26555   |
| ECIAI39_1991 | 0.081   | 0.2627  | 0.30816   |
| ECIAI39_2003 | 0.0111  | 0.1658  | 0.06669   |
| ECIAI39_2004 | 0.0029  | 0.2401  | 0.01204   |
| ECIAI39_2006 | 0.0037  | 0.2255  | 0.01632   |
| ECIAI39_2007 | 0.0135  | 0.2938  | 0.04585   |
| ECIAI39_2008 | 0.0099  | 0.1223  | 0.08059   |
| ECIAI39_2010 | 0.0129  | 0.2033  | 0.06323   |
| ECIAI39_2011 | 0.0222  | 0.2478  | 0.08956   |
| ECIAI39_2013 | 0.0433  | 0.1576  | 0.27486   |
| ECIAI39_2015 | 0.019   | 0.10665 | 0.201775  |
| ECIAI39_2032 | 0.00325 | 0.0956  | 0.02657   |
| ECIAI39_2033 | 0.0102  | 0.1336  | 0.07643   |
| ECIAI39_2034 | 0.0059  | 0.123   | 0.04835   |

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Table S1 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$            |
|--------------|----------------------|--------------------|---------------------|
| ECIAI39_2036 | 0.0163               | 0.1683             | 0.09703             |
| ECIAI39_2040 | 0.0011               | 0.1664             | 0.0064              |
| ECIAI39_2041 | 0.0077               | 0.2336             | 0.03282             |
| ECIAI39_2042 | 0.0036               | 0.1433             | 0.02484             |
| ECIAI39_2044 | 0.0098               | 0.2298             | 0.04251             |
| ECIAI39_2045 | 0.0285               | 0.3976             | 0.07174             |
| ECIAI39_2046 | 0.01285              | 0.343675           | 0.0411225           |
| ECIAI39_2047 | 0.0266               | 0.5967             | 0.04466             |
| ECIAI39_2048 | 0.05215              | 0.75785            | 0.06957             |
| ECIAI39_2049 | 0.1425               | 1.8419             | 0.07736             |
| ECIAI39_2050 | 0.0126               | 0.6323             | 0.01986             |
| ECIAI39_2051 | 0.0101               | 0.553              | 0.0182              |
| ECIAI39_2066 | 0.0032               | 0.5947             | 0.00546             |
| ECIAI39_2068 | 0.0375               | 0.5673             | 0.06618             |
| ECIAI39_2069 | 0.01435              | 0.54645            | 0.026355            |
| ECIAI39_2070 | 0.0257               | 0.4499             | 0.056725            |
| ECIAI39_2073 | 0.0132               | 0.4                | 0.03291             |
| ECIAI39_2075 | 0.0059               | 0.3594             | 0.01652             |
| ECIAI39_2076 | 0.011433333333333333 | 0.2651666666666667 | 0.04686333333333333 |
| ECIAI39_2077 | 0.0294               | 0.1066             | 0.27572             |
| ECIAI39_2078 | 0.1259               | 0.1112             | 1.13184             |
| ECIAI39_2079 | 0.0215               | 0.4362             | 0.04922             |
| ECIAI39_2080 | 0.0121               | 0.2304             | 0.065405            |
| ECIAI39_2081 | 0.0261               | 0.3694             | 0.07053             |
| ECIAI39_2084 | 0.0172               | 0.371              | 0.04647             |
| ECIAI39_2085 | 0.003                | 0.15               | 0.01978             |
| ECIAI39_2086 | 0.0066               | 0.3542             | 0.01873             |
| ECIAI39_2087 | 0.0151               | 0.2917             | 0.05171             |
| ECIAI39_2089 | 0.0102               | 0.2536             | 0.0404              |
| ECIAI39_2091 | 0.0012               | 0.2215             | 0.00546             |
| ECIAI39_2094 | 0.0063               | 0.2147             | 0.02955             |
| ECIAI39_2096 | 0.0124               | 0.2095             | 0.05932             |
| ECIAI39_2098 | 0                    | 0.1083             | 0                   |
| ECIAI39_2099 | 0.01035              | 0.1649             | 0.071105            |
| ECIAI39_2101 | 0.0286               | 0.3366             | 0.08485             |
| ECIAI39_2104 | 0.0498               | 0.2495             | 0.19944             |
| ECIAI39_2109 | 0.0467               | 0.3139             | 0.14879             |
| ECIAI39_2111 | 0.0463               | 0.40465            | 0.11686             |
| ECIAI39_2114 | 0.0189               | 0.3137             | 0.06027             |
| ECIAI39_2115 | 0.0072               | 0.4071             | 0.01771             |
| ECIAI39_2116 | 0.0046               | 0.4586             | 0.01013             |
| ECIAI39_2117 | 0.00955              | 0.4476             | 0.020905            |
| ECIAI39_2121 | 0.0224               | 0.5561             | 0.04024             |
| ECIAI39_2123 | 0.0087               | 0.3032             | 0.02871             |
| ECIAI39_2126 | 0.004                | 0.2423             | 0.01647             |
| ECIAI39_2129 | 0.0182               | 0.2319             | 0.07863             |
| ECIAI39_2130 | 0.0183               | 0.1713             | 0.10676             |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$              | $\omega$          |
|--------------|--------------------|-------------------|-------------------|
| ECIAI39_2132 | 0.0237333333333333 | 0.177066666666667 | 0.148493333333333 |
| ECIAI39_2133 | 0.0122             | 0.0806            | 0.15109           |
| ECIAI39_2134 | 0.0216             | 0.1277            | 0.16917           |
| ECIAI39_2135 | 0.004              | 0.1983            | 0.02029           |
| ECIAI39_2137 | 0.0254             | 0.198             | 0.12836           |
| ECIAI39_2138 | 0.0206             | 0.1368            | 0.1507            |
| ECIAI39_2139 | 0.004              | 0.1177            | 0.03435           |
| ECIAI39_2140 | 0.0287             | 0.27855           | 0.089905          |
| ECIAI39_2141 | 0.0285857142857143 | 0.531742857142857 | 0.107304285714286 |
| ECIAI39_2142 | 0.0485             | 0.9675            | 0.05012           |
| ECIAI39_2143 | 0.0614             | 0.4979            | 0.12324           |
| ECIAI39_2144 | 0.0801             | 1.0844            | 0.07389           |
| ECIAI39_2145 | 0.0698             | 1.462             | 0.04775           |
| ECIAI39_2146 | 0.0381             | 2.1091            | 0.01807           |
| ECIAI39_2148 | 0                  | 0.3423            | 0                 |
| ECIAI39_2149 | 0.0032             | 0.2972            | 0.01087           |
| ECIAI39_2154 | 0.1062             | 1.0094            | 0.10523           |
| ECIAI39_2155 | 0.0851             | 0.6374            | 0.13358           |
| ECIAI39_2156 | 0.09555            | 0.343             | 0.27934           |
| ECIAI39_2157 | 0.0776             | 0.355             | 0.212525          |
| ECIAI39_2158 | 0.0124             | 0.3026            | 0.04733           |
| ECIAI39_2159 | 0.0532             | 0.2311            | 0.23033           |
| ECIAI39_2160 | 0.05055            | 0.3671            | 0.131345          |
| ECIAI39_2161 | 0.0445             | 0.3275            | 0.146585          |
| ECIAI39_2163 | 0.0033             | 0.1187            | 0.02741           |
| ECIAI39_2164 | 0.0029             | 0.0932            | 0.03115           |
| ECIAI39_2166 | 0.00275            | 0.1513            | 0.01892           |
| ECIAI39_2168 | 0.0092666666666667 | 0.1747            | 0.05666           |
| ECIAI39_2169 | 0.026              | 0.2586            | 0.10063           |
| ECIAI39_2170 | 0.0278             | 0.2435            | 0.1143            |
| ECIAI39_2171 | 0.0347             | 0.4256            | 0.08147           |
| ECIAI39_2172 | 0.0247             | 0.2798            | 0.08823           |
| ECIAI39_2173 | 0.0061             | 0.4015            | 0.01512           |
| ECIAI39_2174 | 0.0871             | 0.43              | 0.20259           |
| ECIAI39_2175 | 0.0037             | 0.2571            | 0.01424           |
| ECIAI39_2177 | 0.0031             | 0.1387            | 0.02228           |
| ECIAI39_2178 | 0.005              | 0.2357            | 0.02127           |
| ECIAI39_2179 | 0.0096             | 0.1776            | 0.05418           |
| ECIAI39_2182 | 0.0316             | 0.3157            | 0.102625          |
| ECIAI39_2184 | 0.0182             | 0.3229            | 0.05649           |
| ECIAI39_2186 | 0.0042666666666667 | 0.135666666666667 | 0.036666666666667 |
| ECIAI39_2187 | 0                  | 0.0803            | 0                 |
| ECIAI39_2188 | 0.0063             | 0.0704            | 0.08898           |
| ECIAI39_2190 | 0.03705            | 0.2315            | 0.16946           |
| ECIAI39_2191 | 0.0078             | 0.2584            | 0.03014           |
| ECIAI39_2192 | 0.0044             | 0.2298            | 0.01932           |
| ECIAI39_2193 | 0.0028             | 0.2411            | 0.01175           |

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Table S1 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$             |
|--------------|----------------------|--------------------|----------------------|
| ECIAI39_2196 | 0.00695              | 0.13005            | 0.05814              |
| ECIAI39_2197 | 0.0204               | 0.2386             | 0.08558              |
| ECIAI39_2198 | 0.005933333333333333 | 0.3099666666666667 | 0.014093333333333333 |
| ECIAI39_2199 | 0.0158               | 0.5667             | 0.02791              |
| ECIAI39_2200 | 0.0029               | 0.0973             | 0.02973              |
| ECIAI39_2202 | 0.0017               | 0.1169             | 0.01423              |
| ECIAI39_2203 | 0.0014               | 0.0589             | 0.02353              |
| ECIAI39_2205 | 0.0049               | 0.137              | 0.03548              |
| ECIAI39_2206 | 0.13113333333333333  | 1.955866666666667  | 0.07071333333333333  |
| ECIAI39_2207 | 0.0346               | 0.36415            | 0.10663              |
| ECIAI39_2208 | 0.01615              | 0.40745            | 0.03794              |
| ECIAI39_2211 | 0.0389               | 0.90085            | 0.03819              |
| ECIAI39_2212 | 0.05175              | 1.4317             | 0.036355             |
| ECIAI39_2214 | 0.0078               | 0.1868             | 0.04188              |
| ECIAI39_2215 | 0.0027               | 0.10225            | 0.02168              |
| ECIAI39_2216 | 0.0074               | 0.142              | 0.05215              |
| ECIAI39_2217 | 0                    | 0.0971             | 0                    |
| ECIAI39_2218 | 0.0226               | 0.158              | 0.14323              |
| ECIAI39_2219 | 0.0081               | 0.1392             | 0.05853              |
| ECIAI39_2220 | 0.0026               | 0.0604             | 0.0427               |
| ECIAI39_2222 | 0.0111               | 0.2156             | 0.05165              |
| ECIAI39_2223 | 0.008666666666666667 | 0.1631666666666667 | 0.0604566666666667   |
| ECIAI39_2224 | 0.0042               | 0.1295             | 0.03276              |
| ECIAI39_2225 | 0.0071               | 0.3121             | 0.02271              |
| ECIAI39_2226 | 0                    | 0.1886             | 0                    |
| ECIAI39_2227 | 0.0113               | 0.3224             | 0.03511              |
| ECIAI39_2229 | 0.0202               | 0.0256             | 0.78922              |
| ECIAI39_2230 | 0.0015               | 0.1682             | 0.00889              |
| ECIAI39_2231 | 0.0069               | 0.0133             | 0.52079              |
| ECIAI39_2232 | 0.0008               | 0.1154             | 0.00689              |
| ECIAI39_2236 | 0.0104               | 0.24095            | 0.04342              |
| ECIAI39_2237 | 0.0026               | 0.1694             | 0.01548              |
| ECIAI39_2239 | 0                    | 0.2666             | 0                    |
| ECIAI39_2240 | 0.00115              | 0.1242             | 0.00811              |
| ECIAI39_2241 | 0.0072               | 0.0835             | 0.077575             |
| ECIAI39_2242 | 0.0033               | 0.1018             | 0.0325               |
| ECIAI39_2243 | 0.00845              | 0.13495            | 0.06231              |
| ECIAI39_2244 | 0.0034               | 0.2329             | 0.01466              |
| ECIAI39_2245 | 0.0075               | 0.0912             | 0.138315             |
| ECIAI39_2247 | 0.0052               | 0.2565             | 0.02026              |
| ECIAI39_2249 | 0.00965              | 0.2264             | 0.043555             |
| ECIAI39_2250 | 0.0229               | 0.2301             | 0.09955              |
| ECIAI39_2252 | 0.0177               | 0.3279             | 0.05405              |
| ECIAI39_2253 | 0.03455              | 0.31895            | 0.107755             |
| ECIAI39_2254 | 0.025433333333333333 | 0.2930666666666667 | 0.1456266666666667   |
| ECIAI39_2255 | 0.0036               | 0.0731             | 0.04904              |
| ECIAI39_2256 | 0                    | 0.148              | 0                    |

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Table S1 – continued from previous page

| Gene         | $dN$                 | $dS$                | $\omega$            |
|--------------|----------------------|---------------------|---------------------|
| ECIAI39_2258 | 0.0044               | 0.1287              | 0.03423             |
| ECIAI39_2263 | 0.01675              | 0.284               | 0.08103             |
| ECIAI39_2264 | 0.0268               | 0.3095666666666667  | 0.1042066666666667  |
| ECIAI39_2273 | 0.0325               | 0.3279              | 0.09912             |
| ECIAI39_2274 | 0.0022               | 0.1942              | 0.01132             |
| ECIAI39_2276 | 0.0628666666666667   | 0.4031666666666667  | 0.16101             |
| ECIAI39_2277 | 0.1862               | 2.0023              | 0.09299             |
| ECIAI39_2278 | 0.18725              | 0.9076              | 0.237595            |
| ECIAI39_2279 | 0.1907               | 1.3061              | 0.14602             |
| ECIAI39_2281 | 0.0012               | 0.2505              | 0.00482             |
| ECIAI39_2283 | 0.0025               | 0.4023              | 0.00614             |
| ECIAI39_2285 | 0.01205              | 0.18995             | 0.071745            |
| ECIAI39_2286 | 0.0108               | 0.3083              | 0.03492             |
| ECIAI39_2287 | 0.0083               | 0.2635              | 0.03143             |
| ECIAI39_2288 | 0.0038               | 0.2141              | 0.01767             |
| ECIAI39_2289 | 0.01665              | 0.2571              | 0.07293             |
| ECIAI39_2290 | 0.0192               | 0.3458              | 0.05539             |
| ECIAI39_2291 | 0.0061               | 0.2848              | 0.02126             |
| ECIAI39_2292 | 0.0093               | 0.2134              | 0.04357             |
| ECIAI39_2293 | 0.0075               | 0.1412              | 0.05328             |
| ECIAI39_2297 | 0.0165               | 0.2393              | 0.06905             |
| ECIAI39_2298 | 0.022                | 0.26095             | 0.10224             |
| ECIAI39_2299 | 0.0138               | 0.228               | 0.06044             |
| ECIAI39_2300 | 0.0251               | 0.1293              | 0.19412             |
| ECIAI39_2301 | 0.02135              | 0.28805             | 0.067095            |
| ECIAI39_2302 | 0.0226               | 0.2721              | 0.08301             |
| ECIAI39_2304 | 0.0258               | 0.1786              | 0.14445             |
| ECIAI39_2305 | 0.0153               | 0.138               | 0.11076             |
| ECIAI39_2306 | 0.0247               | 0.1794              | 0.136735            |
| ECIAI39_2307 | 0.01913333333333333  | 0.4087              | 0.06240333333333333 |
| ECIAI39_2308 | 0.005                | 0.2807              | 0.01772             |
| ECIAI39_2309 | 0.05055              | 0.18485             | 0.274105            |
| ECIAI39_2310 | 0.013                | 0.2563              | 0.0508              |
| ECIAI39_2311 | 0.0271               | 0.6091              | 0.0445              |
| ECIAI39_2312 | 0.0223               | 0.2591              | 0.08624             |
| ECIAI39_2313 | 0.0566666666666667   | 0.9914666666666667  | 0.0412466666666667  |
| ECIAI39_2314 | 0.0301               | 0.204               | 0.14773             |
| ECIAI39_2318 | 0.0368               | 0.3212              | 0.118375            |
| ECIAI39_2321 | 0.0011               | 0.2065              | 0.00545             |
| ECIAI39_2322 | 0.0037               | 0.2189              | 0.01692             |
| ECIAI39_2324 | 0.0031               | 0.1559              | 0.0201              |
| ECIAI39_2325 | 0                    | 0.09813333333333333 | 0                   |
| ECIAI39_2326 | 0.0028               | 0.1187              | 0.024               |
| ECIAI39_2329 | 0.006                | 0.2468              | 0.02445             |
| ECIAI39_2330 | 0.003033333333333333 | 0.2697666666666667  | 0.0114366666666667  |
| ECIAI39_2332 | 0                    | 0.06945             | 0                   |
| ECIAI39_2334 | 0.0046               | 0.1496              | 0.03057             |

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Table S1 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$            |
|--------------|----------------------|--------------------|---------------------|
| ECIAI39_2336 | 0.0011               | 0.1629             | 0.00694             |
| ECIAI39_2338 | 0.0045               | 0.1799             | 0.02476             |
| ECIAI39_2340 | 0.0039               | 0.1755             | 0.02216             |
| ECIAI39_2342 | 0.00565              | 0.1058             | 0.03957             |
| ECIAI39_2343 | 0.0065               | 0.0153             | 0.42639             |
| ECIAI39_2344 | 0                    | 0.0289             | 0                   |
| ECIAI39_2347 | 0.0024               | 0.11875            | 0.01755             |
| ECIAI39_2348 | 0.0134               | 0.12975            | 0.092535            |
| ECIAI39_2349 | 0.00735              | 0.1084             | 0.037795            |
| ECIAI39_2350 | 0.0283               | 0.2188             | 0.12951             |
| ECIAI39_2351 | 0.0144               | 0.2218             | 0.06486             |
| ECIAI39_2352 | 0.00385              | 0.35355            | 0.010175            |
| ECIAI39_2354 | 0.007533333333333333 | 0.2279666666666667 | 0.03254333333333333 |
| ECIAI39_2356 | 0.007366666666666667 | 0.1709             | 0.04845666666666667 |
| ECIAI39_2357 | 0.00535              | 0.10615            | 0.0546              |
| ECIAI39_2358 | 0.0308               | 0.54385            | 0.042265            |
| ECIAI39_2359 | 0.007                | 0.046              | 0.15289             |
| ECIAI39_2360 | 0.0098               | 0.2241             | 0.0437              |
| ECIAI39_2361 | 0.022                | 0.2728             | 0.08062             |
| ECIAI39_2362 | 0.0135               | 0.1033             | 0.13031             |
| ECIAI39_2363 | 0.0091               | 0.1589             | 0.05755             |
| ECIAI39_2364 | 0.0012               | 0.2034             | 0.00585             |
| ECIAI39_2367 | 0.004                | 0.4666             | 0.00858             |
| ECIAI39_2368 | 0.0107               | 0.3762             | 0.02833             |
| ECIAI39_2369 | 0.533125             | 5.242625           | 0.09111             |
| ECIAI39_2370 | 0.23635              | 3.01205            | 0.081955            |
| ECIAI39_2374 | 0.01806666666666667  | 0.3038             | 0.07033333333333333 |
| ECIAI39_2376 | 0.0554               | 1.3075166666666667 | 0.06028666666666667 |
| ECIAI39_2379 | 0.0074               | 0.192              | 0.03876             |
| ECIAI39_2380 | 0.009                | 0.1752             | 0.05145             |
| ECIAI39_2393 | 0.0151               | 0.203              | 0.07438             |
| ECIAI39_2397 | 0.017                | 0.2489             | 0.06843             |
| ECIAI39_2399 | 0.0022               | 0.1158             | 0.01913             |
| ECIAI39_2401 | 0.0244               | 0.2399             | 0.10163             |
| ECIAI39_2402 | 0.023                | 0.3298             | 0.06963             |
| ECIAI39_2403 | 0.00745              | 0.13305            | 0.070975            |
| ECIAI39_2404 | 0.0084               | 0.1223             | 0.06898             |
| ECIAI39_2408 | 0.0056               | 0.1677             | 0.03334             |
| ECIAI39_2409 | 0.0577               | 0.27295            | 0.21054             |
| ECIAI39_2410 | 0.0359               | 0.1456             | 0.24649             |
| ECIAI39_2411 | 0.0122               | 0.1944             | 0.06274             |
| ECIAI39_2412 | 0.0045               | 0.3774             | 0.01197             |
| ECIAI39_2413 | 0.0017               | 0.2501             | 0.00681             |
| ECIAI39_2416 | 0.0037               | 0.2254             | 0.01636             |
| ECIAI39_2419 | 0.0209               | 0.4699             | 0.04458             |
| ECIAI39_2421 | 0.0504               | 0.3445             | 0.14637             |
| ECIAI39_2423 | 0.0045               | 0.2805             | 0.01604             |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$    | $\omega$ |
|--------------|--------------------|---------|----------|
| ECIAI39_2424 | 0.0245             | 0.105   | 0.690445 |
| ECIAI39_2425 | 0.00885            | 0.24385 | 0.05771  |
| ECIAI39_2428 | 0.0024             | 0.1807  | 0.01343  |
| ECIAI39_2430 | 0.0153             | 0.1574  | 0.0917   |
| ECIAI39_2431 | 0.0085             | 0.1189  | 0.07188  |
| ECIAI39_2432 | 0.0249             | 0.5261  | 0.04204  |
| ECIAI39_2433 | 0.0041             | 0.1886  | 0.02147  |
| ECIAI39_2439 | 0.0089             | 0.1925  | 0.04607  |
| ECIAI39_2440 | 0.0075             | 0.1519  | 0.04961  |
| ECIAI39_2443 | 0.0089             | 0.0842  | 0.245555 |
| ECIAI39_2444 | 0.00075            | 0.0727  | 0.005915 |
| ECIAI39_2445 | 0.0017             | 0.0236  | 0.07346  |
| ECIAI39_2446 | 0.0026             | 0.1211  | 0.02148  |
| ECIAI39_2447 | 0.0134             | 0.2353  | 0.05682  |
| ECIAI39_2448 | 0.0278             | 0.5435  | 0.05117  |
| ECIAI39_2451 | 0.0157             | 0.4062  | 0.03864  |
| ECIAI39_2452 | 0.00485            | 0.56205 | 0.00873  |
| ECIAI39_2453 | 0.0052             | 0.4109  | 0.01266  |
| ECIAI39_2454 | 0.0069             | 0.4188  | 0.01643  |
| ECIAI39_2455 | 0.0072             | 0.2029  | 0.03545  |
| ECIAI39_2457 | 0.0114             | 0.3729  | 0.03044  |
| ECIAI39_2458 | 0.0345             | 0.5725  | 0.06027  |
| ECIAI39_2459 | 0.0152             | 0.3477  | 0.04365  |
| ECIAI39_2461 | 0.0046             | 0.2122  | 0.02163  |
| ECIAI39_2462 | 0.0144             | 0.1363  | 0.1058   |
| ECIAI39_2463 | 0.01295            | 0.1123  | 0.09943  |
| ECIAI39_2464 | 0.0104             | 0.29105 | 0.032615 |
| ECIAI39_2465 | 0.0276             | 0.4852  | 0.05699  |
| ECIAI39_2466 | 0.0095             | 0.2853  | 0.03333  |
| ECIAI39_2467 | 0.0088             | 0.0996  | 0.08867  |
| ECIAI39_2468 | 0.0162             | 0.33075 | 0.048645 |
| ECIAI39_2477 | 0.0281             | 0.3149  | 0.08939  |
| ECIAI39_2478 | 0.0083             | 0.19825 | 0.10808  |
| ECIAI39_2480 | 0.0784             | 0.7057  | 0.11106  |
| ECIAI39_2481 | 0.0164             | 0.2094  | 0.07832  |
| ECIAI39_2483 | 0.0134             | 0.2213  | 0.06074  |
| ECIAI39_2485 | 0.0052             | 0.0695  | 0.07414  |
| ECIAI39_2486 | 0                  | 0.0892  | 0        |
| ECIAI39_2487 | 0.006              | 0.2     | 0.03001  |
| ECIAI39_2488 | 0.0133             | 0.3882  | 0.0342   |
| ECIAI39_2489 | 0.02335            | 0.1401  | 0.156445 |
| ECIAI39_2490 | 0.0114666666666667 | 0.3219  | 0.06743  |
| ECIAI39_2493 | 0.0029             | 0.195   | 0.014305 |
| ECIAI39_2494 | 0.0138             | 0.235   | 0.05872  |
| ECIAI39_2497 | 0.0088             | 0.1746  | 0.05044  |
| ECIAI39_2499 | 0.0088             | 0.1667  | 0.05283  |
| ECIAI39_2501 | 0.0027             | 0.1345  | 0.02021  |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$              | $\omega$          |
|--------------|--------------------|-------------------|-------------------|
| ECIAI39_2503 | 0.032              | 0.1361            | 0.23541           |
| ECIAI39_2504 | 0.03082            | 0.23394           | 0.180346          |
| ECIAI39_2505 | 0.0018             | 0.1554            | 0.01161           |
| ECIAI39_2507 | 0.0017             | 0.0383            | 0.04331           |
| ECIAI39_2508 | 0                  | 0.04925           | 0                 |
| ECIAI39_2520 | 0.0041             | 0.1855            | 0.02206           |
| ECIAI39_2522 | 0.0253             | 0.115             | 0.22029           |
| ECIAI39_2523 | 0.0035             | 0.115             | 0.0305            |
| ECIAI39_2524 | 0.0032             | 0.12505           | 0.025335          |
| ECIAI39_2525 | 0.0096             | 0.0736            | 0.13052           |
| ECIAI39_2534 | 0.0018             | 0.2079            | 0.00887           |
| ECIAI39_2536 | 0.002              | 0.3848            | 0.00514           |
| ECIAI39_2538 | 0.032766666666667  | 1.091233333333333 | 0.030933333333333 |
| ECIAI39_2539 | 0.003              | 0.1492            | 0.01991           |
| ECIAI39_2540 | 0.0074             | 0.0638            | 0.11611           |
| ECIAI39_2546 | 0.0024             | 0.2348            | 0.01037           |
| ECIAI39_2548 | 0.0231             | 0.2295            | 0.10077           |
| ECIAI39_2550 | 0.04               | 0.35              | 0.11428           |
| ECIAI39_2552 | 0.0163             | 0.1907            | 0.08548           |
| ECIAI39_2555 | 0.0072             | 0.1788            | 0.04016           |
| ECIAI39_2556 | 0.0169             | 0.162             | 0.10448           |
| ECIAI39_2557 | 0.0158             | 0.2518            | 0.06266           |
| ECIAI39_2558 | 0.0108             | 0.22325           | 0.05552           |
| ECIAI39_2560 | 0.0048             | 0.1637            | 0.02956           |
| ECIAI39_2562 | 0.0022             | 0.110833333333333 | 0.022246666666667 |
| ECIAI39_2563 | 0                  | 0.1568            | 0                 |
| ECIAI39_2564 | 0                  | 0.0521            | 0                 |
| ECIAI39_2566 | 0.0019             | 0.2515            | 0.00753           |
| ECIAI39_2567 | 0                  | 0.1379            | 0                 |
| ECIAI39_2568 | 0.0264             | 0.3273            | 0.08054           |
| ECIAI39_2569 | 0.0169             | 0.1363            | 0.12423           |
| ECIAI39_2570 | 0.0089             | 0.1775            | 0.05015           |
| ECIAI39_2576 | 0.0195             | 0.2553            | 0.07805           |
| ECIAI39_2577 | 0.0369             | 0.3194            | 0.11546           |
| ECIAI39_2578 | 0.0132             | 0.4046            | 0.03272           |
| ECIAI39_2580 | 0.0105             | 0.3117            | 0.03377           |
| ECIAI39_2581 | 0.0123             | 0.2532            | 0.04847           |
| ECIAI39_2585 | 0.0231             | 0.2738            | 0.08449           |
| ECIAI39_2588 | 0.022              | 0.2769            | 0.07956           |
| ECIAI39_2589 | 0.0022             | 0.1757            | 0.01265           |
| ECIAI39_2591 | 0.008              | 0.06675           | 0.153005          |
| ECIAI39_2592 | 0.0017             | 0.22845           | 0.00755           |
| ECIAI39_2594 | 0.0283             | 0.1191            | 0.23747           |
| ECIAI39_2596 | 0.0075             | 0.2458            | 0.03066           |
| ECIAI39_2600 | 0.0093             | 0.3224            | 0.02879           |
| ECIAI39_2602 | 0.0069333333333333 | 0.200766666666667 | 0.03399           |
| ECIAI39_2603 | 0.0033             | 0.0897            | 0.03644           |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_2604 | 0.0065             | 0.283              | 0.02296            |
| ECIAI39_2605 | 0.0137666666666667 | 0.3414             | 0.0381466666666667 |
| ECIAI39_2606 | 0.00245            | 0.2143             | 0.008575           |
| ECIAI39_2607 | 0.0011             | 0.17285            | 0.006315           |
| ECIAI39_2608 | 0.0302             | 0.3491             | 0.08642            |
| ECIAI39_2609 | 0.0048             | 0.057              | 0.0834             |
| ECIAI39_2610 | 0.00275            | 0.063              | 0.028465           |
| ECIAI39_2613 | 0.05875            | 0.4389             | 0.11225            |
| ECIAI39_2614 | 0.0104             | 0.1867             | 0.05578            |
| ECIAI39_2617 | 0.01745            | 0.3006             | 0.04967            |
| ECIAI39_2618 | 0.0086             | 0.4464             | 0.0193             |
| ECIAI39_2620 | 0.0068             | 0.2318             | 0.02937            |
| ECIAI39_2621 | 0.00705            | 0.14665            | 0.05088            |
| ECIAI39_2622 | 0.015              | 0.2542             | 0.05891            |
| ECIAI39_2623 | 0.0074             | 0.144              | 0.05122            |
| ECIAI39_2624 | 0                  | 0.1039             | 0                  |
| ECIAI39_2625 | 0.03675            | 0.2631             | 0.12378            |
| ECIAI39_2635 | 0.0005             | 0.12               | 0.00454            |
| ECIAI39_2636 | 0.0323             | 0.1828             | 0.17646            |
| ECIAI39_2637 | 0.0073             | 0.2792             | 0.02619            |
| ECIAI39_2638 | 0                  | 0.0916             | 0                  |
| ECIAI39_2639 | 0.0046             | 0.0167             | 0.27812            |
| ECIAI39_2640 | 0.0037             | 0.2145             | 0.01714            |
| ECIAI39_2641 | 0.0091             | 0.203              | 0.04465            |
| ECIAI39_2642 | 0.01505            | 0.1312             | 0.129095           |
| ECIAI39_2643 | 0.0171             | 0.0975             | 0.2268766666666667 |
| ECIAI39_2651 | 0.0035             | 0.318              | 0.01114            |
| ECIAI39_2657 | 0.00815            | 0.256675           | 0.035645           |
| ECIAI39_2700 | 0.01785            | 0.4751             | 0.04343            |
| ECIAI39_2702 | 0.0187             | 0.3119             | 0.0599             |
| ECIAI39_2704 | 0.0191             | 0.4558             | 0.04185            |
| ECIAI39_2705 | 0.0149             | 0.5732             | 0.02597            |
| ECIAI39_2706 | 0.0046             | 0.2828             | 0.015515           |
| ECIAI39_2707 | 0.015325           | 0.126125           | 0.132965           |
| ECIAI39_2708 | 0.0093111111111111 | 0.1826             | 0.0714222222222222 |
| ECIAI39_2709 | 0.0027             | 0.1949             | 0.01379            |
| ECIAI39_2710 | 0.0043             | 0.2445             | 0.01772            |
| ECIAI39_2712 | 0.0078666666666667 | 0.0678666666666667 | 0.0935066666666667 |
| ECIAI39_2713 | 0.0024             | 0.1467             | 0.01641            |
| ECIAI39_2715 | 0.0009             | 0.2679             | 0.00332            |
| ECIAI39_2720 | 0.0034             | 0.06215            | 0.03164            |
| ECIAI39_2721 | 0.004              | 0.1467             | 0.030698           |
| ECIAI39_2723 | 0.0073             | 0.2358             | 0.03091            |
| ECIAI39_2724 | 0.01415            | 0.20585            | 0.093025           |
| ECIAI39_2726 | 0.0076             | 0.3267             | 0.02318            |
| ECIAI39_2727 | 0.0257333333333333 | 0.3611             | 0.08131            |
| ECIAI39_2731 | 0.0249333333333333 | 0.1559             | 0.15715            |

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Table S1 – continued from previous page

| Gene         | $dN$     | $dS$               | $\omega$           |
|--------------|----------|--------------------|--------------------|
| ECIAI39_2732 | 0.0406   | 0.2775             | 0.14643            |
| ECIAI39_2733 | 0.0341   | 0.3191             | 0.10673            |
| ECIAI39_2735 | 0.0027   | 0.2301             | 0.01163            |
| ECIAI39_2736 | 0.0085   | 0.1625             | 0.060445           |
| ECIAI39_2737 | 0.0158   | 0.1981             | 0.07953            |
| ECIAI39_2738 | 0.0214   | 0.2891             | 0.07415            |
| ECIAI39_2739 | 0.0088   | 0.30865            | 0.046315           |
| ECIAI39_2740 | 0.0055   | 0.3432             | 0.01602            |
| ECIAI39_2742 | 0.0127   | 0.3222             | 0.03955            |
| ECIAI39_2743 | 0.0032   | 0.3804             | 0.00849            |
| ECIAI39_2744 | 0.0063   | 0.2806             | 0.0226             |
| ECIAI39_2746 | 0.0065   | 0.2254             | 0.02896            |
| ECIAI39_2748 | 0.0035   | 0.14155            | 0.014725           |
| ECIAI39_2749 | 0.00445  | 0.08185            | 0.18839            |
| ECIAI39_2750 | 0.00315  | 0.25215            | 0.008925           |
| ECIAI39_2751 | 0.0155   | 0.3369             | 0.04606            |
| ECIAI39_2752 | 0.01335  | 0.16435            | 0.08297            |
| ECIAI39_2753 | 0.0045   | 0.5233             | 0.00861            |
| ECIAI39_2754 | 0.0957   | 0.8185             | 0.11687            |
| ECIAI39_2761 | 0.002975 | 0.100525           | 0.0321425          |
| ECIAI39_2762 | 0.00885  | 0.12665            | 0.07443            |
| ECIAI39_2763 | 0.0125   | 0.2117             | 0.05885            |
| ECIAI39_2764 | 0.0047   | 0.0554             | 0.08551            |
| ECIAI39_2765 | 0.0026   | 0.1178             | 0.02239            |
| ECIAI39_2769 | 0.0044   | 0.2437             | 0.01807            |
| ECIAI39_2771 | 0.0169   | 0.5219             | 0.03238            |
| ECIAI39_2781 | 0.0112   | 0.3838             | 0.02926            |
| ECIAI39_2782 | 0.0065   | 0.4268             | 0.0152             |
| ECIAI39_2787 | 0.0155   | 0.3527             | 0.04408            |
| ECIAI39_2788 | 0.0237   | 0.3086             | 0.07667            |
| ECIAI39_2789 | 0.06395  | 0.2006             | 0.299855           |
| ECIAI39_2790 | 0.0454   | 0.1225             | 0.37026            |
| ECIAI39_2791 | 0.0722   | 0.3473333333333333 | 0.2183533333333333 |
| ECIAI39_2792 | 0.03352  | 0.23344            | 0.176962           |
| ECIAI39_2793 | 0.0087   | 0.38845            | 0.022155           |
| ECIAI39_2797 | 0        | 0.1012             | 0                  |
| ECIAI39_2798 | 0.0072   | 0.2122             | 0.03401            |
| ECIAI39_2800 | 0        | 0.1762             | 0                  |
| ECIAI39_2805 | 0.0055   | 0.2508             | 0.02198            |
| ECIAI39_2806 | 0.0068   | 0.4411             | 0.0155             |
| ECIAI39_2812 | 0.0255   | 0.2327             | 0.10958            |
| ECIAI39_2814 | 0.0258   | 0.1255             | 0.20589            |
| ECIAI39_2815 | 0.0175   | 0.1435             | 0.12211            |
| ECIAI39_2816 | 0.001    | 0.1612             | 0.00644            |
| ECIAI39_2818 | 0.0011   | 0.0847             | 0.01314            |
| ECIAI39_2819 | 0.0032   | 0.2146             | 0.01473            |
| ECIAI39_2821 | 0.0116   | 0.0689             | 0.16799            |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_2823 | 0.005              | 0.1045             | 0.04783            |
| ECIAI39_2825 | 0.0034             | 0.1153             | 0.02989            |
| ECIAI39_2826 | 0.0049             | 0.1397             | 0.03475            |
| ECIAI39_2827 | 0.012              | 0.1387             | 0.0867             |
| ECIAI39_2828 | 0.0034             | 0.0672             | 0.05038            |
| ECIAI39_2829 | 0.0079             | 0.0816             | 0.09648            |
| ECIAI39_2831 | 0.00255            | 0.12485            | 0.019315           |
| ECIAI39_2833 | 0                  | 0.0961             | 0                  |
| ECIAI39_2835 | 0.0279             | 0.24775            | 0.11317            |
| ECIAI39_2836 | 0.0103             | 0.3962             | 0.0261             |
| ECIAI39_2837 | 0.0013             | 0.212              | 0.00615            |
| ECIAI39_2843 | 0.0126             | 0.2651             | 0.04743            |
| ECIAI39_2844 | 0.00775            | 0.1915             | 0.0397             |
| ECIAI39_2845 | 0.0275             | 0.2603             | 0.10547            |
| ECIAI39_2846 | 0.0118             | 0.2709             | 0.04371            |
| ECIAI39_2847 | 0.0146             | 0.1305             | 0.11167            |
| ECIAI39_2849 | 0.0104             | 0.2277             | 0.04585            |
| ECIAI39_2851 | 0.0324666666666667 | 0.1900333333333333 | 0.1552866666666667 |
| ECIAI39_2852 | 0.0447             | 0.1086666666666667 | 0.3722433333333333 |
| ECIAI39_2853 | 0.0218             | 0.1394             | 0.15642            |
| ECIAI39_2855 | 0                  | 0.1802             | 0                  |
| ECIAI39_2859 | 0.0025             | 0.1044             | 0.02432            |
| ECIAI39_2861 | 0                  | 0.0111             | 0                  |
| ECIAI39_2864 | 0                  | 0.1831             | 0                  |
| ECIAI39_2865 | 0.0041             | 0.1021             | 0.02374            |
| ECIAI39_2866 | 0.0087             | 0.122              | 0.07168            |
| ECIAI39_2867 | 0.0087             | 0.195              | 0.04466            |
| ECIAI39_2869 | 0.0055             | 0.0857             | 0.06476            |
| ECIAI39_2870 | 0.0059             | 0.1061             | 0.05576            |
| ECIAI39_2871 | 0.0205             | 0.1146             | 0.17885            |
| ECIAI39_2873 | 0.0042             | 0.1101             | 0.03857            |
| ECIAI39_2874 | 0.0024             | 0.1341             | 0.01808            |
| ECIAI39_2875 | 0.0131             | 0.2133             | 0.06121            |
| ECIAI39_2876 | 0.01135            | 0.20925            | 0.05413            |
| ECIAI39_2878 | 0.0012             | 0.1464             | 0.0081             |
| ECIAI39_2892 | 0                  | 0.1418             | 0                  |
| ECIAI39_2893 | 0                  | 0.057              | 0                  |
| ECIAI39_2895 | 0.0113             | 0.1754             | 0.06438            |
| ECIAI39_2896 | 0.02335            | 0.23615            | 0.098965           |
| ECIAI39_2897 | 0.0087             | 0.1298             | 0.06694            |
| ECIAI39_2898 | 0.0023             | 0.2481             | 0.00921            |
| ECIAI39_2899 | 0.0012             | 0.1474             | 0.00798            |
| ECIAI39_2900 | 0.0011             | 0.3393             | 0.00335            |
| ECIAI39_2901 | 0.0105             | 0.2615             | 0.04022            |
| ECIAI39_2902 | 0.0077             | 0.2521             | 0.03074            |
| ECIAI39_2903 | 0.0054             | 0.1131             | 0.0476             |
| ECIAI39_2905 | 0.0245             | 0.0903             | 0.27123            |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$    | $\omega$          |
|--------------|--------------------|---------|-------------------|
| ECIAI39_2907 | 0.0386             | 0.2351  | 0.16417           |
| ECIAI39_2909 | 0.0151             | 0.2412  | 0.06256           |
| ECIAI39_2911 | 0.0143333333333333 | 0.127   | 0.109846666666667 |
| ECIAI39_2915 | 0.0044             | 0.2128  | 0.02077           |
| ECIAI39_2918 | 0.003              | 0.2226  | 0.01365           |
| ECIAI39_2920 | 0.0055             | 0.18645 | 0.03876           |
| ECIAI39_2923 | 0.01335            | 0.18955 | 0.07704           |
| ECIAI39_2924 | 0.0052             | 0.2496  | 0.02069           |
| ECIAI39_2926 | 0.0291             | 0.31785 | 0.07103           |
| ECIAI39_2930 | 0.0109             | 0.4752  | 0.02295           |
| ECIAI39_2932 | 0.0176             | 0.3318  | 0.05297           |
| ECIAI39_2933 | 0.0321             | 0.2274  | 0.121645          |
| ECIAI39_2934 | 0                  | 0.0868  | 0                 |
| ECIAI39_2935 | 0.0116             | 0.1482  | 0.07836           |
| ECIAI39_2936 | 0                  | 0.1682  | 0                 |
| ECIAI39_2937 | 0.0227             | 0.2273  | 0.0999            |
| ECIAI39_2939 | 0                  | 0.1737  | 0                 |
| ECIAI39_2940 | 0.00645            | 0.26285 | 0.032095          |
| ECIAI39_2941 | 0.0178             | 0.358   | 0.04977           |
| ECIAI39_2944 | 0.0061             | 0.2958  | 0.02055           |
| ECIAI39_2945 | 0.0159             | 0.1351  | 0.11805           |
| ECIAI39_2946 | 0.008              | 0.2166  | 0.03716           |
| ECIAI39_2948 | 0.0302             | 0.2724  | 0.11082           |
| ECIAI39_2950 | 0.0213             | 0.3209  | 0.06637           |
| ECIAI39_2951 | 0.0026             | 0.1646  | 0.01584           |
| ECIAI39_2952 | 0                  | 0.0079  | 0                 |
| ECIAI39_2953 | 0.0138             | 0.1286  | 0.10717           |
| ECIAI39_2954 | 0.0006             | 0.1084  | 0.00481           |
| ECIAI39_2957 | 0.0141             | 0.0723  | 0.1951            |
| ECIAI39_2958 | 0.0175             | 0.2647  | 0.06614           |
| ECIAI39_2962 | 0.0054             | 0.2123  | 0.02537           |
| ECIAI39_2963 | 0.0059             | 0.1566  | 0.03766           |
| ECIAI39_2964 | 0.00735            | 0.2015  | 0.03381           |
| ECIAI39_2965 | 0.0013             | 0.1545  | 0.00852           |
| ECIAI39_2966 | 0.0013             | 0.0851  | 0.01495           |
| ECIAI39_2967 | 0.003              | 0.0578  | 0.05198           |
| ECIAI39_2970 | 0.0456             | 0.1487  | 0.30682           |
| ECIAI39_2974 | 0.0363             | 0.1728  | 0.21019           |
| ECIAI39_2975 | 0.0028             | 0.3092  | 0.00921           |
| ECIAI39_2977 | 0.0253             | 0.5322  | 0.04746           |
| ECIAI39_2978 | 0.0046             | 0.3574  | 0.01291           |
| ECIAI39_2981 | 0.0007             | 0.2713  | 0.00261           |
| ECIAI39_2983 | 0                  | 0.1571  | 0                 |
| ECIAI39_2984 | 0.0046             | 0.20435 | 0.022005          |
| ECIAI39_2985 | 0.0108             | 0.1378  | 0.07813           |
| ECIAI39_2986 | 0.024              | 0.2946  | 0.067855          |
| ECIAI39_2987 | 0.00235            | 0.13775 | 0.01712           |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_2988 | 0.0143             | 0.4117             | 0.03478            |
| ECIAI39_2989 | 0.0037             | 0.1517333333333333 | 0.02867            |
| ECIAI39_2990 | 0.0116             | 0.3957             | 0.02922            |
| ECIAI39_2991 | 0.01375            | 0.17215            | 0.11453            |
| ECIAI39_2993 | 0.0084333333333333 | 0.0746666666666667 | 0.2333766666666667 |
| ECIAI39_2994 | 0.0088             | 0.1218             | 0.07184            |
| ECIAI39_2995 | 0.0071             | 0.1403             | 0.05161            |
| ECIAI39_2996 | 0.005              | 0.151              | 0.03327            |
| ECIAI39_2997 | 0.0022             | 0.1635             | 0.01361            |
| ECIAI39_2999 | 0.0149             | 0.1733             | 0.08613            |
| ECIAI39_3000 | 0.0189             | 0.2304             | 0.08184            |
| ECIAI39_3022 | 0.0068             | 0.1034             | 0.065435           |
| ECIAI39_3023 | 0.0074333333333333 | 0.2275             | 0.03344            |
| ECIAI39_3024 | 0.0025             | 0.1407             | 0.01764            |
| ECIAI39_3026 | 0.0058             | 0.1637             | 0.03566            |
| ECIAI39_3027 | 0.0013             | 0.1916             | 0.00685            |
| ECIAI39_3028 | 0.0044             | 0.0411             | 0.10716            |
| ECIAI39_3029 | 0.0144             | 0.1684             | 0.08532            |
| ECIAI39_3030 | 0                  | 0.0959             | 0                  |
| ECIAI39_3031 | 0.0032             | 0.1722             | 0.01865            |
| ECIAI39_3032 | 0                  | 0.1182             | 0                  |
| ECIAI39_3033 | 0.0079333333333333 | 0.1179666666666667 | 0.04943            |
| ECIAI39_3034 | 0.00485            | 0.0602             | 0.08701            |
| ECIAI39_3035 | 0.0202             | 0.0636             | 0.31677            |
| ECIAI39_3036 | 0.0205             | 0.1056             | 0.19381            |
| ECIAI39_3037 | 0.0063             | 0.1743             | 0.060675           |
| ECIAI39_3038 | 0.004              | 0.4028             | 0.00983            |
| ECIAI39_3039 | 0.0032             | 0.1053             | 0.02993            |
| ECIAI39_3041 | 0.0013             | 0.0778             | 0.01678            |
| ECIAI39_3045 | 0.0152             | 0.15175            | 0.07716            |
| ECIAI39_3046 | 0.0231333333333333 | 0.1590333333333333 | 0.1402466666666667 |
| ECIAI39_3047 | 0                  | 0.1908             | 0                  |
| ECIAI39_3048 | 0.0015             | 0.3158             | 0.00486            |
| ECIAI39_3049 | 0                  | 0.0668             | 0                  |
| ECIAI39_3051 | 0.0006             | 0.0692666666666667 | 0.0046866666666667 |
| ECIAI39_3052 | 0.0028             | 0.1898             | 0.01479            |
| ECIAI39_3053 | 0                  | 0.1397             | 0                  |
| ECIAI39_3054 | 0.0131333333333333 | 0.2880333333333333 | 0.0363366666666667 |
| ECIAI39_3063 | 0.0127             | 0.5036             | 0.02515            |
| ECIAI39_3064 | 0.0017             | 0.6111             | 0.00285            |
| ECIAI39_3065 | 0.016              | 0.7064             | 0.02263            |
| ECIAI39_3066 | 0.0293             | 0.8093             | 0.03625            |
| ECIAI39_3070 | 0.0176             | 0.2828             | 0.06229            |
| ECIAI39_3072 | 0.0269             | 0.2903             | 0.09252            |
| ECIAI39_3076 | 0.0171             | 0.2279             | 0.07505            |
| ECIAI39_3078 | 0.00735            | 0.1701             | 0.044435           |
| ECIAI39_3079 | 0                  | 0.1198             | 0                  |

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Table S1 – continued from previous page

| Gene         | $dN$    | $dS$               | $\omega$           |
|--------------|---------|--------------------|--------------------|
| ECIAI39_3081 | 0.007   | 0.2485             | 0.02799            |
| ECIAI39_3083 | 0.0136  | 0.3311             | 0.04108            |
| ECIAI39_3084 | 0.0057  | 0.3078             | 0.01861            |
| ECIAI39_3085 | 0       | 0                  | 0                  |
| ECIAI39_3086 | 0.0008  | 0.0882             | 0.00927            |
| ECIAI39_3088 | 0.0033  | 0.0526             | 0.06284            |
| ECIAI39_3089 | 0.0085  | 0.2205             | 0.03837            |
| ECIAI39_3090 | 0.0278  | 0.155              | 0.17936            |
| ECIAI39_3091 | 0.01095 | 0.1689             | 0.064475           |
| ECIAI39_3093 | 0.0052  | 0.2873             | 0.01793            |
| ECIAI39_3095 | 0.0144  | 0.2601             | 0.05552            |
| ECIAI39_3096 | 0.0136  | 0.2123             | 0.06396            |
| ECIAI39_3099 | 0.0029  | 0.1089             | 0.02649            |
| ECIAI39_3100 | 0.0039  | 0.1297             | 0.03039            |
| ECIAI39_3101 | 0.0133  | 0.3857             | 0.03441            |
| ECIAI39_3102 | 0.0244  | 0.3148             | 0.07765            |
| ECIAI39_3103 | 0.0123  | 0.4188             | 0.02931            |
| ECIAI39_3104 | 0.0246  | 0.4939             | 0.04986            |
| ECIAI39_3107 | 0.0141  | 0.3426             | 0.04114            |
| ECIAI39_3108 | 0.0167  | 0.3807             | 0.04398            |
| ECIAI39_3109 | 0.1003  | 0.8632             | 0.11626            |
| ECIAI39_3111 | 0.0076  | 0.1682             | 0.04507            |
| ECIAI39_3112 | 0.021   | 0.2275             | 0.09228            |
| ECIAI39_3114 | 0.0079  | 0.2707             | 0.02923            |
| ECIAI39_3116 | 0.004   | 0.173              | 0.023              |
| ECIAI39_3118 | 0.00225 | 0.23585            | 0.010225           |
| ECIAI39_3119 | 0.0036  | 0.3974             | 0.0091             |
| ECIAI39_3120 | 0       | 0.0776             | 0                  |
| ECIAI39_3121 | 0.01585 | 0.1207             | 0.17364            |
| ECIAI39_3122 | 0.0135  | 0.235375           | 0.0713225          |
| ECIAI39_3123 | 0       | 0.1393             | 0                  |
| ECIAI39_3124 | 0.015   | 0.13025            | 0.116215           |
| ECIAI39_3125 | 0.02315 | 0.0956             | 0.271705           |
| ECIAI39_3126 | 0.0151  | 0.1794             | 0.08421            |
| ECIAI39_3127 | 0.0069  | 0.0994             | 0.06953            |
| ECIAI39_3129 | 0.0055  | 0.16905            | 0.03371            |
| ECIAI39_3130 | 0.0063  | 0.3843             | 0.01626            |
| ECIAI39_3131 | 0.0116  | 0.168              | 0.06895            |
| ECIAI39_3132 | 0.0045  | 0.168              | 0.0265             |
| ECIAI39_3133 | 0       | 0.213              | 0                  |
| ECIAI39_3134 | 0.1266  | 0.0327             | 3.87286            |
| ECIAI39_3137 | 0.0069  | 0.1941666666666667 | 0.0320366666666667 |
| ECIAI39_3138 | 0.0043  | 0.2088             | 0.02047            |
| ECIAI39_3139 | 0.0094  | 0.1464             | 0.06443            |
| ECIAI39_3140 | 0.0065  | 0.2763             | 0.0235             |
| ECIAI39_3141 | 0.0238  | 0.0945             | 0.267555           |
| ECIAI39_3146 | 0.0039  | 0.1869             | 0.02069            |

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Table S1 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| ECIAI39_3151 | 0.0071  | 0.1688  | 0.04184  |
| ECIAI39_3153 | 0.0176  | 0.165   | 0.10687  |
| ECIAI39_3154 | 0.0202  | 0.1     | 0.263665 |
| ECIAI39_3155 | 0.0128  | 0.2581  | 0.04941  |
| ECIAI39_3156 | 0.0106  | 0.1951  | 0.05452  |
| ECIAI39_3157 | 0.01215 | 0.31965 | 0.038055 |
| ECIAI39_3160 | 0.0154  | 0.21738 | 0.067756 |
| ECIAI39_3162 | 0.0044  | 0.1922  | 0.02315  |
| ECIAI39_3163 | 0.0086  | 0.3211  | 0.02672  |
| ECIAI39_3165 | 0.0036  | 0.32055 | 0.0087   |
| ECIAI39_3168 | 0.0025  | 0.1638  | 0.01551  |
| ECIAI39_3170 | 0.0034  | 0.007   | 0.48581  |
| ECIAI39_3171 | 0.002   | 0.1907  | 0.01074  |
| ECIAI39_3172 | 0.0062  | 0       | NA       |
| ECIAI39_3173 | 0.0008  | 0.2253  | 0.002355 |
| ECIAI39_3175 | 0       | 0.1096  | 0        |
| ECIAI39_3177 | 0       | 0.187   | 0        |
| ECIAI39_3180 | 0.00105 | 0.05905 | 0.01463  |
| ECIAI39_3181 | 0.0054  | 0.2481  | 0.02176  |
| ECIAI39_3183 | 0.0135  | 0.1438  | 0.09421  |
| ECIAI39_3185 | 0.0045  | 0.1021  | 0.04449  |
| ECIAI39_3186 | 0.0024  | 0.2738  | 0.00892  |
| ECIAI39_3187 | 0.00695 | 0.13385 | 0.062515 |
| ECIAI39_3188 | 0.0007  | 0.0868  | 0.00837  |
| ECIAI39_3190 | 0       | 0.0089  | 0        |
| ECIAI39_3193 | 0.006   | 0.1948  | 0.03075  |
| ECIAI39_3195 | 0.0062  | 0.1948  | 0.03195  |
| ECIAI39_3197 | 0       | 0.0048  | 0        |
| ECIAI39_3198 | 0.01475 | 0.14095 | 0.09035  |
| ECIAI39_3199 | 0.0006  | 0.0853  | 0.005105 |
| ECIAI39_3200 | 0.00615 | 0.1335  | 0.04241  |
| ECIAI39_3201 | 0       | 0.0996  | 0        |
| ECIAI39_3203 | 0.0042  | 0.0653  | 0.06606  |
| ECIAI39_3204 | 0.0028  | 0.088   | 0.03211  |
| ECIAI39_3206 | 0       | 0.118   | 0        |
| ECIAI39_3207 | 0       | 0.0542  | 0        |
| ECIAI39_3209 | 0.00305 | 0.06935 | 0.05254  |
| ECIAI39_3210 | 0.00725 | 0.10885 | 0.07157  |
| ECIAI39_3211 | 0.0144  | 0.1358  | 0.10038  |
| ECIAI39_3213 | 0.0006  | 0.1042  | 0.00594  |
| ECIAI39_3215 | 0.0076  | 0.1853  | 0.04088  |
| ECIAI39_3218 | 0.0034  | 0.3375  | 0.01007  |
| ECIAI39_3220 | 0.009   | 0.3469  | 0.02587  |
| ECIAI39_3228 | 0.04495 | 0.44155 | 0.10198  |
| ECIAI39_3229 | 0.0402  | 0.1521  | 0.2645   |
| ECIAI39_3230 | 0.0068  | 0.1743  | 0.03929  |
| ECIAI39_3232 | 0.0032  | 0.3999  | 0.00789  |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_3234 | 0.004              | 0.2584             | 0.01538            |
| ECIAI39_3236 | 0.0029             | 0.07755            | 0.031565           |
| ECIAI39_3237 | 0                  | 0.0149             | 0                  |
| ECIAI39_3238 | 0.00885            | 0.1347             | 0.039285           |
| ECIAI39_3239 | 0.0065             | 0.1879666666666667 | 0.04248            |
| ECIAI39_3240 | 0.003375           | 0.122175           | 0.0282725          |
| ECIAI39_3241 | 0.003775           | 0.118575           | 0.078705           |
| ECIAI39_3243 | 0.0031             | 0.1715             | 0.01833            |
| ECIAI39_3246 | 0.0111             | 0.1204             | 0.09231            |
| ECIAI39_3248 | 0.0121             | 0.21215            | 0.057025           |
| ECIAI39_3249 | 0                  | 0.2094             | 0                  |
| ECIAI39_3250 | 0.0257             | 0.0676             | 0.37954            |
| ECIAI39_3252 | 0.0015             | 0.1022             | 0.01476            |
| ECIAI39_3254 | 0                  | 0.0621             | 0                  |
| ECIAI39_3255 | 0.0124             | 0.1338             | 0.09303            |
| ECIAI39_3256 | 0.0165             | 0.1353             | 0.12194            |
| ECIAI39_3257 | 0                  | 0.0851             | 0                  |
| ECIAI39_3258 | 0.0031             | 0.1483             | 0.02121            |
| ECIAI39_3259 | 0.0102             | 0.3615             | 0.02823            |
| ECIAI39_3261 | 0.005              | 0.2371             | 0.02091            |
| ECIAI39_3262 | 0                  | 0.0421             | 0                  |
| ECIAI39_3263 | 0.0249             | 0.1987             | 0.1255             |
| ECIAI39_3264 | 0.0209             | 0.2084             | 0.10049            |
| ECIAI39_3265 | 0.0064             | 0.1185             | 0.05412            |
| ECIAI39_3273 | 0.0215             | 0.1902             | 0.11282            |
| ECIAI39_3275 | 0.0175             | 0.4938             | 0.03549            |
| ECIAI39_3281 | 0                  | 0.0319             | 0                  |
| ECIAI39_3282 | 0.0399             | 0.25               | 0.15945            |
| ECIAI39_3283 | 0.0133             | 0.0951             | 0.1398             |
| ECIAI39_3284 | 0.01635            | 0.19545            | 0.10116            |
| ECIAI39_3285 | 0.0102             | 0.13205            | 0.06735            |
| ECIAI39_3286 | 0.0205             | 0.2269             | 0.09046            |
| ECIAI39_3287 | 0                  | 0.1056             | 0                  |
| ECIAI39_3288 | 0.0042             | 0.2405             | 0.01749            |
| ECIAI39_3289 | 0.01355            | 0.2917             | 0.039375           |
| ECIAI39_3290 | 0                  | 0.0041             | 0                  |
| ECIAI39_3291 | 0                  | 0.0282             | 0                  |
| ECIAI39_3292 | 0                  | 0                  | 0                  |
| ECIAI39_3293 | 0.0005333333333333 | 0.0303833333333333 | 0.0088666666666667 |
| ECIAI39_3294 | 0                  | 0.0044666666666667 | 0                  |
| ECIAI39_3295 | 0                  | 0                  | 0                  |
| ECIAI39_3296 | 0                  | 0.0119142857142857 | 0                  |
| ECIAI39_3297 | 0                  | 0.0190666666666667 | 0                  |
| ECIAI39_3298 | 0                  | 0.0093             | 0                  |
| ECIAI39_3310 | 0.10015            | 17.2989            | 0.03387            |
| ECIAI39_3317 | 0                  | 0.0335             | 0                  |
| ECIAI39_3318 | 0.005675           | 0.0613             | 0.034505           |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_3319 | 0.044              | 0.5274             | 0.08349            |
| ECIAI39_3320 | 0.0099             | 0.322              | 0.03072            |
| ECIAI39_3322 | 0.0031             | 0.0864             | 0.041215           |
| ECIAI39_3324 | 0                  | 0.1736             | 0                  |
| ECIAI39_3328 | 0.0132666666666667 | 0.1809666666666667 | 0.04663            |
| ECIAI39_3329 | 0.0032             | 0.1538             | 0.02077            |
| ECIAI39_3330 | 0                  | 0.0742             | 0                  |
| ECIAI39_3331 | 0.0028             | 0.1936             | 0.01467            |
| ECIAI39_3332 | 0.0167             | 0.2516             | 0.06627            |
| ECIAI39_3333 | 0.0242             | 0.1787             | 0.13566            |
| ECIAI39_3334 | 0.0164333333333333 | 0.1333666666666667 | 0.1860533333333333 |
| ECIAI39_3335 | 0.0075             | 0.1826             | 0.0412             |
| ECIAI39_3338 | 0.0028             | 0.1856             | 0.01513            |
| ECIAI39_3339 | 0.0044             | 0.2946             | 0.01497            |
| ECIAI39_3340 | 0.0026             | 0.2605             | 0.01003            |
| ECIAI39_3341 | 0                  | 0.174              | 0                  |
| ECIAI39_3356 | 0.0043             | 0.2116             | 0.02046            |
| ECIAI39_3357 | 0.0123             | 0.2012             | 0.06122            |
| ECIAI39_3358 | 0.0017             | 0.12735            | 0.030825           |
| ECIAI39_3359 | 0.0124             | 0.187              | 0.06629            |
| ECIAI39_3360 | 0.0041             | 0.0814             | 0.05095            |
| ECIAI39_3361 | 0.0139             | 0.1657             | 0.08387            |
| ECIAI39_3362 | 0.0343             | 0.1029             | 0.33364            |
| ECIAI39_3363 | 0.0684             | 0.1758             | 0.52565            |
| ECIAI39_3364 | 0.0343             | 0.1719             | 0.19938            |
| ECIAI39_3366 | 0.0028             | 0.1604             | 0.01765            |
| ECIAI39_3369 | 0.0077             | 0.1279             | 0.06057            |
| ECIAI39_3372 | 0.0077             | 0.161              | 0.04768            |
| ECIAI39_3373 | 0.0019             | 0.0763             | 0.02549            |
| ECIAI39_3374 | 0.0024             | 0.09145            | 0.01471            |
| ECIAI39_3381 | 0.0021             | 0.2734             | 0.00772            |
| ECIAI39_3382 | 0                  | 0.1511             | 0                  |
| ECIAI39_3383 | 0.0028             | 0.2303             | 0.01225            |
| ECIAI39_3385 | 0.0129             | 0.3204             | 0.04033            |
| ECIAI39_3387 | 0                  | 0.0342             | 0                  |
| ECIAI39_3388 | 0.0043             | 0.2222             | 0.01921            |
| ECIAI39_3389 | 0.02465            | 0.37555            | 0.069805           |
| ECIAI39_3390 | 0.0303             | 0.3414             | 0.10376            |
| ECIAI39_3391 | 0.0025             | 0.4206             | 0.0059             |
| ECIAI39_3393 | 0.0158             | 0.2247             | 0.07039            |
| ECIAI39_3402 | 0.0032             | 0.2071             | 0.01559            |
| ECIAI39_3409 | 0.02975            | 0.3844             | 0.07144            |
| ECIAI39_3413 | 0.0033             | 0.2969             | 0.007405           |
| ECIAI39_3419 | 0.0034             | 0.1725             | 0.01981            |
| ECIAI39_3421 | 0                  | 0.0645             | 0                  |
| ECIAI39_3422 | 0.0011             | 0.0595             | 0.01879            |
| ECIAI39_3423 | 0.0071             | 0.1165             | 0.06052            |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_3425 | 0.005              | 0.1562             | 0.03201            |
| ECIAI39_3426 | 0.0041             | 0.0733             | 0.05569            |
| ECIAI39_3427 | 0.00195            | 0.219              | 0.012045           |
| ECIAI39_3434 | 0.0032             | 0.6139             | 0.00519            |
| ECIAI39_3435 | 0.0164             | 0.5302             | 0.03089            |
| ECIAI39_3436 | 0.0225             | 0.33135            | 0.06449            |
| ECIAI39_3437 | 0.01155            | 0.391325           | 0.0360625          |
| ECIAI39_3438 | 0.0112             | 0.2851             | 0.03912            |
| ECIAI39_3439 | 0.0053             | 0.3268             | 0.0163             |
| ECIAI39_3440 | 0.0039             | 0.5744             | 0.00681            |
| ECIAI39_3441 | 0                  | 0.3612             | 0                  |
| ECIAI39_3442 | 0.0071             | 0.46885            | 0.014905           |
| ECIAI39_3443 | 0.0119             | 0.3334             | 0.03585            |
| ECIAI39_3445 | 0.0329             | 0.3319             | 0.09921            |
| ECIAI39_3446 | 0.0038             | 0.2901             | 0.01301            |
| ECIAI39_3447 | 0                  | 0.1855             | 0                  |
| ECIAI39_3448 | 0.0028             | 0.3371             | 0.0084             |
| ECIAI39_3449 | 0                  | 0.1499             | 0                  |
| ECIAI39_3450 | 0.0044             | 0.2333             | 0.01905            |
| ECIAI39_3452 | 0.054              | 0.0774             | 0.69764            |
| ECIAI39_3453 | 0.0033             | 0.1033             | 0.03156            |
| ECIAI39_3454 | 0.0100666666666667 | 0.1550333333333333 | 0.08505            |
| ECIAI39_3455 | 0.0223             | 0.3371             | 0.06611            |
| ECIAI39_3456 | 0.0051             | 0.4699             | 0.011065           |
| ECIAI39_3457 | 0.0025             | 0.1079             | 0.02275            |
| ECIAI39_3458 | 0.0076             | 0.1608             | 0.04741            |
| ECIAI39_3460 | 0.00858            | 0.31288            | 0.039518           |
| ECIAI39_3462 | 0.0160333333333333 | 0.4448333333333333 | 0.0389133333333333 |
| ECIAI39_3468 | 0.0049             | 0.2901             | 0.01693            |
| ECIAI39_3471 | 0.0167             | 0.3358             | 0.04959            |
| ECIAI39_3476 | 0.0548             | 1.6723             | 0.03275            |
| ECIAI39_3477 | 0.042              | 1.36655            | 0.02947            |
| ECIAI39_3478 | 0.0124             | 0.1573             | 0.07904            |
| ECIAI39_3480 | 0                  | 0.1001             | 0                  |
| ECIAI39_3483 | 0                  | 0.1271             | 0                  |
| ECIAI39_3484 | 0.0029             | 0.3541             | 0.00634            |
| ECIAI39_3486 | 0.0042             | 0.4561             | 0.00917            |
| ECIAI39_3489 | 0.0142             | 0.2553             | 0.05553            |
| ECIAI39_3490 | 0.0042             | 0.32               | 0.0131             |
| ECIAI39_3493 | 0.0467             | 0.3616             | 0.12921            |
| ECIAI39_3499 | 0.0241             | 0.1433             | 0.16788            |
| ECIAI39_3500 | 0.011              | 0.143              | 0.07711            |
| ECIAI39_3501 | 0.0041             | 0.1132             | 0.03588            |
| ECIAI39_3502 | 0.0052             | 0.1763             | 0.02963            |
| ECIAI39_3503 | 0                  | 0.0681             | 0                  |
| ECIAI39_3509 | 0.0488             | 0.2391             | 0.2023833333333333 |
| ECIAI39_3510 | 0.0024             | 0.2116             | 0.01154            |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$    | $\omega$ |
|--------------|--------------------|---------|----------|
| ECIAI39_3513 | 0.00525            | 0.16235 | 0.03017  |
| ECIAI39_3514 | 0.0068             | 0.1226  | 0.05552  |
| ECIAI39_3516 | 0.0141             | 0.1044  | 0.13483  |
| ECIAI39_3517 | 0.0373             | 0.1433  | 0.26055  |
| ECIAI39_3519 | 0.0068             | 0.1775  | 0.03839  |
| ECIAI39_3521 | 0.01               | 0.5171  | 0.017755 |
| ECIAI39_3523 | 0.0131             | 0.2633  | 0.04956  |
| ECIAI39_3526 | 0.0126             | 0.109   | 0.11528  |
| ECIAI39_3527 | 0.0095             | 0.1325  | 0.07176  |
| ECIAI39_3528 | 0.0099             | 0.1731  | 0.05691  |
| ECIAI39_3530 | 0.0011             | 0.0602  | 0.01906  |
| ECIAI39_3532 | 0.0073             | 0.1604  | 0.04571  |
| ECIAI39_3538 | 0.0103             | 0.1609  | 0.06421  |
| ECIAI39_3539 | 0.0125             | 0.1966  | 0.06351  |
| ECIAI39_3545 | 0.0224             | 0       | NA       |
| ECIAI39_3547 | 0                  | 0.0154  | 0        |
| ECIAI39_3549 | 0.0121666666666667 | 0.3101  | 0.06132  |
| ECIAI39_3550 | 0                  | 0.3111  | 0        |
| ECIAI39_3552 | 0.0027             | 0.2063  | 0.01301  |
| ECIAI39_3557 | 0.0154             | 0.4243  | 0.03623  |
| ECIAI39_3558 | 0.0194             | 0.4584  | 0.04225  |
| ECIAI39_3559 | 0.01425            | 0.1981  | 0.080635 |
| ECIAI39_3560 | 0.0502             | 0.1916  | 0.26177  |
| ECIAI39_3561 | 0.0313             | 0.2302  | 0.13606  |
| ECIAI39_3562 | 0.0043             | 0.1079  | 0.04008  |
| ECIAI39_3563 | 0.0082             | 0.14095 | 0.059405 |
| ECIAI39_3564 | 0                  | 0.04365 | 0        |
| ECIAI39_3568 | 0.0041             | 0.3063  | 0.01355  |
| ECIAI39_3570 | 0.0015             | 0.1138  | 0.01348  |
| ECIAI39_3571 | 0.0204             | 0.2809  | 0.07254  |
| ECIAI39_3574 | 0.00515            | 0.1638  | 0.03138  |
| ECIAI39_3575 | 0.0059             | 0.1272  | 0.04626  |
| ECIAI39_3576 | 0.0042             | 0.2338  | 0.01776  |
| ECIAI39_3577 | 0.0012             | 0.1062  | 0.01171  |
| ECIAI39_3578 | 0.0035             | 0.1388  | 0.0252   |
| ECIAI39_3579 | 0.0056             | 0.181   | 0.03069  |
| ECIAI39_3580 | 0.026              | 0.1493  | 0.1951   |
| ECIAI39_3592 | 0.0074             | 0.373   | 0.01979  |
| ECIAI39_3593 | 0.0105             | 0.3383  | 0.03111  |
| ECIAI39_3595 | 0.0174             | 0.3035  | 0.05749  |
| ECIAI39_3597 | 0.0076             | 0.1247  | 0.06067  |
| ECIAI39_3612 | 0.0026             | 0.1126  | 0.02344  |
| ECIAI39_3614 | 0.0052             | 0.1995  | 0.02581  |
| ECIAI39_3615 | 0.014              | 0.3673  | 0.03823  |
| ECIAI39_3616 | 0.005              | 0.1337  | 0.03766  |
| ECIAI39_3617 | 0.0027             | 0.405   | 0.00655  |
| ECIAI39_3621 | 0.0184             | 0.1721  | 0.10704  |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_3622 | 0                  | 0.4475             | 0                  |
| ECIAI39_3623 | 0.00445            | 0.13095            | 0.03396            |
| ECIAI39_3624 | 0                  | 0.1324             | 0                  |
| ECIAI39_3625 | 0.0048             | 0.195              | 0.02471            |
| ECIAI39_3626 | 0.0048             | 0.2815             | 0.01694            |
| ECIAI39_3627 | 0.01885            | 0.20675            | 0.092365           |
| ECIAI39_3630 | 0.0069             | 0.4102             | 0.0169             |
| ECIAI39_3631 | 0.0048             | 0.2452             | 0.01958            |
| ECIAI39_3634 | 0.0015             | 0.3348             | 0.00436            |
| ECIAI39_3635 | 0.0072             | 0.1535             | 0.04686            |
| ECIAI39_3636 | 0.0289             | 0.2399             | 0.12052            |
| ECIAI39_3640 | 0.5365             | 9.2696             | 0.05787            |
| ECIAI39_3643 | 0.47995            | 7.57225            | 0.063655           |
| ECIAI39_3645 | 0.06               | 2.2229             | 0.02699            |
| ECIAI39_3646 | 0.04015            | 4.08225            | 0.03687            |
| ECIAI39_3647 | 0.03915            | 1.62355            | 0.02327            |
| ECIAI39_3648 | 0.0529             | 0.6434             | 0.08224            |
| ECIAI39_3649 | 0.1324             | 1.7333             | 0.07641            |
| ECIAI39_3650 | 0.0035             | 0.1791             | 0.01952            |
| ECIAI39_3653 | 0.0085             | 0.0991             | 0.08571            |
| ECIAI39_3654 | 0.0069             | 0.1458             | 0.04758            |
| ECIAI39_3655 | 0.0020666666666667 | 0.0370333333333333 | 0.0209633333333333 |
| ECIAI39_3657 | 0.0061             | 0.0652             | 0.137365           |
| ECIAI39_3658 | 0.0033             | 0.19845            | 0.012035           |
| ECIAI39_3659 | 0.0066             | 0.2899             | 0.02272            |
| ECIAI39_3660 | 0.0321             | 0.1819             | 0.17656            |
| ECIAI39_3661 | 0.0207             | 0.1624             | 0.1424366666666667 |
| ECIAI39_3663 | 0.0012             | 0.0326             | 0.025675           |
| ECIAI39_3665 | 0.00465            | 0.23215            | 0.02288            |
| ECIAI39_3666 | 0.0113             | 0.4621             | 0.02436            |
| ECIAI39_3668 | 0.001              | 0.1356             | 0.0077             |
| ECIAI39_3669 | 0.018              | 0.1512             | 0.11932            |
| ECIAI39_3673 | 0.0072             | 0.1384             | 0.0517             |
| ECIAI39_3677 | 0.0255             | 0.4369             | 0.0584             |
| ECIAI39_3678 | 0.0317             | 0.7263             | 0.04369            |
| ECIAI39_3679 | 0.0075             | 0.14775            | 0.050975           |
| ECIAI39_3680 | 0.0136             | 0.2011             | 0.06745            |
| ECIAI39_3682 | 0.0129             | 0.1359             | 0.09496            |
| ECIAI39_3683 | 0.0088             | 0.1567             | 0.05584            |
| ECIAI39_3684 | 0.0116             | 0.3717             | 0.03114            |
| ECIAI39_3688 | 0.0027             | 0.2249             | 0.01207            |
| ECIAI39_3689 | 0.0091             | 0.2501             | 0.03644            |
| ECIAI39_3690 | 0.0102             | 0.4071             | 0.02495            |
| ECIAI39_3691 | 0.0025             | 0.4057             | 0.00605            |
| ECIAI39_3692 | 0.0077             | 0.2273             | 0.037635           |
| ECIAI39_3693 | 0.0177             | 0.4084             | 0.0434             |
| ECIAI39_3697 | 0.0202             | 0.1694             | 0.11151            |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$              | $\omega$ |
|--------------|--------------------|-------------------|----------|
| ECIAI39_3701 | 0.0207             | 0.3082            | 0.06712  |
| ECIAI39_3703 | 0.0175             | 0.1327            | 0.13191  |
| ECIAI39_3705 | 0.0197             | 0.1462            | 0.13448  |
| ECIAI39_3707 | 0.0170833333333333 | 0.231083333333333 | 0.07039  |
| ECIAI39_3708 | 0.0299             | 0.3643            | 0.08205  |
| ECIAI39_3715 | 0.0036             | 0.2206            | 0.01626  |
| ECIAI39_3717 | 0.003              | 0.1914            | 0.01561  |
| ECIAI39_3719 | 0.0013             | 0.2062            | 0.00644  |
| ECIAI39_3721 | 0                  | 0.2162            | 0        |
| ECIAI39_3722 | 0.001              | 0.1077            | 0.00926  |
| ECIAI39_3724 | 0.00285            | 0.00455           | 0.31081  |
| ECIAI39_3725 | 0.0009             | 0.0859            | 0.00996  |
| ECIAI39_3726 | 0.00465            | 0.44325           | 0.01139  |
| ECIAI39_3729 | 0.0146             | 0.2962            | 0.04935  |
| ECIAI39_3731 | 0.0127             | 0.33695           | 0.047275 |
| ECIAI39_3732 | 0.02255            | 0.30095           | 0.074435 |
| ECIAI39_3734 | 0.0103             | 0.103             | 0.10028  |
| ECIAI39_3735 | 0.0054             | 0.3334            | 0.01611  |
| ECIAI39_3736 | 0.09445            | 1.30275           | 0.069645 |
| ECIAI39_3744 | 0.00155            | 0.25285           | 0.00449  |
| ECIAI39_3745 | 0.0015             | 0.1943            | 0.00749  |
| ECIAI39_3748 | 0.0024             | 0.2307            | 0.01032  |
| ECIAI39_3750 | 0.0063             | 0.2108            | 0.0301   |
| ECIAI39_3751 | 0.0037             | 0.0145            | 0.25517  |
| ECIAI39_3752 | 0.0007             | 0.02085           | 0.0935   |
| ECIAI39_3754 | 0                  | 0.067             | 0        |
| ECIAI39_3755 | 0.00145            | 0.06345           | 0.025235 |
| ECIAI39_3756 | 0.00185            | 0.0219            | 0.041735 |
| ECIAI39_3758 | 0.00445            | 0.1145            | 0.02197  |
| ECIAI39_3762 | 0.00475            | 0.14045           | 0.036135 |
| ECIAI39_3764 | 0.0118             | 0.2264            | 0.05207  |
| ECIAI39_3765 | 0.0053             | 0.1409            | 0.03751  |
| ECIAI39_3769 | 0.0048             | 0.1624            | 0.02943  |
| ECIAI39_3770 | 0.0015             | 0.1054            | 0.01464  |
| ECIAI39_3771 | 0.0033             | 0.1072            | 0.03094  |
| ECIAI39_3781 | 0                  | 0.0519            | 0        |
| ECIAI39_3782 | 0.0129             | 0.1706            | 0.07553  |
| ECIAI39_3786 | 0                  | 0.1861            | 0        |
| ECIAI39_3792 | 0.0074             | 0.6615            | 0.01119  |
| ECIAI39_3794 | 0.0159             | 0.7315            | 0.0218   |
| ECIAI39_3795 | 0.0078             | 0.3771            | 0.02066  |
| ECIAI39_3798 | 0.0049             | 0.4665            | 0.01048  |
| ECIAI39_3800 | 0.006              | 0.6981            | 0.00856  |
| ECIAI39_3803 | 0.0098             | 0.337             | 0.02898  |
| ECIAI39_3807 | 0.0088             | 0.2198            | 0.04017  |
| ECIAI39_3811 | 0.0058             | 0.1323            | 0.04417  |
| ECIAI39_3812 | 0                  | 0.0262            | 0        |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$    | $\omega$            |
|--------------|--------------------|---------|---------------------|
| ECIAI39_3814 | 0.0011             | 0.1456  | 0.00741             |
| ECIAI39_3816 | 0.0038             | 0.1402  | 0.02726             |
| ECIAI39_3819 | 0.0067             | 0.1219  | 0.05535             |
| ECIAI39_3820 | 0.00675            | 0.215   | 0.031585            |
| ECIAI39_3821 | 0.0162             | 0.1559  | 0.10396             |
| ECIAI39_3823 | 0.0067             | 0.3027  | 0.022               |
| ECIAI39_3825 | 0.0311             | 0.1039  | 0.29941             |
| ECIAI39_3826 | 0                  | 0.1633  | 0                   |
| ECIAI39_3827 | 0.01445            | 0.16945 | 0.12085             |
| ECIAI39_3829 | 0.0184             | 0.1313  | 0.13994             |
| ECIAI39_3830 | 0.0279             | 0.1685  | 0.1655              |
| ECIAI39_3833 | 0.0118             | 0.1521  | 0.07745             |
| ECIAI39_3835 | 0.005              | 0.1968  | 0.02561             |
| ECIAI39_3836 | 0.0228             | 0.3515  | 0.12589             |
| ECIAI39_3838 | 0.0358             | 0.4561  | 0.0784              |
| ECIAI39_3841 | 0.0426             | 0.1764  | 0.24165             |
| ECIAI39_3842 | 0.00715            | 0.19925 | 0.0713              |
| ECIAI39_3843 | 0.0052             | 0.1395  | 0.03755             |
| ECIAI39_3845 | 0.008              | 0.2     | 0.03994             |
| ECIAI39_3848 | 0.0063             | 0.2953  | 0.02117             |
| ECIAI39_3849 | 0.00705            | 0.3511  | 0.01373             |
| ECIAI39_3850 | 0.0065             | 0.2494  | 0.02597             |
| ECIAI39_3851 | 0.01395            | 0.31965 | 0.042935            |
| ECIAI39_3852 | 0.002              | 0.2472  | 0.00799             |
| ECIAI39_3854 | 0.0033             | 0.4808  | 0.00683             |
| ECIAI39_3857 | 0                  | 0.305   | 0                   |
| ECIAI39_3858 | 0.0048             | 0.2541  | 0.01895             |
| ECIAI39_3859 | 0                  | 0.0967  | 0                   |
| ECIAI39_3861 | 0                  | 0.4049  | 0                   |
| ECIAI39_3862 | 0.0008             | 0.3024  | 0.00254             |
| ECIAI39_3863 | 0.0094             | 0.4678  | 0.02                |
| ECIAI39_3864 | 0.0023             | 0.2106  | 0.0111              |
| ECIAI39_3865 | 0.0044             | 0.1191  | 0.0366              |
| ECIAI39_3866 | 0.0121             | 0.2884  | 0.04198             |
| ECIAI39_3867 | 0.0035             | 0.319   | 0.010405            |
| ECIAI39_3869 | 0.0159             | 0.3267  | 0.04855             |
| ECIAI39_3872 | 0.0184             | 0.2115  | 0.08709             |
| ECIAI39_3874 | 0.0032666666666667 | 0.1316  | 0.02787             |
| ECIAI39_3875 | 0.0177             | 0.078   | 0.22688             |
| ECIAI39_3876 | 0.0015666666666667 | 0.0548  | 0.02171333333333333 |
| ECIAI39_3877 | 0.0037             | 0.1494  | 0.0248              |
| ECIAI39_3879 | 0.012              | 0.2132  | 0.081895            |
| ECIAI39_3880 | 0.0049             | 0.4493  | 0.01086             |
| ECIAI39_3881 | 0.0113             | 0.2737  | 0.039835            |
| ECIAI39_3884 | 0.012              | 0.2108  | 0.05695             |
| ECIAI39_3886 | 0.0044             | 0.2763  | 0.01588             |
| ECIAI39_3887 | 0.00735            | 0.13225 | 0.05106             |

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Table S1 – continued from previous page

| Gene         | $dN$                | $dS$                | $\omega$ |
|--------------|---------------------|---------------------|----------|
| ECIAI39_3888 | 0.0113              | 0.2417              | 0.04668  |
| ECIAI39_3896 | 0.03193333333333333 | 0.20023333333333333 | 0.15126  |
| ECIAI39_3897 | 0.00865             | 0.1594              | 0.05574  |
| ECIAI39_3898 | 0.0221              | 0.1319              | 0.186245 |
| ECIAI39_3899 | 0.00345             | 0.1666              | 0.023205 |
| ECIAI39_3901 | 0.01                | 0.1771              | 0.07372  |
| ECIAI39_3903 | 0.0062              | 0.3338              | 0.01858  |
| ECIAI39_3904 | 0.0042              | 0.1797              | 0.02326  |
| ECIAI39_3906 | 0                   | 0.1904              | 0        |
| ECIAI39_3907 | 0                   | 0.0712              | 0        |
| ECIAI39_3917 | 0.01085             | 0.2014              | 0.06111  |
| ECIAI39_3918 | 0.00425             | 0.2497              | 0.028945 |
| ECIAI39_3920 | 0.0936              | 0.5274              | 0.17744  |
| ECIAI39_3922 | 0.0032              | 0.1122              | 0.018375 |
| ECIAI39_3923 | 0.0016              | 0.1357              | 0.0115   |
| ECIAI39_3924 | 0.0055              | 0.2819              | 0.01949  |
| ECIAI39_3927 | 0.00175             | 0.1601              | 0.00647  |
| ECIAI39_3934 | 0.0367              | 0.65295             | 0.056805 |
| ECIAI39_3935 | 0.0293              | 0.55345             | 0.065885 |
| ECIAI39_3937 | 0.0169              | 0.3664              | 0.04622  |
| ECIAI39_3938 | 0.0199              | 0.2495              | 0.075635 |
| ECIAI39_3939 | 0.0108              | 0.1588              | 0.06773  |
| ECIAI39_3940 | 0.0157              | 0.0931              | 0.16906  |
| ECIAI39_3942 | 0.0095              | 0.2089              | 0.04552  |
| ECIAI39_3943 | 0.01005             | 0.18855             | 0.049345 |
| ECIAI39_3944 | 0.0136              | 0.2428              | 0.05588  |
| ECIAI39_3945 | 0.0005              | 0.11865             | 0.00295  |
| ECIAI39_3946 | 0                   | 0.1547              | 0        |
| ECIAI39_3947 | 0                   | 0.037               | 0        |
| ECIAI39_3949 | 0.0016              | 0.0764              | 0.02101  |
| ECIAI39_3950 | 0.00365             | 0.11805             | 0.026795 |
| ECIAI39_3952 | 0.0148              | 0.239               | 0.06177  |
| ECIAI39_3953 | 0                   | 0.1609              | 0        |
| ECIAI39_3954 | 0.0109              | 0.09                | 0.121155 |
| ECIAI39_3955 | 0.0042              | 0.0678              | 0.0718   |
| ECIAI39_3956 | 0.0192              | 0.3104              | 0.06199  |
| ECIAI39_3957 | 0.0028              | 0.2113              | 0.01338  |
| ECIAI39_3958 | 0.0047              | 0.282               | 0.01671  |
| ECIAI39_3959 | 0.0017              | 0.0591              | 0.02956  |
| ECIAI39_3960 | 0                   | 0.025               | 0        |
| ECIAI39_3961 | 0                   | 0.0321              | 0        |
| ECIAI39_3962 | 0.0051              | 0.1384              | 0.0371   |
| ECIAI39_3964 | 0.0033              | 0.1062              | 0.03126  |
| ECIAI39_3966 | 0.0056              | 0.10925             | 0.05647  |
| ECIAI39_3967 | 0.0014              | 0.106               | 0.0136   |
| ECIAI39_3968 | 0.039               | 0.3599              | 0.10842  |
| ECIAI39_3969 | 0.0057              | 0.395               | 0.01446  |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$           |
|--------------|--------------------|--------------------|--------------------|
| ECIAI39_3970 | 0.0102             | 0.505              | 0.02019            |
| ECIAI39_3971 | 0                  | 0                  | 0                  |
| ECIAI39_3972 | 0.0043             | 0.1161             | 0.02572            |
| ECIAI39_3973 | 0.0056             | 0.3345             | 0.01664            |
| ECIAI39_3974 | 0.0109             | 0.3997             | 0.0273             |
| ECIAI39_3975 | 0.002              | 0.2259             | 0.00877            |
| ECIAI39_3976 | 0.0114             | 0.2208             | 0.05176            |
| ECIAI39_3978 | 0.0412             | 0.2613             | 0.15757            |
| ECIAI39_3981 | 0.0141             | 0.495              | 0.02848            |
| ECIAI39_3982 | 0.0104             | 0.3404             | 0.03064            |
| ECIAI39_3986 | 0.0046             | 0.3798             | 0.01211            |
| ECIAI39_3987 | 0.0112             | 0.2314             | 0.04822            |
| ECIAI39_3988 | 0.0249             | 0.2176             | 0.1146             |
| ECIAI39_3989 | 0.0105             | 0.1854             | 0.05669            |
| ECIAI39_3990 | 0.0095             | 0.24145            | 0.036025           |
| ECIAI39_3994 | 0.0016             | 0.2288             | 0.00717            |
| ECIAI39_3997 | 0.0178             | 0.1654             | 0.10733            |
| ECIAI39_3998 | 0.0162             | 0.1561             | 0.10361            |
| ECIAI39_3999 | 0.0039             | 0.1758             | 0.0221             |
| ECIAI39_4000 | 0.0023             | 0.295              | 0.00787            |
| ECIAI39_4001 | 0.0595             | 0.3124             | 0.19038            |
| ECIAI39_4002 | 0.0011             | 0.17925            | 0.006105           |
| ECIAI39_4004 | 0.0011             | 0.13835            | 0.011495           |
| ECIAI39_4005 | 0.0131             | 0.2722             | 0.04816            |
| ECIAI39_4007 | 0.023              | 0.3359             | 0.06844            |
| ECIAI39_4009 | 0.0139             | 0.1469             | 0.09446            |
| ECIAI39_4016 | 0.0148             | 0.2371333333333333 | 0.0599066666666667 |
| ECIAI39_4019 | 0                  | 0.0355             | 0                  |
| ECIAI39_4020 | 0.0008666666666667 | 0.0429666666666667 | 0.01432            |
| ECIAI39_4021 | 0                  | 0.02705            | 0                  |
| ECIAI39_4029 | 0.01425            | 0.2836             | 0.050225           |
| ECIAI39_4030 | 0.02595            | 0.2041             | 0.137005           |
| ECIAI39_4031 | 0.0306             | 0.2138             | 0.144785           |
| ECIAI39_4032 | 0.01305            | 0.12325            | 0.126325           |
| ECIAI39_4033 | 0.00596            | 0.13688            | 0.11726            |
| ECIAI39_4034 | 0.0101             | 0.10485            | 0.135075           |
| ECIAI39_4035 | 0.0311333333333333 | 0.456466666666667  | 0.07578            |
| ECIAI39_4036 | 0.0252333333333333 | 0.370866666666667  | 0.0789             |
| ECIAI39_4038 | 0.0072             | 0.2678             | 0.02696            |
| ECIAI39_4048 | 0.0116             | 0.1795             | 0.06487            |
| ECIAI39_4049 | 0.0175             | 0.2678             | 0.06531            |
| ECIAI39_4050 | 0.0022             | 0.2424             | 0.00927            |
| ECIAI39_4052 | 0.0128             | 0.3656             | 0.03491            |
| ECIAI39_4054 | 0.0053             | 0.3754             | 0.01415            |
| ECIAI39_4055 | 0.0068             | 0.3767             | 0.01798            |
| ECIAI39_4056 | 0.0068             | 0.405              | 0.0168             |
| ECIAI39_4059 | 0.0019             | 0.2202             | 0.00735            |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$              | $\omega$           |
|--------------|--------------------|-------------------|--------------------|
| ECIAI39_4060 | 0.0112             | 0.3308            | 0.03382            |
| ECIAI39_4061 | 0.0104             | 0.3279            | 0.03161            |
| ECIAI39_4062 | 0.0066             | 0.1342            | 0.0493             |
| ECIAI39_4065 | 0.0025             | 0.1941            | 0.01314            |
| ECIAI39_4067 | 0.0357             | 0.247966666666667 | 0.14662            |
| ECIAI39_4068 | 0.0084             | 0.2601            | 0.03217            |
| ECIAI39_4071 | 0.0116             | 0.1179            | 0.09808            |
| ECIAI39_4076 | 0.00395            | 0.1437            | 0.02842            |
| ECIAI39_4077 | 0.0059             | 0.1935            | 0.03043            |
| ECIAI39_4079 | 0.0023             | 0.09795           | 0.024025           |
| ECIAI39_4080 | 0.0823             | 1.4055            | 0.05857            |
| ECIAI39_4083 | 0.0143             | 0.1257            | 0.26819            |
| ECIAI39_4084 | 0.0006             | 0.2069            | 0.00281            |
| ECIAI39_4086 | 0.004              | 0.1309            | 0.02318            |
| ECIAI39_4087 | 0.0132             | 0.1951            | 0.06755            |
| ECIAI39_4089 | 0                  | 0.2691            | 0                  |
| ECIAI39_4090 | 0.0055             | 0.1473            | 0.03723            |
| ECIAI39_4092 | 0.017              | 0.224566666666667 | 0.0786833333333333 |
| ECIAI39_4093 | 0.0085             | 0.1996            | 0.04243            |
| ECIAI39_4095 | 0.0041             | 0.2061            | 0.01996            |
| ECIAI39_4096 | 0.0041             | 0.1878            | 0.02202            |
| ECIAI39_4097 | 0.022              | 0.1642            | 0.13406            |
| ECIAI39_4100 | 0.00355            | 0.11185           | 0.050145           |
| ECIAI39_4102 | 0.0015             | 0.4086            | 0.00369            |
| ECIAI39_4105 | 0.00775            | 0.1735            | 0.03843            |
| ECIAI39_4106 | 0.0268             | 0.1804            | 0.1484             |
| ECIAI39_4107 | 0.0094             | 0.2214            | 0.04252            |
| ECIAI39_4108 | 0.0034             | 0.1644            | 0.02038            |
| ECIAI39_4109 | 0.0026             | 0.1616            | 0.01633            |
| ECIAI39_4114 | 0.01225            | 0.215             | 0.063895           |
| ECIAI39_4117 | 0.0039             | 0.1225            | 0.03148            |
| ECIAI39_4120 | 0.0077             | 0.1003            | 0.07636            |
| ECIAI39_4121 | 0.0082             | 0.2043            | 0.04024            |
| ECIAI39_4124 | 0.002              | 0.1965            | 0.01022            |
| ECIAI39_4125 | 0.0034             | 0.1612            | 0.02083            |
| ECIAI39_4126 | 0                  | 0.0314            | 0                  |
| ECIAI39_4128 | 0.0132             | 0.2229            | 0.05927            |
| ECIAI39_4129 | 0.0216             | 0.3573            | 0.06033            |
| ECIAI39_4131 | 0.0302             | 0.2254            | 0.13403            |
| ECIAI39_4133 | 0.03685            | 0.3195            | 0.11907            |
| ECIAI39_4134 | 0.03925            | 1.01065           | 0.04432            |
| ECIAI39_4142 | 0.03765            | 0.51865           | 0.07599            |
| ECIAI39_4143 | 0.0315333333333333 | 0.401966666666667 | 0.089116666666667  |
| ECIAI39_4144 | 0.022              | 0.6225            | 0.03539            |
| ECIAI39_4145 | 0.0416             | 0.8217            | 0.05065            |
| ECIAI39_4146 | 0.0113             | 0.7107            | 0.01596            |
| ECIAI39_4147 | 0.0126             | 0.6106            | 0.02058            |

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Table S1 – continued from previous page

| Gene         | $dN$                | $dS$               | $\omega$            |
|--------------|---------------------|--------------------|---------------------|
| ECIAI39_4148 | 0.0189              | 0.5413             | 0.03485             |
| ECIAI39_4149 | 0.02483333333333333 | 0.4043666666666667 | 0.08411             |
| ECIAI39_4150 | 0.0092              | 0.4443             | 0.02073             |
| ECIAI39_4151 | 0.01986666666666667 | 0.4768             | 0.04309666666666667 |
| ECIAI39_4152 | 0.0267              | 0.5103             | 0.05225             |
| ECIAI39_4155 | 0                   | 0.0521             | 0                   |
| ECIAI39_4156 | 0.0075              | 0.1431             | 0.05257             |
| ECIAI39_4157 | 0.0312              | 0.0924             | 0.33742             |
| ECIAI39_4159 | 0.0471              | 0.1557             | 0.30218             |
| ECIAI39_4162 | 0.0096              | 0.1014             | 0.09426             |
| ECIAI39_4163 | 0.0088              | 0.3273             | 0.02681             |
| ECIAI39_4164 | 0.0273              | 0.57395            | 0.051365            |
| ECIAI39_4165 | 0.0178              | 0.3418             | 0.05207             |
| ECIAI39_4166 | 0                   | 0.1646             | 0                   |
| ECIAI39_4167 | 0.0051              | 0.1422             | 0.03583             |
| ECIAI39_4172 | 0.00515             | 0.1409             | 0.035095            |
| ECIAI39_4174 | 0.0327              | 0.1948             | 0.16759             |
| ECIAI39_4175 | 0.0085              | 0.1642             | 0.05148             |
| ECIAI39_4176 | 0                   | 0.0956             | 0                   |
| ECIAI39_4177 | 0.002               | 0.1648             | 0.01211             |
| ECIAI39_4178 | 0.0057              | 0.1619             | 0.03516             |
| ECIAI39_4179 | 0                   | 0.1622             | 0                   |
| ECIAI39_4180 | 0.01955             | 0.0923             | 0.220645            |
| ECIAI39_4182 | 0.0027              | 0.1641             | 0.01663             |
| ECIAI39_4185 | 0.0172              | 0.1646             | 0.10477             |
| ECIAI39_4186 | 0.00135             | 0.07875            | 0.018555            |
| ECIAI39_4190 | 0.0206              | 0.1289             | 0.16011             |
| ECIAI39_4191 | 0.00275             | 0.06715            | 0.03882             |
| ECIAI39_4193 | 0                   | 0.0703             | 0                   |
| ECIAI39_4195 | 0.0111              | 0.1775             | 0.06262             |
| ECIAI39_4196 | 0                   | 0.054              | 0                   |
| ECIAI39_4198 | 0                   | 0.1577             | 0                   |
| ECIAI39_4199 | 0.0377              | 0.1643             | 0.22958             |
| ECIAI39_4202 | 0.0046              | 0.1213             | 0.03828             |
| ECIAI39_4203 | 0.0027              | 0.1259             | 0.02133             |
| ECIAI39_4207 | 0.0042              | 0.1372             | 0.03073             |
| ECIAI39_4211 | 0.00615             | 0.11975            | 0.03985             |
| ECIAI39_4212 | 0.0164              | 0.4377             | 0.03755             |
| ECIAI39_4215 | 0.0011              | 0.2712             | 0.00417             |
| ECIAI39_4218 | 0.0043              | 0.1792             | 0.02424             |
| ECIAI39_4219 | 0.0027              | 0.2453             | 0.01099             |
| ECIAI39_4220 | 0.0025              | 0.3197             | 0.0078              |
| ECIAI39_4221 | 0.0082              | 0.2082             | 0.03927             |
| ECIAI39_4223 | 0.024               | 0.1623             | 0.14805             |
| ECIAI39_4224 | 0.0052              | 0.1695             | 0.021325            |
| ECIAI39_4227 | 0.0152              | 0.2089             | 0.07295             |
| ECIAI39_4228 | 0.0074              | 0.0377             | 0.195425            |

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Table S1 – continued from previous page

| Gene         | $dN$                 | $dS$                | $\omega$            |
|--------------|----------------------|---------------------|---------------------|
| ECIAI39_4229 | 0.0023               | 0.1196              | 0.01892             |
| ECIAI39_4231 | 0.0035               | 0.0976              | 0.0354              |
| ECIAI39_4233 | 0                    | 0.0179              | 0                   |
| ECIAI39_4235 | 0                    | 0.0563              | 0                   |
| ECIAI39_4236 | 0.0047               | 0.203               | 0.02312             |
| ECIAI39_4237 | 0                    | 0.335               | 0                   |
| ECIAI39_4239 | 0.0112               | 0.1075              | 0.10383             |
| ECIAI39_4240 | 0.0306               | 0.3558              | 0.08844             |
| ECIAI39_4241 | 0                    | 0.27635             | 0                   |
| ECIAI39_4244 | 0.0168               | 0.323               | 0.05197             |
| ECIAI39_4248 | 0.0046               | 0.03                | 0.11654             |
| ECIAI39_4249 | 0.0192               | 0.0844              | 0.22788             |
| ECIAI39_4250 | 0.0019               | 0.1879              | 0.00991             |
| ECIAI39_4251 | 0.0052               | 0.4655              | 0.01113             |
| ECIAI39_4254 | 0.0233               | 0.643475            | 0.0322375           |
| ECIAI39_4255 | 0.0045               | 0.5162666666666667  | 0.01181333333333333 |
| ECIAI39_4256 | 0.01605              | 0.4613              | 0.0319              |
| ECIAI39_4257 | 0.001166666666666667 | 0.02056666666666667 | 0.05744666666666667 |
| ECIAI39_4258 | 0.0186909090909091   | 0.29016363636363636 | 0.0684354545454545  |
| ECIAI39_4259 | 0.0087               | 0.204               | 0.04286             |
| ECIAI39_4262 | 0.0039               | 0.1613              | 0.02443             |
| ECIAI39_4264 | 0.0207               | 0.1807              | 0.11463             |
| ECIAI39_4265 | 0.0005               | 0.0833              | 0.00455             |
| ECIAI39_4266 | 0.0064               | 0.1289              | 0.0498              |
| ECIAI39_4267 | 0.0025               | 0.1238              | 0.02043             |
| ECIAI39_4269 | 0.0125               | 0.2528              | 0.04963             |
| ECIAI39_4271 | 0.0126               | 0.2133              | 0.05917             |
| ECIAI39_4273 | 0.006                | 0.3384              | 0.01775             |
| ECIAI39_4274 | 0.0123               | 0.3475              | 0.03551             |
| ECIAI39_4277 | 0.0123               | 0.3916              | 0.03138             |
| ECIAI39_4280 | 0.0028               | 0.1946              | 0.0145              |
| ECIAI39_4281 | 0.0052               | 0.2206              | 0.02371             |
| ECIAI39_4282 | 0.0052               | 0.2398              | 0.02184             |
| ECIAI39_4284 | 0.0197               | 0.1408              | 0.14014             |
| ECIAI39_4285 | 0.0032               | 0.1967              | 0.0165              |
| ECIAI39_4287 | 0.0181               | 0.1103              | 0.16442             |
| ECIAI39_4288 | 0.004                | 0.1796              | 0.02227             |
| ECIAI39_4290 | 0.0076               | 0.2138              | 0.03578             |
| ECIAI39_4292 | 0.0066               | 0.1829              | 0.03588             |
| ECIAI39_4294 | 0.003                | 0.2698              | 0.0112              |
| ECIAI39_4295 | 0.0015               | 0.0502              | 0.014935            |
| ECIAI39_4302 | 0.0196               | 0.2709              | 0.07247             |
| ECIAI39_4303 | 0.0226               | 0.9734666666666667  | 0.02801666666666667 |
| ECIAI39_4305 | 0.0024               | 0.269               | 0.00898             |
| ECIAI39_4306 | 0.0035               | 0.0835              | 0.04178             |
| ECIAI39_4309 | 0                    | 0.2333              | 0                   |
| ECIAI39_4310 | 0.0013               | 0.0739              | 0.01805             |

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Table S1 – continued from previous page

| Gene         | $dN$               | $dS$              | $\omega$           |
|--------------|--------------------|-------------------|--------------------|
| ECIAI39_4311 | 0                  | 0.1421            | 0                  |
| ECIAI39_4312 | 0.0284             | 0.4691            | 0.057895           |
| ECIAI39_4318 | 0.0184             | 0.4011            | 0.04585            |
| ECIAI39_4361 | 0.0061             | 0.2516            | 0.02407            |
| ECIAI39_4362 | 0.0069             | 0.2675            | 0.0257             |
| ECIAI39_4369 | 0.015              | 0.1931            | 0.0778             |
| ECIAI39_4370 | 0                  | 0.1475            | 0                  |
| ECIAI39_4371 | 0.0088             | 0.2471            | 0.03547            |
| ECIAI39_4372 | 0.0533333333333333 | 0.837666666666667 | 0.0887933333333333 |
| ECIAI39_4373 | 0.0171333333333333 | 0.291             | 0.0593766666666667 |
| ECIAI39_4393 | 0.0114             | 0.2753            | 0.04129            |
| ECIAI39_4394 | 0                  | 0                 | 0                  |
| ECIAI39_4395 | 0.0034             | 0.1731            | 0.01984            |
| ECIAI39_4396 | 0.0056             | 0.1615            | 0.03465            |
| ECIAI39_4399 | 0.0157             | 0.1165            | 0.13453            |
| ECIAI39_4400 | 0.0063666666666667 | 0.1411            | 0.0540766666666667 |
| ECIAI39_4401 | 0.0138             | 0.1573            | 0.08769            |
| ECIAI39_4403 | 0.0136             | 0.1139            | 0.1194             |
| ECIAI39_4404 | 0.0441             | 0.2406            | 0.24898            |
| ECIAI39_4405 | 0.01395            | 0.2259            | 0.080375           |
| ECIAI39_4406 | 0.005925           | 0.14145           | 0.055335           |
| ECIAI39_4408 | 0.007              | 0.1906            | 0.03666            |
| ECIAI39_4409 | 0.0079             | 0.2485            | 0.03179            |
| ECIAI39_4411 | 0.0355             | 0.3775            | 0.09398            |
| ECIAI39_4413 | 0.0054             | 0.3189            | 0.0169             |
| ECIAI39_4415 | 0.0036             | 0.1777            | 0.0202             |
| ECIAI39_4417 | 0.0024             | 0.1929            | 0.01231            |
| ECIAI39_4418 | 0.002              | 0.1952            | 0.01047            |
| ECIAI39_4422 | 0.0301             | 0.3808            | 0.08671            |
| ECIAI39_4423 | 0.0069             | 0.2886            | 0.0238             |
| ECIAI39_4424 | 0.0045             | 0.176             | 0.02557            |
| ECIAI39_4426 | 0.0033             | 0.44945           | 0.00708            |
| ECIAI39_4428 | 0                  | 0.277             | 0                  |
| ECIAI39_4431 | 0.0029             | 0.2916            | 0.00982            |
| ECIAI39_4433 | 0.0044             | 0.14              | 0.0315             |
| ECIAI39_4434 | 0.0103             | 0.184             | 0.0559266666666667 |
| ECIAI39_4435 | 0                  | 0.1369            | 0                  |
| ECIAI39_4436 | 0.0166             | 0.2482            | 0.06702            |
| ECIAI39_4437 | 0.0195             | 0.2263            | 0.0864             |
| ECIAI39_4440 | 0.0262             | 0.1786            | 0.14671            |
| ECIAI39_4442 | 0                  | 0.0732            | 0                  |
| ECIAI39_4443 | 0.0261             | 0.1621            | 0.209915           |
| ECIAI39_4937 | 0.0152             | 0.2165            | 0.07027            |

Table S2: Per gene  $dN$ ,  $dS$ , and  $\omega$  values calculated for *B. subtilis*.

| <i>Bacillus subtilis</i> |                     |                    |                    |
|--------------------------|---------------------|--------------------|--------------------|
| Gene                     | $dN$                | $dS$               | $\omega$           |
| gene_name                | dN                  | dS                 | omega              |
| B657_RS21020             | 0.0198              | 0.3709             | 0.05341            |
| B657_RS21130             | 0.01665             | 0.14565            | 0.110055           |
| B657_RS21135             | 0.03355             | 0.497              | 0.06602            |
| B657_RS21140             | 0.0687              | 0.64175            | 0.10724            |
| B657_RS21170             | 0.0324              | 0.4165333333333333 | 0.07838            |
| B657_RS21175             | 0.02295             | 0.2772             | 0.106485           |
| B657_RS21180             | 0.0039              | 0.202              | 0.01934            |
| B657_RS21185             | 0.0089              | 0.3754             | 0.02359            |
| B657_RS21190             | 0.0097              | 0.26345            | 0.03468            |
| B657_RS21195             | 0.04755             | 0.9777             | 0.048235           |
| B657_RS21200             | 0.0616              | 0.48               | 0.12842            |
| B657_RS21205             | 0.05475             | 0.51925            | 0.10833            |
| B657_RS21210             | 0.0957              | 0.5554             | 0.17224            |
| B657_RS21215             | 0.0628              | 0.3043             | 0.20636            |
| B657_RS21220             | 0.06955             | 0.3059             | 0.24682            |
| B657_RS21225             | 0.0283              | 0.2916             | 0.09705            |
| B657_RS21230             | 0.0141              | 0.1901             | 0.07427            |
| B657_RS21240             | 0.02543333333333333 | 0.4663666666666667 | 0.0646466666666667 |
| B657_RS21245             | 0.0471              | 0.2284             | 0.20622            |
| B657_RS21255             | 0.0589              | 0.3145             | 0.18483            |
| B657_RS21260             | 0.011               | 0.3412             | 0.03212            |
| B657_RS21265             | 0.0134              | 0.1976             | 0.06761            |
| B657_RS21270             | 0.0247              | 0.2268             | 0.1089             |
| B657_RS21275             | 0.0176              | 0.1524             | 0.11555            |
| B657_RS21285             | 0.0165              | 0.1789             | 0.09251            |
| B657_RS21300             | 0.08513333333333333 | 1.7132             | 0.0528166666666667 |
| B657_RS21310             | 0.02                | 0.1743             | 0.11492            |
| B657_RS21315             | 0.0114              | 0.2678             | 0.04261            |
| B657_RS21320             | 0.0137              | 0.3752             | 0.03661            |
| B657_RS21325             | 0.026               | 0.2968             | 0.08763            |
| B657_RS21340             | 0.02495             | 0.27115            | 0.08777            |
| B657_RS21345             | 0.0134              | 0.3324             | 0.04036            |
| B657_RS21350             | 0.0179              | 0.2686             | 0.0665             |
| B657_RS21355             | 0.0208              | 0.2422             | 0.08597            |
| B657_RS21360             | 0.0108              | 0.3264             | 0.03319            |
| B657_RS21365             | 0.0059              | 0.2287             | 0.02591            |
| B657_RS21390             | 0.0403666666666667  | 0.4546             | 0.09046            |
| B657_RS21395             | 0.0197              | 0.5549             | 0.03548            |
| B657_RS21400             | 0.02813333333333333 | 0.4778666666666667 | 0.0555866666666667 |
| B657_RS21425             | 0.0344              | 0.3423             | 0.10047            |
| B657_RS21430             | 0.0968              | 0.681025           | 0.1450925          |
| B657_RS21435             | 0.0261              | 0.5505             | 0.04733            |
| B657_RS21500             | 0.0675              | 0.3196             | 0.21136            |
| B657_RS21505             | 0.0564              | 0.3781             | 0.14909            |

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Table S2 – continued from previous page

| Gene           | $dN$                | $dS$               | $\omega$           |
|----------------|---------------------|--------------------|--------------------|
| B657_RS21515   | 0.0521              | 0.3195             | 0.16927            |
| B657_RS21520   | 0.032               | 0.2436             | 0.13153            |
| B657_RS21525   | 0.0299              | 0.4727             | 0.0632             |
| B657_RS21535   | 0.0376              | 0.2516             | 0.14955            |
| B657_RS21540   | 0.01345             | 0.27785            | 0.04872            |
| B657_RS21560   | 0.0255              | 0.3486             | 0.07316            |
| B657_RS21565   | 0.0149              | 0.4145             | 0.03601            |
| B657_RS21570   | 0.0782              | 0.0929             | 0.84181            |
| B657_RS21595   | 0.0114              | 0.23595            | 0.059915           |
| B657_RS21645   | 0.0085              | 0.4087             | 0.02079            |
| B657_RS21680   | 0.04215             | 0.29595            | 0.17832            |
| B657_RS21695   | 0.11115             | 0.3988             | 0.280295           |
| B657_RS21705   | 0.0521              | 0.4695333333333333 | 0.1191533333333333 |
| B657_RS21710   | 0.0217              | 0.2773             | 0.07838            |
| B657_RS21715   | 0.0168              | 0.33565            | 0.06229            |
| B657_RS21720   | 0.0183              | 0.4063             | 0.045              |
| B657_RS21725   | 0.0117              | 0.3116             | 0.03767            |
| BSBS38_RS02685 | 0.0102              | 0.2813             | 0.03621            |
| BSBS38_RS03245 | 0.0156              | 0.2732             | 0.05725            |
| BSBS38_RS06355 | 0.0655              | 0.4395             | 0.14896            |
| BSBS38_RS06455 | 0.0208              | 0.2823             | 0.07384            |
| BSBS38_RS13570 | 0.0157              | 0.2405             | 0.06516            |
| BSBS38_RS13600 | 0.0146              | 0.2687             | 0.05449            |
| BSBS38_RS15175 | 0.0232              | 0.334              | 0.06933            |
| BSBS38_RS16465 | 0.0984              | 0.6294             | 0.15634            |
| BSU17360       | 0.0113              | 0.1186             | 0.09556            |
| BSU39360       | 0.0131              | 0.3506             | 0.03726            |
| BSU39400       | 0.0078              | 0.3429             | 0.02289            |
| BSU39440       | 0.1182              | 0.6529             | 0.18111            |
| BSU39490       | 0.0147              | 0.3225             | 0.04556            |
| BSU39520       | 0.0191              | 0.4154             | 0.04604            |
| BSU39590       | 0.0195              | 0.2517             | 0.07742            |
| BSU39640       | 0.018               | 0.3285             | 0.05483            |
| BSU39690       | 0.0077              | 0.391              | 0.0196             |
| BSU39720       | 0.0207              | 0.218              | 0.09477            |
| BSU39780       | 0.01                | 0.3334             | 0.02986            |
| BSU39820       | 0.0062              | 0.4048             | 0.01538            |
| BSU39990       | 0.0251              | 0.1301             | 0.19324            |
| BSU40010       | 0.0119              | 0.2958             | 0.0401             |
| BSU40050       | 0.0232              | 0.2561             | 0.09077            |
| BSU40070       | 0.0102              | 0.3165             | 0.0323             |
| BSU40080       | 0.0118              | 0.2658             | 0.04439            |
| BSU40350       | 0.01415             | 0.49265            | 0.02951            |
| BSU40360       | 0.02395             | 0.1868             | 0.252125           |
| BSU40370       | 0.0052              | 0.3574             | 0.01462            |
| BSU40380       | 0.0261              | 0.2297             | 0.11365            |
| BSU40390       | 0.02886666666666667 | 0.2943             | 0.1020133333333333 |

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Table S2 – continued from previous page

| Gene           | $dN$    | $dS$     | $\omega$  |
|----------------|---------|----------|-----------|
| BSU40400       | 0.0038  | 0.2874   | 0.01306   |
| BSU40410       | 0       | 0.1751   | 0         |
| BSU40420       | 0.0068  | 0.1875   | 0.03609   |
| BSU40430       | 0.05395 | 0.3554   | 0.158905  |
| BSU40440       | 0.002   | 0.2769   | 0.00738   |
| BSU40450       | 0.0613  | 0.3172   | 0.19327   |
| BSU40460       | 0.0588  | 0.2333   | 0.25189   |
| BSU40480       | 0.03285 | 0.2685   | 0.122285  |
| BSU40490       | 0.06445 | 0.3292   | 0.1925975 |
| BSU40500       | 0.0064  | 0.2458   | 0.02605   |
| BSU40510       | 0.0042  | 0.2016   | 0.02105   |
| BSU40540       | 0.0285  | 0.2957   | 0.0965    |
| BSU40550       | 0.0091  | 0.2335   | 0.0389    |
| BSU40560       | 0.0425  | 0.3309   | 0.1283    |
| BSU40570       | 0.0089  | 0.3689   | 0.024     |
| BSU40630       | 0.0433  | 0.4511   | 0.10148   |
| BSU40710       | 0.0171  | 0.4546   | 0.03765   |
| BSU40720       | 0.0944  | 0.5156   | 0.18313   |
| BSU40730       | 0.0787  | 0.3792   | 0.20751   |
| BSU40820       | 0.03225 | 0.560125 | 0.0592975 |
| BSU40830       | 0.0237  | 0.4819   | 0.0492    |
| BSU40840       | 0.0268  | 0.4302   | 0.0622    |
| BSU40850       | 0.03905 | 0.2918   | 0.175005  |
| BSU40860       | 0.0487  | 0.2632   | 0.18513   |
| BSU40870       | 0.0597  | 0.2796   | 0.21345   |
| BSU40880       | 0.0333  | 0.4421   | 0.07544   |
| BSU40890       | 0       | 0.0537   | 0         |
| BSU40900       | 0       | 0.0366   | 0         |
| BSU40910       | 0.0099  | 0.0134   | 0.74218   |
| BSU40920       | 0.0076  | 0.272    | 0.02809   |
| BSU40930       | 0.0245  | 0.38715  | 0.063115  |
| BSU40939       | 0.0061  | 0.1667   | 0.03652   |
| BSU40940       | 0.0195  | 0.2973   | 0.06574   |
| BSU40950       | 0.0201  | 0.4284   | 0.04699   |
| BSU40960       | 0.0114  | 0.2984   | 0.03807   |
| BSU40970       | 0       | 0.2648   | 0         |
| BSU40980       | 0.0541  | 0.32555  | 0.16628   |
| BSU40990       | 0.0048  | 0.1592   | 0.03042   |
| BSU41000       | 0.0153  | 0.3464   | 0.04407   |
| BSU41010       | 0.0022  | 0.2435   | 0.00895   |
| BSU41020       | 0.0056  | 0.30285  | 0.0195    |
| BSU41030       | 0.0303  | 0.2758   | 0.10998   |
| BSU41040       | 0.0071  | 0.1677   | 0.04264   |
| BSU41050       | 0.008   | 0.1561   | 0.05118   |
| BSU41060       | 0       | 0.0593   | 0         |
| BSUW23_RS01260 | 0.1203  | 0.1997   | 0.60238   |
| BSUW23_RS01285 | 0.05685 | 0.28265  | 0.200915  |

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Table S2 – continued from previous page

| Gene           | $dN$    | $dS$    | $\omega$ |
|----------------|---------|---------|----------|
| BSUW23_RS01425 | 0.0263  | 0.1681  | 0.15626  |
| BSUW23_RS01450 | 0.0939  | 0.312   | 0.30106  |
| BSUW23_RS01455 | 0.0048  | 0.2737  | 0.01766  |
| BSUW23_RS01565 | 0.0404  | 0.4036  | 0.10018  |
| BSUW23_RS01575 | 0.0111  | 0.3903  | 0.02832  |
| BSUW23_RS01580 | 0       | 0.1512  | 0        |
| BSUW23_RS01625 | 0.0463  | 0.2847  | 0.16262  |
| BSUW23_RS01665 | 0.0884  | 0.3314  | 0.26669  |
| BSUW23_RS01690 | 0.0487  | 0.4077  | 0.11935  |
| BSUW23_RS01855 | 0.005   | 0.3493  | 0.01426  |
| BSUW23_RS01935 | 0.1114  | 0.2807  | 0.39707  |
| BSUW23_RS01970 | 0.0211  | 0.384   | 0.05487  |
| BSUW23_RS02040 | 0.0422  | 0.3159  | 0.13369  |
| BSUW23_RS02155 | 0.0749  | 0.7629  | 0.09817  |
| BSUW23_RS02255 | 0.0163  | 0.3906  | 0.04179  |
| BSUW23_RS02300 | 0.0285  | 0.262   | 0.1089   |
| BSUW23_RS02355 | 0.0451  | 0.4028  | 0.11201  |
| BSUW23_RS02390 | 0.0277  | 0.333   | 0.08306  |
| BSUW23_RS02510 | 0.0314  | 0.4113  | 0.07626  |
| BSUW23_RS02570 | 0       | 0.1521  | 0        |
| BSUW23_RS02600 | 0.0093  | 0.1835  | 0.05075  |
| BSUW23_RS02630 | 0.0256  | 0.2521  | 0.10151  |
| BSUW23_RS02715 | 0.0116  | 0.1787  | 0.06469  |
| BSUW23_RS02920 | 0.0433  | 0.4526  | 0.09566  |
| BSUW23_RS02950 | 0.0833  | 0.5626  | 0.14813  |
| BSUW23_RS02995 | 0.0532  | 0.3553  | 0.14978  |
| BSUW23_RS03040 | 0.03745 | 0.4382  | 0.085665 |
| BSUW23_RS03060 | 0.0449  | 0.4089  | 0.11098  |
| BSUW23_RS03110 | 0.0226  | 0.3194  | 0.07068  |
| BSUW23_RS03140 | 0.082   | 1.3326  | 0.06153  |
| BSUW23_RS03185 | 0.0288  | 0.3434  | 0.08398  |
| BSUW23_RS03235 | 0.0276  | 1.2984  | 0.02126  |
| BSUW23_RS03260 | 0.0814  | 0.41105 | 0.198145 |
| BSUW23_RS03265 | 0.0163  | 0.5054  | 0.03229  |
| BSUW23_RS03270 | 0.0077  | 0.2098  | 0.0369   |
| BSUW23_RS03280 | 0.0183  | 0.4654  | 0.03938  |
| BSUW23_RS03300 | 0.03585 | 0.443   | 0.0827   |
| BSUW23_RS03310 | 0.0483  | 0.4273  | 0.11298  |
| BSUW23_RS05065 | 0.022   | 0.1348  | 0.1631   |
| BSUW23_RS05080 | 0       | 0.0245  | 0        |
| BSUW23_RS05210 | 0.0396  | 0.41515 | 0.09715  |
| BSUW23_RS05235 | 0.0406  | 0.1597  | 0.25422  |
| BSUW23_RS05250 | 0.0109  | 0.3452  | 0.0316   |
| BSUW23_RS05265 | 0.0193  | 0.2754  | 0.07008  |
| BSUW23_RS05310 | 0.047   | 0.1629  | 0.28834  |
| BSUW23_RS05385 | 0.0355  | 0.3737  | 0.09487  |
| BSUW23_RS05430 | 0.01035 | 0.07665 | 0.131905 |

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Table S2 – continued from previous page

| Gene           | $dN$    | $dS$               | $\omega$           |
|----------------|---------|--------------------|--------------------|
| BSUW23_RS05450 | 0.0413  | 0.2778             | 0.14875            |
| BSUW23_RS05555 | 0.0094  | 0.314              | 0.02985            |
| BSUW23_RS05655 | 0.0144  | 0.2906             | 0.04963            |
| BSUW23_RS05675 | 0.0199  | 0.2906             | 0.06837            |
| BSUW23_RS05715 | 0.0237  | 0.2847             | 0.08343            |
| BSUW23_RS05815 | 0.0393  | 0.3139             | 0.12519            |
| BSUW23_RS05835 | 0.0437  | 0.3702             | 0.11805            |
| BSUW23_RS05860 | 0.0127  | 0.3231             | 0.0392             |
| BSUW23_RS05920 | 0.0205  | 0.1914             | 0.10709            |
| BSUW23_RS06010 | 0.0834  | 0.1848             | 0.45121            |
| BSUW23_RS06020 | 0.0642  | 0.37145            | 0.186455           |
| BSUW23_RS06065 | 0.068   | 0.4084333333333333 | 0.1541866666666667 |
| BSUW23_RS06075 | 0.0222  | 0.3948             | 0.05627            |
| BSUW23_RS06140 | 0.0193  | 0.4649             | 0.04143            |
| BSUW23_RS06220 | 0.0655  | 0.2623             | 0.2497             |
| BSUW23_RS06300 | 0.0382  | 1.4794             | 0.02581            |
| BSUW23_RS06420 | 0.0043  | 0.3012             | 0.01413            |
| BSUW23_RS06430 | 0.0485  | 0.3586             | 0.13519            |
| BSUW23_RS06435 | 0.0376  | 0.2474             | 0.1519             |
| BSUW23_RS06455 | 0.0281  | 0.3609             | 0.07797            |
| BSUW23_RS06465 | 0.0327  | 0.3909666666666667 | 0.07914            |
| BSUW23_RS06535 | 0.0162  | 0.2772             | 0.05846            |
| BSUW23_RS06545 | 0.0199  | 0.4057             | 0.04911            |
| BSUW23_RS06635 | 0.033   | 0.7229             | 0.04569            |
| BSUW23_RS06740 | 0.0662  | 0.4175             | 0.15863            |
| BSUW23_RS06765 | 0.0687  | 0.2063             | 0.33282            |
| BSUW23_RS06775 | 0       | 0.2026             | 0                  |
| BSUW23_RS06915 | 0.0333  | 0.4967             | 0.06698            |
| BSUW23_RS06920 | 0.0111  | 0.4263             | 0.02593            |
| BSUW23_RS06945 | 0.0348  | 0.2153             | 0.16185            |
| BSUW23_RS06970 | 0.0731  | 3.4346             | 0.02127            |
| BSUW23_RS07030 | 0.0879  | 0.2786             | 0.31546            |
| BSUW23_RS07070 | 0.0172  | 0.2707             | 0.06361            |
| BSUW23_RS07120 | 0.0392  | 0.5866             | 0.06681            |
| BSUW23_RS07125 | 0.0084  | 0.2989             | 0.02804            |
| BSUW23_RS07155 | 0.0172  | 0.3568             | 0.04822            |
| BSUW23_RS07175 | 0.0346  | 0.3082             | 0.11215            |
| BSUW23_RS07190 | 0.07085 | 0.32815            | 0.211265           |
| BSUW23_RS07255 | 0.0331  | 0.3712             | 0.08929            |
| BSUW23_RS07280 | 0.0233  | 0.5286             | 0.04408            |
| BSUW23_RS07285 | 0.0121  | 0.3472             | 0.03471            |
| BSUW23_RS07300 | 0.0476  | 0.6882             | 0.082845           |
| BSUW23_RS07305 | 0.0149  | 0.4077             | 0.03649            |
| BSUW23_RS07330 | 0.02    | 0.3269             | 0.06127            |
| BSUW23_RS07375 | 0.0425  | 0.4329             | 0.09814            |
| BSUW23_RS07410 | 0.0174  | 0.2757             | 0.06322            |
| BSUW23_RS07415 | 0.015   | 0.4129             | 0.03627            |

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Table S2 – continued from previous page

| Gene           | $dN$               | $dS$              | $\omega$          |
|----------------|--------------------|-------------------|-------------------|
| BSUW23_RS07435 | 0.0109             | 0.3146            | 0.03476           |
| BSUW23_RS07440 | 0.051              | 0.4306            | 0.11842           |
| BSUW23_RS07450 | 0.03525            | 0.4639            | 0.077             |
| BSUW23_RS07485 | 0.0064             | 0.2632            | 0.0244            |
| BSUW23_RS07500 | 0.0074             | 0.2428            | 0.03041           |
| BSUW23_RS07585 | 0.0077             | 0.0644            | 0.11921           |
| BSUW23_RS07600 | 0.0235             | 0.3162            | 0.07419           |
| BSUW23_RS07640 | 0.0083             | 0.2035            | 0.04082           |
| BSUW23_RS07645 | 0.0051             | 0.1661            | 0.03073           |
| BSUW23_RS07835 | 0.0533             | 0.3331            | 0.16011           |
| BSUW23_RS07850 | 0.0259             | 0.5618            | 0.04617           |
| BSUW23_RS07870 | 0.0138             | 0.3398            | 0.04067           |
| BSUW23_RS07890 | 0.0368             | 0.2918            | 0.12598           |
| BSUW23_RS07910 | 0.0072             | 0.1885            | 0.03839           |
| BSUW23_RS07915 | 0.0919             | 0.5137            | 0.17897           |
| BSUW23_RS07950 | 0.0665             | 0.2556            | 0.26003           |
| BSUW23_RS08040 | 0.011              | 0.1526            | 0.07192           |
| BSUW23_RS08085 | 0.0633             | 0.434             | 0.14582           |
| BSUW23_RS08095 | 0.0369             | 0.4168            | 0.08843           |
| BSUW23_RS08185 | 0.033              | 0.3451            | 0.09572           |
| BSUW23_RS08260 | 0.0244             | 0.2866            | 0.08519           |
| BSUW23_RS08330 | 0.016              | 0.321             | 0.04998           |
| BSUW23_RS08505 | 0.0387             | 0.22875           | 0.183755          |
| BSUW23_RS08550 | 0.0207             | 0.2788            | 0.07407           |
| BSUW23_RS08715 | 0                  | 0.0213            | 0                 |
| BSUW23_RS08835 | 0.0042             | 0.0292            | 0.14506           |
| BSUW23_RS08910 | 0.0105             | 0.2843            | 0.03698           |
| BSUW23_RS09035 | 0.0023             | 0.2061            | 0.01138           |
| BSUW23_RS09055 | 0                  | 0.0204            | 0                 |
| BSUW23_RS09085 | 0.0095             | 0.187             | 0.05107           |
| BSUW23_RS09115 | 0.0130666666666667 | 0.328166666666667 | 0.041216666666667 |
| BSUW23_RS09380 | 0.0651             | 0.3475            | 0.18726           |
| BSUW23_RS09410 | 0.0165             | 0.3904            | 0.04225           |
| BSUW23_RS09415 | 0.03865            | 0.31605           | 0.12491           |
| BSUW23_RS09465 | 0.0054             | 0.402             | 0.01351           |
| BSUW23_RS09475 | 0.0429             | 0.3092            | 0.13877           |
| BSUW23_RS09495 | 0.012              | 0.2987            | 0.04028           |
| BSUW23_RS09505 | 0.01               | 0.2735            | 0.03653           |
| BSUW23_RS09585 | 0.025              | 0.3192            | 0.07838           |
| BSUW23_RS09590 | 0.0299             | 0.2207            | 0.1356            |
| BSUW23_RS09600 | 0.0213             | 0.2305            | 0.09245           |
| BSUW23_RS09635 | 0.0392             | 0.3651            | 0.10733           |
| BSUW23_RS09645 | 0.0288             | 0.5873            | 0.04903           |
| BSUW23_RS09670 | 0.03775            | 0.38665           | 0.103445          |
| BSUW23_RS09705 | 0.0567333333333333 | 0.3131            | 0.279043333333333 |
| BSUW23_RS09710 | 0.01015            | 0.295475          | 0.0325125         |
| BSUW23_RS09715 | 0.0396666666666667 | 0.557566666666667 | 0.081966666666667 |

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Table S2 – continued from previous page

| Gene           | $dN$   | $dS$    | $\omega$ |
|----------------|--------|---------|----------|
| BSUW23_RS10035 | 0.0183 | 0.2948  | 0.0621   |
| BSUW23_RS10110 | 0      | 0.3282  | 0        |
| BSUW23_RS10480 | 0.1302 | 0.5312  | 0.24515  |
| BSUW23_RS10530 | 0.0159 | 0.428   | 0.03712  |
| BSUW23_RS10555 | 0      | 0.2178  | 0        |
| BSUW23_RS10655 | 0.0453 | 0.4549  | 0.09964  |
| BSUW23_RS10660 | 0.0365 | 0.5499  | 0.06632  |
| BSUW23_RS10735 | 0.0433 | 0.284   | 0.15256  |
| BSUW23_RS10745 | 0.0151 | 0.187   | 0.08067  |
| BSUW23_RS10750 | 0.0325 | 0.3258  | 0.09989  |
| BSUW23_RS10810 | 0.0084 | 0.3441  | 0.02438  |
| BSUW23_RS10860 | 0.0527 | 0.2856  | 0.1847   |
| BSUW23_RS10875 | 0.0068 | 0.3972  | 0.01724  |
| BSUW23_RS10885 | 0.0468 | 0.3155  | 0.14838  |
| BSUW23_RS11720 | 0.0093 | 0.2715  | 0.03439  |
| BSUW23_RS11735 | 0      | 0.1105  | 0        |
| BSUW23_RS11740 | 0.0205 | 0.281   | 0.07285  |
| BSUW23_RS12135 | 0.0305 | 0.5719  | 0.05334  |
| BSUW23_RS12160 | 0.077  | 0.4751  | 0.16196  |
| BSUW23_RS12175 | 0.0319 | 0.6918  | 0.04606  |
| BSUW23_RS12180 | 0.033  | 0.44    | 0.07503  |
| BSUW23_RS12195 | 0.02   | 0.8245  | 0.02429  |
| BSUW23_RS12305 | 0.0105 | 0.3358  | 0.03135  |
| BSUW23_RS12335 | 0.0043 | 0.179   | 0.02383  |
| BSUW23_RS12340 | 0.0487 | 0.4451  | 0.10938  |
| BSUW23_RS12415 | 0.0856 | 0.5025  | 0.17028  |
| BSUW23_RS12475 | 0.005  | 0.3575  | 0.01409  |
| BSUW23_RS12485 | 0.0101 | 0.0915  | 0.11064  |
| BSUW23_RS12525 | 0.0762 | 1.5431  | 0.04939  |
| BSUW23_RS12550 | 0.0115 | 0.5925  | 0.01936  |
| BSUW23_RS12570 | 0.0156 | 0.4526  | 0.029005 |
| BSUW23_RS12615 | 0.0104 | 0.3454  | 0.03005  |
| BSUW23_RS12625 | 0.0109 | 0.4226  | 0.02577  |
| BSUW23_RS12665 | 0.0027 | 0.2424  | 0.01123  |
| BSUW23_RS12730 | 0.0234 | 0.6004  | 0.03894  |
| BSUW23_RS12760 | 0.0204 | 0.377   | 0.05419  |
| BSUW23_RS12865 | 0.0256 | 0.4896  | 0.0523   |
| BSUW23_RS12875 | 0.0204 | 0.3281  | 0.06227  |
| BSUW23_RS12910 | 0.0192 | 0.3388  | 0.05662  |
| BSUW23_RS12955 | 0.0304 | 0.3086  | 0.09836  |
| BSUW23_RS13015 | 0      | 0.1811  | 0        |
| BSUW23_RS13075 | 0.0034 | 0.1209  | 0.02812  |
| BSUW23_RS13085 | 0.005  | 0.2563  | 0.0196   |
| BSUW23_RS13090 | 0.0102 | 0.1899  | 0.05356  |
| BSUW23_RS13115 | 0.0228 | 0.1476  | 0.15468  |
| BSUW23_RS13125 | 0.0237 | 0.23735 | 0.115305 |
| BSUW23_RS13150 | 0.0281 | 0.2599  | 0.10809  |

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Table S2 – continued from previous page

| Gene           | $dN$    | $dS$    | $\omega$ |
|----------------|---------|---------|----------|
| BSUW23_RS13175 | 0.0115  | 0.28    | 0.04111  |
| BSUW23_RS13180 | 0.0037  | 0.1978  | 0.01869  |
| BSUW23_RS13215 | 0       | 0.0092  | 0        |
| BSUW23_RS13235 | 0.07505 | 0.29065 | 0.261205 |
| BSUW23_RS13275 | 0.0311  | 0.2368  | 0.13119  |
| BSUW23_RS13280 | 0.0581  | 0.2468  | 0.23548  |
| BSUW23_RS13345 | 0.0066  | 0.2445  | 0.02693  |
| BSUW23_RS13355 | 0.0134  | 0.2435  | 0.05507  |
| BSUW23_RS13395 | 0.0335  | 0.3044  | 0.10994  |
| BSUW23_RS13420 | 0.0208  | 0.2662  | 0.07813  |
| BSUW23_RS13440 | 0.0131  | 0.3965  | 0.03315  |
| BSUW23_RS13460 | 0       | 0.0228  | 0        |
| BSUW23_RS13470 | 0.0071  | 0.2448  | 0.02892  |
| BSUW23_RS13535 | 0.0106  | 0.0728  | 0.14539  |
| BSUW23_RS13595 | 0.0029  | 0.181   | 0.01626  |
| BSUW23_RS13660 | 0.0169  | 0.3147  | 0.05357  |
| BSUW23_RS13680 | 0.017   | 0.2787  | 0.06099  |
| BSUW23_RS13690 | 0.0319  | 0.2368  | 0.13481  |
| BSUW23_RS14040 | 0.0608  | 0.6324  | 0.09609  |
| BSUW23_RS14235 | 0.0293  | 0.4903  | 0.05968  |
| BSUW23_RS14305 | 0.0368  | 0.4255  | 0.08656  |
| BSUW23_RS14310 | 0.0399  | 0.3931  | 0.10152  |
| BSUW23_RS14370 | 0.0169  | 0.3037  | 0.05562  |
| BSUW23_RS14400 | 0.0028  | 0.2588  | 0.01101  |
| BSUW23_RS14410 | 0.0062  | 0.2952  | 0.02087  |
| BSUW23_RS14430 | 0.0032  | 0.0875  | 0.03695  |
| BSUW23_RS14490 | 0.0132  | 0.4432  | 0.0297   |
| BSUW23_RS14505 | 0       | 0.2085  | 0        |
| BSUW23_RS14570 | 0.0524  | 0.4145  | 0.12654  |
| BSUW23_RS14585 | 0.0258  | 0.4985  | 0.05181  |
| BSUW23_RS14640 | 0.0086  | 0.2239  | 0.0383   |
| BSUW23_RS14650 | 0.0191  | 0.3317  | 0.05745  |
| BSUW23_RS14655 | 0.0366  | 0.393   | 0.0931   |
| BSUW23_RS14670 | 0.0223  | 0.0956  | 0.23322  |
| BSUW23_RS14700 | 0       | 0.2244  | 0        |
| BSUW23_RS14730 | 0.0122  | 0.2254  | 0.05428  |
| BSUW23_RS14750 | 0.0554  | 0.6342  | 0.08731  |
| BSUW23_RS14765 | 0.0355  | 0.3415  | 0.10395  |
| BSUW23_RS14890 | 0.014   | 0.3483  | 0.0403   |
| BSUW23_RS14900 | 0.2004  | 0.6046  | 0.33143  |
| BSUW23_RS14975 | 0.0195  | 0.2364  | 0.08242  |
| BSUW23_RS15035 | 0.0124  | 0.3013  | 0.04105  |
| BSUW23_RS15075 | 0.0183  | 0.3458  | 0.05278  |
| BSUW23_RS15080 | 0.015   | 0.3165  | 0.04746  |
| BSUW23_RS15090 | 0.0226  | 0.3236  | 0.06971  |
| BSUW23_RS15160 | 0.031   | 0.3229  | 0.09593  |
| BSUW23_RS15195 | 0       | 0.0432  | 0        |

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Table S2 – continued from previous page

| Gene           | $dN$                | $dS$    | $\omega$ |
|----------------|---------------------|---------|----------|
| BSUW23_RS15200 | 0.0655              | 0.6328  | 0.10344  |
| BSUW23_RS15340 | 0                   | 0.1999  | 0        |
| BSUW23_RS15345 | 0                   | 0.0441  | 0        |
| BSUW23_RS15350 | 0.0056              | 0.2952  | 0.01891  |
| BSUW23_RS15360 | 0.0121              | 0.2729  | 0.04433  |
| BSUW23_RS15365 | 0.0141              | 0.2636  | 0.05362  |
| BSUW23_RS15370 | 0.0407              | 0.2257  | 0.1805   |
| BSUW23_RS15440 | 0.0265              | 0.2275  | 0.11649  |
| BSUW23_RS15560 | 0.0093              | 0.1811  | 0.05118  |
| BSUW23_RS15630 | 0.0369              | 0.4715  | 0.07837  |
| BSUW23_RS15665 | 0.011               | 0.2943  | 0.03736  |
| BSUW23_RS15710 | 0.0112              | 0.3368  | 0.03321  |
| BSUW23_RS15775 | 0.0216              | 0.1755  | 0.1228   |
| BSUW23_RS15840 | 0.0212              | 0.323   | 0.06568  |
| BSUW23_RS15940 | 0.0181              | 0.3634  | 0.04976  |
| BSUW23_RS15975 | 0.0386              | 0.2848  | 0.13567  |
| BSUW23_RS15990 | 0.0201              | 0.3368  | 0.05971  |
| BSUW23_RS16070 | 0.1156              | 0.6111  | 0.18924  |
| BSUW23_RS16095 | 0.2892              | 1.8195  | 0.15894  |
| BSUW23_RS16100 | 0.0065              | 0.4881  | 0.0133   |
| BSUW23_RS16115 | 0.0176              | 0.2407  | 0.0733   |
| BSUW23_RS16160 | 0.0204              | 0.2619  | 0.08319  |
| BSUW23_RS16165 | 0.0286              | 0.2853  | 0.1004   |
| BSUW23_RS16200 | 0.0332              | 0.348   | 0.09535  |
| BSUW23_RS16210 | 0.0162              | 0.3096  | 0.05243  |
| BSUW23_RS16265 | 0.0347              | 0.3084  | 0.11249  |
| BSUW23_RS16285 | 0.0136              | 0.0748  | 0.18209  |
| BSUW23_RS16330 | 0.0414              | 0.376   | 0.11014  |
| BSUW23_RS16340 | 0.0358              | 0.4014  | 0.08927  |
| BSUW23_RS16565 | 0.0484              | 0.2863  | 0.16905  |
| BSUW23_RS16640 | 0.0701              | 0.1813  | 0.38695  |
| BSUW23_RS16660 | 0.01345             | 0.37305 | 0.03535  |
| BSUW23_RS16670 | 0.0212              | 0.3757  | 0.05647  |
| BSUW23_RS16680 | 0.0064              | 0.075   | 0.08554  |
| BSUW23_RS16685 | 0.0391              | 0.3958  | 0.09882  |
| BSUW23_RS16720 | 0.0256              | 0.1912  | 0.13406  |
| BSUW23_RS16790 | 0.0211              | 0.1608  | 0.13134  |
| BSUW23_RS16795 | 0                   | 0.1425  | 0        |
| BSUW23_RS16815 | 0.02523333333333333 | 0.3368  | 0.07612  |
| BSUW23_RS16850 | 0.0971              | 0.3452  | 0.28119  |
| BSUW23_RS16950 | 0.0156              | 0.3395  | 0.04583  |
| BSUW23_RS16960 | 0.0226              | 0.3686  | 0.0613   |
| BSUW23_RS17040 | 0.0212              | 0.2726  | 0.07782  |
| BSUW23_RS17185 | 0.0169              | 0.3769  | 0.04494  |
| BSUW23_RS17195 | 0.0439              | 0.2612  | 0.1682   |
| BSUW23_RS17220 | 0.15                | 0.7163  | 0.20942  |
| BSUW23_RS17230 | 0.0791              | 0.6013  | 0.13149  |

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Table S2 – continued from previous page

| Gene           | $dN$    | $dS$     | $\omega$ |
|----------------|---------|----------|----------|
| BSUW23_RS17235 | 0.0929  | 0.3333   | 0.27873  |
| BSUW23_RS17395 | 0.0151  | 0.3996   | 0.03773  |
| BSUW23_RS17400 | 0.0181  | 0.3104   | 0.05821  |
| BSUW23_RS17405 | 0.0169  | 0.3255   | 0.05185  |
| BSUW23_RS17410 | 0.0342  | 0.4914   | 0.06969  |
| BSUW23_RS17420 | 0.00955 | 0.14205  | 0.088605 |
| BSUW23_RS17425 | 0.0266  | 0.2343   | 0.11347  |
| BSUW23_RS17450 | 0.0319  | 0.281    | 0.11364  |
| BSUW23_RS17525 | 0.0461  | 0.9384   | 0.04915  |
| BSUW23_RS17690 | 0.01    | 0.3552   | 0.02812  |
| BSUW23_RS17720 | 0.0183  | 0.3453   | 0.05303  |
| BSUW23_RS17725 | 0.0455  | 0.2904   | 0.15669  |
| BSUW23_RS17790 | 0       | 0.1815   | 0        |
| BSUW23_RS17795 | 0.0071  | 0.2812   | 0.02523  |
| BSUW23_RS17840 | 0.0132  | 0.3136   | 0.04206  |
| BSUW23_RS17865 | 0.0312  | 0.4761   | 0.06549  |
| BSUW23_RS17950 | 0.0275  | 0.29245  | 0.09516  |
| BSUW23_RS18035 | 0.024   | 0.3034   | 0.07903  |
| BSUW23_RS18065 | 0.0255  | 0.1238   | 0.20588  |
| BSUW23_RS18075 | 0.0473  | 0.356    | 0.133    |
| BSUW23_RS18080 | 0.0096  | 0.2372   | 0.04056  |
| BSUW23_RS18105 | 0.0351  | 0.39955  | 0.087965 |
| BSUW23_RS18130 | 0.0547  | 0.3913   | 0.13976  |
| BSUW23_RS18155 | 0.0188  | 0.1927   | 0.122575 |
| BSUW23_RS18185 | 0.0167  | 0.4559   | 0.03666  |
| BSUW23_RS18195 | 0.0069  | 0.2474   | 0.02784  |
| BSUW23_RS18310 | 0.0169  | 0.4054   | 0.0417   |
| BSUW23_RS18340 | 0.0137  | 0.3611   | 0.03799  |
| BSUW23_RS18390 | 0.0301  | 0.3013   | 0.09992  |
| BSUW23_RS18400 | 0.0305  | 0.394    | 0.07731  |
| BSUW23_RS18435 | 0.1005  | 0.2267   | 0.44349  |
| BSUW23_RS18455 | 0.022   | 0.2486   | 0.08838  |
| BSUW23_RS18490 | 0.0275  | 0.2834   | 0.09699  |
| BSUW23_RS18580 | 0.0031  | 0.3271   | 0.01038  |
| BSUW23_RS18655 | 0.0199  | 0.3918   | 0.05092  |
| BSUW23_RS18705 | 0.0143  | 0.2787   | 0.05118  |
| BSUW23_RS18765 | 0.0354  | 0.6669   | 0.0531   |
| BSUW23_RS18810 | 0.7194  | 110.4406 | 0.00651  |
| BSUW23_RS18835 | 0.0566  | 3.1277   | 0.01809  |
| BSUW23_RS18930 | 0.5178  | 41.1163  | 0.01259  |
| BSUW23_RS18940 | 0.1013  | 0.5983   | 0.16924  |
| BSUW23_RS19025 | 0.0408  | 0.2912   | 0.13997  |
| BSUW23_RS19070 | 0.0375  | 0.3168   | 0.11838  |
| BSUW23_RS19115 | 0.0288  | 0.5016   | 0.05736  |
| BSUW23_RS19235 | 0.0123  | 0.4017   | 0.03059  |
| BSUW23_RS19250 | 0.0337  | 0.1543   | 0.21841  |
| BSUW23_RS19270 | 0.01    | 0.5446   | 0.01838  |

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Table S2 – continued from previous page

| Gene           | $dN$    | $dS$    | $\omega$ |
|----------------|---------|---------|----------|
| BSUW23_RS19340 | 0       | 0.2746  | 0        |
| BSUW23_RS19350 | 0       | 0.1596  | 0        |
| BSUW23_RS19385 | 0.0336  | 0.3548  | 0.09479  |
| BSUW23_RS19430 | 0.019   | 0.3293  | 0.05754  |
| BSUW23_RS19470 | 0.0106  | 0.1162  | 0.09159  |
| BSUW23_RS19480 | 0.0038  | 0.1496  | 0.02534  |
| BSUW23_RS19500 | 0.0438  | 0.3284  | 0.13347  |
| BSUW23_RS19540 | 0.0378  | 0.2081  | 0.19216  |
| BSUW23_RS19545 | 0.0366  | 0.3289  | 0.11141  |
| BSUW23_RS19550 | 0.005   | 0.2422  | 0.02055  |
| BSUW23_RS19630 | 0.0254  | 0.3663  | 0.06924  |
| BSUW23_RS19690 | 0.0644  | 0.3944  | 0.16336  |
| BSUW23_RS19735 | 0.0091  | 0.0496  | 0.18346  |
| BSUW23_RS19790 | 0.089   | 0.3764  | 0.23641  |
| BSUW23_RS19795 | 0.06755 | 0.312   | 0.22061  |
| BSUW23_RS19860 | 0.006   | 0.2196  | 0.02729  |
| BSUW23_RS19870 | 0       | 0.0504  | 0        |
| BSUW23_RS19895 | 0.0725  | 0.3536  | 0.20504  |
| BSUW23_RS19900 | 0.0318  | 0.3832  | 0.08287  |
| BSUW23_RS19915 | 0.0384  | 0.3595  | 0.10683  |
| BSUW23_RS19920 | 0.0099  | 0.2459  | 0.04006  |
| BSUW23_RS19945 | 0.0181  | 0.3264  | 0.0555   |
| BSUW23_RS20030 | 0.0433  | 0.1631  | 0.26538  |
| BSUW23_RS20040 | 0.0041  | 0.2669  | 0.01554  |
| BSUW23_RS20045 | 0.0398  | 0.2471  | 0.16109  |
| BSUW23_RS20075 | 0.0268  | 0.2733  | 0.09818  |
| BSUW23_RS20125 | 0.0894  | 3.4964  | 0.02555  |
| BSUW23_RS20145 | 0.0185  | 0.2746  | 0.06753  |
| BSUW23_RS20210 | 0.0279  | 0.3699  | 0.07535  |
| BSUW23_RS20215 | 0.00915 | 0.31215 | 0.03009  |
| BSUW23_RS20235 | 0.0221  | 0.4257  | 0.05193  |
| BSUW23_RS20255 | 0.034   | 0.6361  | 0.05352  |
| BSUW23_RS20275 | 0.0021  | 0.269   | 0.00774  |
| BSUW23_RS20315 | 0.0279  | 0.3372  | 0.08275  |
| BSUW23_RS20330 | 0.0334  | 0.1477  | 0.22574  |
| BSUW23_RS20425 | 0.0107  | 0.3294  | 0.03246  |
| BSUW23_RS20440 | 0.0287  | 0.4222  | 0.06791  |
| BSUW23_RS20460 | 0.0629  | 0.323   | 0.19476  |
| BSUW23_RS20525 | 0.0078  | 0.8713  | 0.00893  |
| BSUW23_RS20550 | 0.0422  | 0.4037  | 0.10461  |
| BSUW23_RS20610 | 0.0135  | 0.3202  | 0.04208  |
| BSUW23_RS20625 | 0.0896  | 0.359   | 0.24947  |
| BSUW23_RS20630 | 0.0308  | 0.466   | 0.06616  |
| BSUW23_RS20645 | 0.04    | 0.3145  | 0.12718  |
| BSUW23_RS20650 | 0.0146  | 0.6649  | 0.02193  |
| BSUW23_RS20675 | 0.0269  | 0.7612  | 0.03538  |
| BSUW23_RS20680 | 0.0224  | 0.3614  | 0.06211  |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$              | $\omega$          |
|-------------|--------------------|-------------------|-------------------|
| I33_RS01240 | 0.05685            | 0.40465           | 0.150125          |
| I33_RS01245 | 0.04975            | 0.41375           | 0.149655          |
| I33_RS01250 | 0.0739             | 0.3921            | 0.18855           |
| I33_RS01260 | 0.01615            | 0.2507            | 0.071305          |
| I33_RS01265 | 0.0392333333333333 | 0.695666666666667 | 0.05315           |
| I33_RS01270 | 0.0443             | 0.44925           | 0.097895          |
| I33_RS01280 | 0.0956             | 1.40915           | 0.100105          |
| I33_RS01285 | 0.0021             | 0.3274            | 0.00639           |
| I33_RS01290 | 0.1188             | 0.3782            | 0.31421           |
| I33_RS01295 | 0.0706             | 0.3197            | 0.22074           |
| I33_RS01330 | 0.03325            | 0.38175           | 0.098395          |
| I33_RS01335 | 0.0183             | 0.3427            | 0.05326           |
| I33_RS01340 | 0.0358666666666667 | 0.238033333333333 | 0.163713333333333 |
| I33_RS01345 | 0.0351             | 0.3438            | 0.10198           |
| I33_RS01355 | 0.0253             | 0.2848            | 0.08876           |
| I33_RS01360 | 0.0201             | 0.3725            | 0.05377           |
| I33_RS01365 | 0.059              | 0.254875          | 0.307445          |
| I33_RS01370 | 0.0424             | 0.343             | 0.1235            |
| I33_RS01380 | 0.0044             | 0.2382            | 0.01839           |
| I33_RS01385 | 0.0179             | 0.336             | 0.05325           |
| I33_RS01400 | 0.0413             | 0.2626            | 0.15736           |
| I33_RS01405 | 0.037475           | 0.496725          | 0.0848975         |
| I33_RS01410 | 0.02265            | 0.3309            | 0.0696            |
| I33_RS01415 | 0.0378             | 0.3116            | 0.12125           |
| I33_RS01425 | 0.0355             | 0.361             | 0.09827           |
| I33_RS01430 | 0.0217             | 0.2123            | 0.10222           |
| I33_RS01435 | 0.0194             | 0.2376            | 0.08165           |
| I33_RS01440 | 0.0286             | 0.3071            | 0.0932            |
| I33_RS01450 | 0.0231             | 0.3155            | 0.07334           |
| I33_RS01460 | 0.0197             | 0.3408            | 0.0578            |
| I33_RS01465 | 0.0155666666666667 | 0.295166666666667 | 0.05359           |
| I33_RS01475 | 0.0237             | 0.2779            | 0.08531           |
| I33_RS01480 | 0.0102             | 0.2389            | 0.04281           |
| I33_RS01485 | 0.01695            | 0.3939            | 0.04385           |
| I33_RS01490 | 0.0689333333333333 | 0.486033333333333 | 0.136576666666667 |
| I33_RS01495 | 0.1325             | 0.4094            | 0.32372           |
| I33_RS01520 | 0.018              | 0.3001            | 0.05989           |
| I33_RS01525 | 0.0261             | 0.3108            | 0.08399           |
| I33_RS01530 | 0.0254             | 0.20485           | 0.14523           |
| I33_RS01545 | 0.02615            | 0.4191            | 0.06048           |
| I33_RS01555 | 0.0173             | 0.3578            | 0.04842           |
| I33_RS01560 | 0.04015            | 0.34215           | 0.129635          |
| I33_RS01570 | 0.0323             | 0.2399            | 0.13456           |
| I33_RS01575 | 0.0386             | 0.3148            | 0.122035          |
| I33_RS01595 | 0.0512             | 0.2278            | 0.22496           |
| I33_RS01600 | 0.0297             | 0.4363            | 0.06797           |
| I33_RS01615 | 0.082              | 0.4619            | 0.17764           |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS01620 | 0.09445            | 0.3625             | 0.269935           |
| I33_RS01625 | 0.0464             | 0.3037             | 0.150685           |
| I33_RS01630 | 0.02925            | 0.3545             | 0.07562            |
| I33_RS01635 | 0.02705            | 0.36615            | 0.076685           |
| I33_RS01645 | 0.0232             | 0.157              | 0.14812            |
| I33_RS01650 | 0.03445            | 0.25815            | 0.156505           |
| I33_RS01655 | 0.0155             | 0.3067             | 0.04748            |
| I33_RS01660 | 0.0196             | 0.50095            | 0.045955           |
| I33_RS01665 | 0.0146             | 0.26205            | 0.05552            |
| I33_RS01670 | 0.0048             | 0.1817             | 0.02637            |
| I33_RS01685 | 0.0193             | 0.2705             | 0.07136            |
| I33_RS01695 | 0.01315            | 0.33035            | 0.037275           |
| I33_RS01700 | 0.0774             | 0.1997             | 0.38747            |
| I33_RS01705 | 0.0127             | 0.3162             | 0.04015            |
| I33_RS01710 | 0.01385            | 0.26405            | 0.04915            |
| I33_RS01720 | 0.0286             | 0.4961             | 0.05769            |
| I33_RS01725 | 0.0179             | 0.3484             | 0.05137            |
| I33_RS01750 | 0.00585            | 0.285              | 0.02523            |
| I33_RS01780 | 0.0397             | 0.2874             | 0.13805            |
| I33_RS01790 | 0.0248             | 0.3512             | 0.07055            |
| I33_RS01800 | 0.0560666666666667 | 0.4387666666666667 | 0.1375833333333333 |
| I33_RS01805 | 0.044              | 0.27925            | 0.155955           |
| I33_RS01810 | 0.0262             | 0.3096             | 0.08466            |
| I33_RS01815 | 0.0292             | 0.3293             | 0.096215           |
| I33_RS01825 | 0.0093             | 0.36285            | 0.0255575          |
| I33_RS01830 | 0.0220666666666667 | 0.2113666666666667 | 0.1002833333333333 |
| I33_RS01835 | 0.04064            | 0.31834            | 0.121142           |
| I33_RS01840 | 0.0376666666666667 | 0.5052             | 0.0770633333333333 |
| I33_RS01845 | 0.054              | 0.3528             | 0.15313            |
| I33_RS01850 | 0.0128             | 0.1769             | 0.07226            |
| I33_RS01860 | 0.0137             | 0.2811             | 0.04862            |
| I33_RS01870 | 0.0213             | 0.4421             | 0.050205           |
| I33_RS01890 | 0.0431             | 0.3221             | 0.13388            |
| I33_RS01895 | 0.0834             | 0.3603             | 0.23156            |
| I33_RS01900 | 0.1352             | 0.3371             | 0.4421333333333333 |
| I33_RS01905 | 0.0145             | 0.3931             | 0.03694            |
| I33_RS01915 | 0.05125            | 0.2527             | 0.23371            |
| I33_RS01920 | 0.0154             | 0.3356             | 0.04584            |
| I33_RS01930 | 0.0068             | 0.2744             | 0.02474            |
| I33_RS01935 | 0.033625           | 0.29145            | 0.1157908333333333 |
| I33_RS01940 | 0.03455            | 0.36533            | 0.096045           |
| I33_RS01990 | 0.0395             | 0.3646             | 0.10823            |
| I33_RS01995 | 0.0186             | 0.3104             | 0.06008            |
| I33_RS02000 | 0.02965            | 0.43615            | 0.068305           |
| I33_RS02005 | 0.0478             | 0.375              | 0.12754            |
| I33_RS02010 | 0.067              | 0.30625            | 0.211975           |
| I33_RS02030 | 0.0242             | 0.2138             | 0.11336            |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS02035 | 0.0135333333333333 | 0.2029             | 0.0644033333333333 |
| I33_RS02045 | 0.0183             | 0.3528             | 0.059035           |
| I33_RS02050 | 0.0049             | 0.3031             | 0.01612            |
| I33_RS02055 | 0.0152             | 0.3052             | 0.04859            |
| I33_RS02060 | 0.0778666666666667 | 0.727              | 0.12034            |
| I33_RS02065 | 0.0334             | 0.2437             | 0.13702            |
| I33_RS02075 | 0.0627             | 0.4989             | 0.1257             |
| I33_RS02080 | 0.0446             | 0.5848             | 0.0762             |
| I33_RS02100 | 0.0601             | 0.60664            | 0.098932           |
| I33_RS02105 | 0.0282666666666667 | 0.4986             | 0.0655566666666667 |
| I33_RS02110 | 0.037              | 0.3362             | 0.115555           |
| I33_RS02115 | 0.0116             | 0.393              | 0.02961            |
| I33_RS02120 | 0.0084             | 0.2758             | 0.0304             |
| I33_RS02125 | 0.0206             | 0.3141             | 0.06574            |
| I33_RS02130 | 0.0094             | 0.198              | 0.04756            |
| I33_RS02135 | 0                  | 0.0684             | 0                  |
| I33_RS02140 | 0.0259             | 0.3144             | 0.08236            |
| I33_RS02155 | 0.00925            | 0.17145            | 0.05414            |
| I33_RS02160 | 0.0189             | 0.3011             | 0.06265            |
| I33_RS02165 | 0.0303             | 0.4688             | 0.06031            |
| I33_RS02175 | 0.0186             | 0.1718             | 0.10804            |
| I33_RS02180 | 0.0228             | 0.2915             | 0.07833            |
| I33_RS02185 | 0.0166666666666667 | 0.2572333333333333 | 0.0588866666666667 |
| I33_RS02210 | 0.0082             | 0.3666             | 0.02246            |
| I33_RS02220 | 0.0347             | 0.5319             | 0.0677             |
| I33_RS02225 | 0.0378             | 0.2723             | 0.1388             |
| I33_RS02230 | 0.0158             | 0.53165            | 0.02961            |
| I33_RS02235 | 0.0218             | 0.2819             | 0.07736            |
| I33_RS02245 | 0.005              | 0.3157             | 0.01587            |
| I33_RS02250 | 0.019              | 0.5185             | 0.03657            |
| I33_RS02255 | 0.0290666666666667 | 0.5434333333333333 | 0.0575566666666667 |
| I33_RS02260 | 0.0233             | 0.3702             | 0.06287            |
| I33_RS02265 | 0.0634             | 0.3519             | 0.1803             |
| I33_RS02270 | 0.0818             | 0.5508             | 0.201515           |
| I33_RS02280 | 0.0147             | 0.2543             | 0.05789            |
| I33_RS02290 | 0.0381             | 0.2245             | 0.1698             |
| I33_RS02295 | 0.0261333333333333 | 0.4683666666666667 | 0.0644833333333333 |
| I33_RS02300 | 0.0386             | 0.34245            | 0.12006            |
| I33_RS02305 | 0.031              | 0.2615333333333333 | 0.1162766666666667 |
| I33_RS02310 | 0.01015            | 0.26525            | 0.037365           |
| I33_RS02315 | 0.0199             | 0.3186             | 0.06231            |
| I33_RS02320 | 0.0149             | 0.3734             | 0.03987            |
| I33_RS02325 | 0.0615             | 0.3187             | 0.19306            |
| I33_RS02350 | 0.0299             | 0.3048             | 0.09809            |
| I33_RS02355 | 0.03775            | 0.3914             | 0.10429            |
| I33_RS02360 | 0.1040666666666667 | 0.6874             | 0.1606433333333333 |
| I33_RS02365 | 0.0161             | 0.2443             | 0.06601            |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$              | $\omega$           |
|-------------|--------------------|-------------------|--------------------|
| I33_RS02370 | 0.00645            | 0.45895           | 0.021315           |
| I33_RS02450 | 0.0276333333333333 | 0.326333333333333 | 0.0774             |
| I33_RS02455 | 0.0644             | 0.3723            | 0.17308            |
| I33_RS02460 | 0.01275            | 0.3449            | 0.036375           |
| I33_RS02465 | 0.1407             | 0.2637            | 0.53337            |
| I33_RS02470 | 0.0311             | 0.3198            | 0.098595           |
| I33_RS02480 | 0.0121             | 0.3085            | 0.03935            |
| I33_RS02485 | 0.01975            | 0.31125           | 0.0641             |
| I33_RS02490 | 0.0081             | 0.207             | 0.03912            |
| I33_RS02505 | 0.0263             | 0.418366666666667 | 0.0627866666666667 |
| I33_RS02510 | 0.0278             | 0.3941            | 0.07062            |
| I33_RS02520 | 0.0097             | 0.2484            | 0.036305           |
| I33_RS02525 | 0.011              | 0.2612            | 0.04223            |
| I33_RS02535 | 0.0296             | 0.3126            | 0.09476            |
| I33_RS02540 | 0.0028             | 0.1942            | 0.01467            |
| I33_RS02555 | 0.0457             | 0.3125            | 0.14618            |
| I33_RS02560 | 0.033              | 0.2808            | 0.11764            |
| I33_RS02565 | 0.0527             | 0.4021            | 0.13116            |
| I33_RS02570 | 0.0219             | 0.2588            | 0.08472            |
| I33_RS02575 | 0.0385             | 0.3614            | 0.10653            |
| I33_RS02585 | 0.0039             | 0.3207            | 0.01227            |
| I33_RS02600 | 0                  | 0                 | 0                  |
| I33_RS02605 | 0                  | 0.0263            | 0                  |
| I33_RS02610 | 0.00674            | 0.3381            | 0.019938           |
| I33_RS02615 | 0.037              | 0.4138            | 0.08929            |
| I33_RS02670 | 0.0214             | 0.3223            | 0.06639            |
| I33_RS02680 | 0.0224             | 0.388             | 0.05785            |
| I33_RS02840 | 0.03405            | 0.178             | 0.183685           |
| I33_RS02860 | 0.0605             | 0.3354            | 0.18044            |
| I33_RS02865 | 0.0582             | 0.5349            | 0.10888            |
| I33_RS02880 | 0.0972             | 0.4281            | 0.2268             |
| I33_RS02885 | 0.0598             | 0.6541            | 0.09135            |
| I33_RS02895 | 0.0494             | 0.4266            | 0.11571            |
| I33_RS02900 | 0.0441             | 0.406             | 0.10854            |
| I33_RS02910 | 0.0636             | 0.371733333333333 | 0.17834            |
| I33_RS02920 | 0.0351             | 0.3375            | 0.10403            |
| I33_RS02935 | 0.0677             | 0.5403            | 0.12537            |
| I33_RS02945 | 0.091              | 0.6179            | 0.14727            |
| I33_RS02950 | 0.0719             | 0.6743            | 0.10666            |
| I33_RS02955 | 0.0703             | 0.5612            | 0.12525            |
| I33_RS02960 | 0.1431             | 0.5051            | 0.28326            |
| I33_RS02975 | 0.0573             | 0.5004            | 0.11446            |
| I33_RS02980 | 0.0575             | 0.301             | 0.19099            |
| I33_RS03015 | 0.0393             | 0.302733333333333 | 0.131213333333333  |
| I33_RS03020 | 0.0254             | 0.391             | 0.06496            |
| I33_RS03025 | 0.0188             | 0.4401            | 0.04268            |
| I33_RS03035 | 0.0387666666666667 | 0.438433333333333 | 0.08499            |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS03040 | 0.0568             | 0.3748             | 0.1514             |
| I33_RS03045 | 0.0342             | 0.3895             | 0.08781            |
| I33_RS03055 | 0.0582             | 0.2668             | 0.20812            |
| I33_RS03065 | 0.0874             | 0.3985             | 0.2193             |
| I33_RS03070 | 0.0498             | 0.328525           | 0.149565           |
| I33_RS03080 | 0.04225            | 0.424              | 0.100365           |
| I33_RS03085 | 0.0356             | 0.3529             | 0.10094            |
| I33_RS03090 | 0.0083             | 0.302              | 0.0276             |
| I33_RS03095 | 0.07295            | 0.25865            | 0.28554            |
| I33_RS03100 | 0.0482             | 0.3293             | 0.14632            |
| I33_RS03120 | 0.0143             | 0.2221             | 0.085205           |
| I33_RS03145 | 0.0203             | 0.2881             | 0.07052            |
| I33_RS03150 | 0.07345            | 1.48735            | 0.049105           |
| I33_RS03155 | 0.0529             | 0.3891             | 0.13604            |
| I33_RS03160 | 0.0199             | 0.2668             | 0.07442            |
| I33_RS03165 | 0.0252             | 0.512              | 0.04914            |
| I33_RS03170 | 0.0903             | 0.3818             | 0.287005           |
| I33_RS03175 | 0.06425            | 0.38425            | 0.16604            |
| I33_RS03215 | 0.0192             | 0.32035            | 0.059955           |
| I33_RS03225 | 0.05225            | 0.322              | 0.17191            |
| I33_RS03235 | 0.0516             | 0.369              | 0.13988            |
| I33_RS04795 | 0.0359             | 0.3458             | 0.10376            |
| I33_RS04800 | 0.0264             | 0.2081             | 0.12692            |
| I33_RS04805 | 0.0888             | 0.29               | 0.30609            |
| I33_RS04810 | 0.01295            | 0.50185            | 0.028115           |
| I33_RS04835 | 0.0585             | 0.3223             | 0.18141            |
| I33_RS04840 | 0.0066             | 0.2793             | 0.02354            |
| I33_RS04845 | 0.0254             | 0.3176             | 0.07982            |
| I33_RS04855 | 0.0291             | 0.2803             | 0.10391            |
| I33_RS04860 | 0.0281             | 0.4396             | 0.06381            |
| I33_RS04865 | 0.0201             | 0.3283             | 0.06134            |
| I33_RS04870 | 0.0770666666666667 | 0.3218333333333333 | 0.2095966666666667 |
| I33_RS04875 | 0.05775            | 0.3592             | 0.17979            |
| I33_RS04880 | 0.0071             | 0.1709             | 0.04177            |
| I33_RS04885 | 0.04255            | 0.2696             | 0.166515           |
| I33_RS04890 | 0.0105             | 0.3966             | 0.0264             |
| I33_RS04895 | 0.0412714285714286 | 0.313557142857143  | 0.129181428571429  |
| I33_RS04905 | 0.0035             | 0.2966             | 0.01183            |
| I33_RS04920 | 0.0023             | 0.2728             | 0.00849            |
| I33_RS04925 | 0.0152             | 0.34405            | 0.043485           |
| I33_RS04930 | 0.0144             | 0.266              | 0.05405            |
| I33_RS04935 | 0.0026             | 0.4081             | 0.00644            |
| I33_RS04940 | 0.03775            | 0.1827             | 0.205835           |
| I33_RS04945 | 0.0412333333333333 | 0.5168             | 0.0759366666666667 |
| I33_RS04950 | 0.0439             | 0.2839             | 0.15454            |
| I33_RS04955 | 0.0489333333333333 | 0.3306333333333333 | 0.12907            |
| I33_RS04960 | 0.03135            | 0.29465            | 0.09436            |

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Table S2 – continued from previous page

| Gene        | $dN$                | $dS$               | $\omega$            |
|-------------|---------------------|--------------------|---------------------|
| I33_RS04965 | 0.0242              | 0.307              | 0.07867             |
| I33_RS04970 | 0.0555              | 0.7843             | 0.07074             |
| I33_RS04975 | 0.135               | 0.2732             | 0.494               |
| I33_RS04980 | 0.0695              | 5.9191             | 0.01174             |
| I33_RS04985 | 0.0649              | 4.3562             | 0.01489             |
| I33_RS04995 | 0.05265             | 0.36115            | 0.153515            |
| I33_RS05000 | 0.0483              | 0.4436             | 0.10892             |
| I33_RS05005 | 0.0622              | 0.3915             | 0.184475            |
| I33_RS05010 | 0.0288              | 0.0837             | 0.34428             |
| I33_RS05015 | 0.0164              | 0.4746             | 0.03461             |
| I33_RS05020 | 0.0035              | 0.3328             | 0.01059             |
| I33_RS05030 | 0.00925             | 0.28485            | 0.032335            |
| I33_RS05035 | 0.00965             | 0.51065            | 0.02091             |
| I33_RS05040 | 0.0063              | 0.2974             | 0.02105             |
| I33_RS05045 | 0.0107              | 0.2947             | 0.03618             |
| I33_RS05060 | 0.0266              | 0.3356             | 0.07933             |
| I33_RS05070 | 0.1112              | 0.5487             | 0.20265             |
| I33_RS05075 | 0.02532             | 0.35028            | 0.089784            |
| I33_RS05080 | 0.0298              | 0.2991             | 0.09968             |
| I33_RS05085 | 0.048075            | 0.2712             | 0.18792             |
| I33_RS05090 | 0.02205             | 0.30005            | 0.07468             |
| I33_RS05110 | 0.0182              | 0.2742             | 0.06622             |
| I33_RS05115 | 0.0156              | 0.458              | 0.034               |
| I33_RS05120 | 0.031               | 0.25365            | 0.10554             |
| I33_RS05130 | 0.02923333333333333 | 0.4357333333333333 | 0.07250666666666667 |
| I33_RS05135 | 0.0194              | 0.3371             | 0.0577              |
| I33_RS05145 | 0.0107              | 0.3064             | 0.03501             |
| I33_RS05150 | 0.07685             | 0.39205            | 0.1816775           |
| I33_RS05155 | 0.0836              | 0.2785             | 0.30001             |
| I33_RS05160 | 0.0321              | 0.3847             | 0.08338             |
| I33_RS05165 | 0.0054              | 0.2119             | 0.02539             |
| I33_RS05170 | 0.0117              | 0.1995             | 0.04844333333333333 |
| I33_RS05175 | 0.0378              | 0.3348             | 0.11278             |
| I33_RS05180 | 0.0123              | 0.13755            | 0.086425            |
| I33_RS05185 | 0.0049              | 0.2851             | 0.01709             |
| I33_RS05190 | 0.0034              | 0.061              | 0.05637             |
| I33_RS05200 | 0.01325             | 0.2466             | 0.05306             |
| I33_RS05205 | 0.06563333333333333 | 0.2573333333333333 | 0.25335666666666667 |
| I33_RS05220 | 0.025               | 0.3178             | 0.0787              |
| I33_RS05230 | 0.0471              | 0.3946             | 0.1194              |
| I33_RS05235 | 0.0438              | 0.469              | 0.09337             |
| I33_RS05240 | 0.0574              | 0.3004             | 0.19104             |
| I33_RS05245 | 0.0417              | 0.30365            | 0.1707              |
| I33_RS05250 | 0.0214              | 0.32025            | 0.06662             |
| I33_RS05265 | 0.1298              | 0.3869             | 0.30413             |
| I33_RS05280 | 0.0329              | 0.3115             | 0.10564             |
| I33_RS05290 | 0.0353              | 0.4544             | 0.07764             |

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Table S2 – continued from previous page

| Gene        | $dN$                | $dS$               | $\omega$            |
|-------------|---------------------|--------------------|---------------------|
| I33_RS05295 | 0.0153              | 0.3474             | 0.04417             |
| I33_RS05305 | 0.0415              | 0.3252             | 0.12768             |
| I33_RS05310 | 0.0218              | 0.2019             | 0.08596             |
| I33_RS05325 | 0.0347              | 0.2712             | 0.18523             |
| I33_RS05330 | 0.0128              | 0.3037             | 0.042               |
| I33_RS05335 | 0.0056              | 0.3357             | 0.022315            |
| I33_RS05340 | 0.0457              | 0.3017             | 0.20015             |
| I33_RS05350 | 0.0525              | 0.2261             | 0.292825            |
| I33_RS05355 | 0.0189              | 0.3436             | 0.0604166666666667  |
| I33_RS05360 | 0.04                | 0.2899             | 0.13796             |
| I33_RS05365 | 0.03605             | 0.22305            | 0.157075            |
| I33_RS05370 | 0.0722              | 0.31165            | 0.231745            |
| I33_RS05375 | 0.0648              | 0.5117             | 0.1266              |
| I33_RS05380 | 0.032575            | 0.6764             | 0.0649525           |
| I33_RS05385 | 0.0141              | 0.2091             | 0.06762             |
| I33_RS05390 | 0.0183              | 0.0955             | 0.1916              |
| I33_RS05395 | 0.0046              | 0.1654             | 0.02759             |
| I33_RS05400 | 0.03175             | 0.19435            | 0.17279             |
| I33_RS05405 | 0.0204              | 0.244              | 0.08375             |
| I33_RS05410 | 0.0265              | 0.4225             | 0.06282             |
| I33_RS05420 | 0.0037              | 0.2803             | 0.01302             |
| I33_RS05425 | 0                   | 0.2686             | 0                   |
| I33_RS05430 | 0.02945             | 0.3934             | 0.074725            |
| I33_RS05435 | 0.03463333333333333 | 0.3835             | 0.08686             |
| I33_RS05445 | 0.037               | 0.3031             | 0.12198             |
| I33_RS05450 | 0.0273              | 0.2599             | 0.10518             |
| I33_RS05455 | 0.0232              | 0.4067             | 0.05696             |
| I33_RS05465 | 0.0213              | 0.2881             | 0.07397             |
| I33_RS05470 | 0.0147              | 0.315              | 0.04675             |
| I33_RS05475 | 0.0126              | 0.5751             | 0.02195             |
| I33_RS05480 | 0.0166666666666667  | 0.3014             | 0.05841             |
| I33_RS05485 | 0.0056              | 0.3001             | 0.01856             |
| I33_RS05490 | 0.0702              | 0.6145             | 0.09986333333333333 |
| I33_RS05495 | 0.0452666666666667  | 0.4084333333333333 | 0.12491333333333333 |
| I33_RS05500 | 0.0788              | 0.3793             | 0.20783             |
| I33_RS05510 | 0.0368              | 0.5205             | 0.07078             |
| I33_RS05515 | 0.0091              | 0.2324             | 0.03919             |
| I33_RS05525 | 0.0178              | 0.2132             | 0.08354             |
| I33_RS05540 | 0.0344              | 0.37735            | 0.08952             |
| I33_RS05545 | 0.0362              | 0.2798             | 0.12925             |
| I33_RS05550 | 0.02223333333333333 | 0.2824333333333333 | 0.0888866666666667  |
| I33_RS05555 | 0.0267              | 0.36445            | 0.080055            |
| I33_RS05560 | 0.0297              | 0.3535             | 0.085805            |
| I33_RS05570 | 0.06                | 0.31535            | 0.17046             |
| I33_RS05575 | 0.0247              | 0.2781             | 0.08873             |
| I33_RS05580 | 0.019               | 0.3496             | 0.05422             |
| I33_RS05585 | 0.0596              | 0.3612             | 0.16766333333333333 |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS05590 | 0.0885             | 0.3637             | 0.2434             |
| I33_RS05595 | 0.0162             | 0.298              | 0.0545             |
| I33_RS05610 | 0.0194             | 0.25855            | 0.103845           |
| I33_RS05615 | 0.0303             | 0.2728             | 0.1154175          |
| I33_RS05620 | 0.04075            | 0.38195            | 0.09671            |
| I33_RS05625 | 0.062875           | 0.322875           | 0.2269225          |
| I33_RS05630 | 0.0315             | 0.3628             | 0.08684            |
| I33_RS05635 | 0.0035             | 0.2334             | 0.01489            |
| I33_RS05640 | 0.0262             | 0.3243             | 0.08073            |
| I33_RS05660 | 0.0374             | 0.2122             | 0.17615            |
| I33_RS05670 | 0.026              | 0.2394             | 0.10868            |
| I33_RS05675 | 0.0224             | 0.1913             | 0.1171             |
| I33_RS05680 | 0.082              | 0.2284             | 0.3589             |
| I33_RS05685 | 0.0617714285714286 | 0.316457142857143  | 0.212568571428571  |
| I33_RS05700 | 0.0152             | 0.2504             | 0.06052            |
| I33_RS05710 | 0.0115             | 0.2882             | 0.03985            |
| I33_RS05715 | 0.0193             | 0.3504             | 0.05505            |
| I33_RS05720 | 0.0328             | 0.3638             | 0.09005            |
| I33_RS05730 | 0.0217             | 0.3088             | 0.07026            |
| I33_RS05735 | 0.0462             | 0.3812             | 0.12131            |
| I33_RS05740 | 0.1003             | 0.2953             | 0.33943            |
| I33_RS05745 | 0.03605            | 0.25575            | 0.14373            |
| I33_RS05750 | 0.0283             | 0.2865             | 0.12179            |
| I33_RS05755 | 0.0533             | 0.5423333333333333 | 0.1416466666666667 |
| I33_RS05760 | 0.0205             | 0.5504             | 0.069295           |
| I33_RS05765 | 0.0496             | 0.2057             | 0.24094            |
| I33_RS05775 | 0.0139             | 0.2581             | 0.05367            |
| I33_RS05780 | 0.0182             | 0.0963             | 0.18947            |
| I33_RS05785 | 0.0343             | 0.2937             | 0.1167             |
| I33_RS05800 | 0.02565            | 0.3788             | 0.062775           |
| I33_RS05820 | 0.0092             | 0.2837             | 0.03237            |
| I33_RS05830 | 0.0098             | 0.1708             | 0.0573             |
| I33_RS05840 | 0.0325             | 0.4311             | 0.07536            |
| I33_RS05845 | 0.0364             | 0.4753             | 0.07657            |
| I33_RS05855 | 0.0713             | 0.45145            | 0.15802            |
| I33_RS05860 | 0.0483             | 0.3086             | 0.15654            |
| I33_RS05865 | 0.03065            | 0.4722             | 0.06647            |
| I33_RS05870 | 0.0389             | 0.3072             | 0.1388625          |
| I33_RS05880 | 0.03495            | 0.32535            | 0.110925           |
| I33_RS05885 | 0.06555            | 0.3325             | 0.189385           |
| I33_RS05890 | 0.0438166666666667 | 0.3654833333333333 | 0.1156366666666667 |
| I33_RS05895 | 0.0537             | 0.3609             | 0.15435            |
| I33_RS05900 | 0.1185             | 0.5915             | 0.20037            |
| I33_RS05905 | 0.0591             | 0.6076             | 0.09731            |
| I33_RS05920 | 0.0183             | 0.3863             | 0.04748            |
| I33_RS05935 | 0.0214             | 0.3413             | 0.06261            |
| I33_RS05955 | 0.0731             | 3.3439             | 0.02186            |

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Table S2 – continued from previous page

| Gene        | $dN$                 | $dS$               | $\omega$           |
|-------------|----------------------|--------------------|--------------------|
| I33_RS05960 | 0.0283               | 0.1152             | 0.24568            |
| I33_RS05965 | 0.02705              | 0.4183             | 0.051625           |
| I33_RS05970 | 0.02515              | 0.17885            | 0.13563            |
| I33_RS05975 | 0.0154               | 0.4298             | 0.03577            |
| I33_RS05980 | 0.0279               | 0.3075             | 0.09056            |
| I33_RS05985 | 0.02935              | 0.27805            | 0.10179            |
| I33_RS05990 | 0.029                | 0.2503             | 0.11571            |
| I33_RS05995 | 0.0275               | 0.2733             | 0.10044            |
| I33_RS06000 | 0.022                | 0.4137             | 0.05306            |
| I33_RS06005 | 0.02405              | 0.3915             | 0.06139            |
| I33_RS06010 | 0.01555              | 0.2516             | 0.061625           |
| I33_RS06015 | 0.0222               | 0.4622             | 0.04808            |
| I33_RS06035 | 0.0277               | 0.2738             | 0.10125            |
| I33_RS06040 | 0.02105              | 0.17105            | 0.3122             |
| I33_RS06050 | 0.0087               | 0.3056             | 0.02841            |
| I33_RS06055 | 0.0485               | 0.29255            | 0.15759            |
| I33_RS06060 | 0.0045               | 0.2883             | 0.01553            |
| I33_RS06070 | 0.0069               | 0.2548             | 0.02717            |
| I33_RS06080 | 0.0497               | 0.2611             | 0.19037            |
| I33_RS06085 | 0.0042               | 0.2256             | 0.01874            |
| I33_RS06090 | 0.0128               | 0.2914             | 0.04389            |
| I33_RS06100 | 0.0409               | 2.79585            | 0.01986            |
| I33_RS06105 | 0.0032               | 0.4087             | 0.00788            |
| I33_RS06110 | 0.0105               | 0.3058             | 0.03443            |
| I33_RS06120 | 0.0097               | 0.3711             | 0.02615            |
| I33_RS06130 | 0.0246               | 1.1394             | 0.0387766666666667 |
| I33_RS06135 | 0.0533               | 2.5231             | 0.02114            |
| I33_RS06140 | 0.0112               | 0.2538             | 0.04395            |
| I33_RS06155 | 0.0105               | 0.3222             | 0.03259            |
| I33_RS06165 | 0.0075               | 0.3303             | 0.02262            |
| I33_RS06180 | 0.0619               | 0.2784             | 0.22244            |
| I33_RS06190 | 0.008733333333333333 | 0.1763666666666667 | 0.0493033333333333 |
| I33_RS06195 | 0.0081               | 0.0467             | 0.17379            |
| I33_RS06205 | 0.0619               | 0.3633             | 0.17036            |
| I33_RS06210 | 0.0474               | 0.3147             | 0.15052            |
| I33_RS06215 | 0.0068               | 0.277              | 0.02456            |
| I33_RS06225 | 0.0076               | 0.3405             | 0.02241            |
| I33_RS06235 | 0.054                | 0.1898             | 0.2847             |
| I33_RS06245 | 0.0363               | 0.2226             | 0.232215           |
| I33_RS06265 | 0.0111               | 0.3474             | 0.03208            |
| I33_RS06280 | 0.0178               | 0.4309             | 0.04138            |
| I33_RS06290 | 0.033                | 0.2873             | 0.11489            |
| I33_RS06295 | 0.014                | 0.2148             | 0.06532            |
| I33_RS06315 | 0.0234               | 0.3306             | 0.07071            |
| I33_RS06320 | 0.037175             | 0.310525           | 0.1648925          |
| I33_RS06325 | 0.0147               | 0.35275            | 0.03845            |
| I33_RS06330 | 0.0481               | 0.6507             | 0.07396            |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS06335 | 0.0778             | 0.7323             | 0.10619            |
| I33_RS06340 | 0.0239             | 0.6292             | 0.03799            |
| I33_RS06350 | 0.0284             | 0.4355             | 0.06513            |
| I33_RS06365 | 0.0211             | 0.2292             | 0.091825           |
| I33_RS06370 | 0.0154             | 0.3273             | 0.04706            |
| I33_RS06375 | 0.0142             | 0.3311             | 0.04409            |
| I33_RS06470 | 0.0837             | 0.3382             | 0.24754            |
| I33_RS06475 | 0.0631             | 0.3087             | 0.198485           |
| I33_RS06480 | 0.0398             | 0.3771             | 0.10541            |
| I33_RS06485 | 0.0287             | 0.4886             | 0.05864            |
| I33_RS06490 | 0.0175             | 0.3598             | 0.0486             |
| I33_RS06495 | 0.04               | 0.2142             | 0.18671            |
| I33_RS06500 | 0.0725666666666667 | 0.4657             | 0.1985466666666667 |
| I33_RS06505 | 0.0737666666666667 | 0.4359666666666667 | 0.17415            |
| I33_RS06510 | 0.0164             | 0.339              | 0.04851            |
| I33_RS06515 | 0.0218             | 0.368              | 0.05935            |
| I33_RS06520 | 0.1755333333333333 | 2.459933333333333  | 0.2766433333333333 |
| I33_RS06525 | 0.04785            | 0.6888             | 0.07338            |
| I33_RS06535 | 0.040075           | 0.40595            | 0.1187875          |
| I33_RS06540 | 0.02805            | 0.30595            | 0.09102            |
| I33_RS06550 | 0.0347             | 0.513              | 0.06757            |
| I33_RS06555 | 0.0260666666666667 | 0.272              | 0.10182            |
| I33_RS06565 | 0.053              | 0.4223             | 0.12552            |
| I33_RS06570 | 0.0321             | 0.2875             | 0.11157            |
| I33_RS06575 | 0.0871             | 0.3204             | 0.27178            |
| I33_RS06590 | 0.0035             | 0.175              | 0.02002            |
| I33_RS06600 | 0.0384             | 0.4002             | 0.09595            |
| I33_RS06610 | 0.0077             | 0.324              | 0.02367            |
| I33_RS06615 | 0.0122             | 0.2636             | 0.04618            |
| I33_RS06625 | 0.03605            | 0.296              | 0.12093            |
| I33_RS06635 | 0.0293             | 0.2979666666666667 | 0.1294266666666667 |
| I33_RS06640 | 0.0101             | 0.3145             | 0.03223            |
| I33_RS06650 | 0.0256             | 0.3741             | 0.06841            |
| I33_RS06660 | 0.019              | 0.4523             | 0.04196            |
| I33_RS06665 | 0.0259             | 0.6599             | 0.039695           |
| I33_RS06670 | 0.0843             | 0.2559             | 0.32955            |
| I33_RS06680 | 0.019625           | 0.233              | 0.0931175          |
| I33_RS06685 | 0.0024             | 0.151              | 0.01605            |
| I33_RS06690 | 0.0246             | 0.1973             | 0.12472            |
| I33_RS06700 | 0.0379             | 0.4404             | 0.08608            |
| I33_RS06705 | 0.026              | 0.5843             | 0.04443            |
| I33_RS06710 | 0.0773             | 0.5621             | 0.1375             |
| I33_RS06715 | 0.0178             | 0.6984             | 0.02549            |
| I33_RS06720 | 0.0207             | 0.4188666666666667 | 0.05485            |
| I33_RS06725 | 0.048              | 0.326              | 0.14715            |
| I33_RS06735 | 0.03325            | 0.42875            | 0.079575           |
| I33_RS06745 | 0.0322             | 0.2901             | 0.11098            |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS06750 | 0.0363             | 0.4613             | 0.07873            |
| I33_RS06760 | 0.0154             | 0.2967             | 0.05177            |
| I33_RS06765 | 0.0223             | 0.3894             | 0.05738            |
| I33_RS06770 | 0.0154             | 0.366              | 0.04196            |
| I33_RS06775 | 0.0213             | 0.1654             | 0.12874            |
| I33_RS06780 | 0.02425            | 0.2777             | 0.068415           |
| I33_RS06785 | 0.02285            | 0.2305             | 0.1187875          |
| I33_RS06790 | 0.0092             | 0.6666             | 0.01381            |
| I33_RS06815 | 0.08335            | 1.882              | 0.03938            |
| I33_RS06820 | 0.0283             | 0.35415            | 0.098445           |
| I33_RS06825 | 0.0161             | 0.3649             | 0.04438            |
| I33_RS06830 | 0.04735            | 0.56705            | 0.08783            |
| I33_RS06835 | 0.284              | 5.1227             | 0.05544            |
| I33_RS06840 | 0.5818333333333333 | 81.2946            | 0.04828            |
| I33_RS06845 | 0.06055            | 0.48755            | 0.14032            |
| I33_RS06850 | 0.040275           | 0.32845            | 0.1463075          |
| I33_RS06855 | 0.0324             | 0.4602             | 0.10014            |
| I33_RS06860 | 0.0193             | 0.2226             | 0.08668            |
| I33_RS06865 | 0.01095            | 0.28975            | 0.03407            |
| I33_RS06890 | 0.0198             | 0.4422             | 0.04481            |
| I33_RS06910 | 0.0205             | 0.2359             | 0.08689            |
| I33_RS06915 | 0.0147             | 0.4083             | 0.03605            |
| I33_RS06920 | 0.0179             | 0.5028             | 0.03554            |
| I33_RS06925 | 0.0543             | 0.293              | 0.18549            |
| I33_RS06930 | 0.0641             | 0.4667             | 0.13734            |
| I33_RS06940 | 0.0123             | 0.23705            | 0.05211            |
| I33_RS06945 | 0.0419             | 0.38045            | 0.111335           |
| I33_RS06950 | 0.0266             | 0.4296             | 0.06186            |
| I33_RS06960 | 0.0506666666666667 | 0.3433666666666667 | 0.1433833333333333 |
| I33_RS06965 | 0.05795            | 0.356              | 0.152865           |
| I33_RS06970 | 0.0487             | 0.4141             | 0.11755            |
| I33_RS06980 | 0.0197             | 0.3106             | 0.06332            |
| I33_RS06990 | 0.0054             | 0.2824             | 0.01902            |
| I33_RS07000 | 0.0371666666666667 | 0.3237333333333333 | 0.11398            |
| I33_RS07015 | 0.0594             | 0.2608             | 0.22778            |
| I33_RS07020 | 0.0267             | 0.3237333333333333 | 0.0864266666666667 |
| I33_RS07025 | 0.0042             | 0.2826             | 0.01473            |
| I33_RS07030 | 0.0111             | 0.3992             | 0.02774            |
| I33_RS07035 | 0.036              | 0.217              | 0.21706            |
| I33_RS07040 | 0.0278             | 0.3763             | 0.07435            |
| I33_RS07045 | 0.035475           | 0.28425            | 0.1134075          |
| I33_RS07050 | 0.0107             | 0.3336             | 0.03195            |
| I33_RS07055 | 0.0128             | 0.2829             | 0.0457633333333333 |
| I33_RS07060 | 0.0065             | 0.2741             | 0.02373            |
| I33_RS07065 | 0.07785            | 0.4459             | 0.171215           |
| I33_RS07070 | 0.0649             | 0.4887             | 0.1328             |
| I33_RS07075 | 0.02415            | 0.3411             | 0.068545           |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$              | $\omega$           |
|-------------|--------------------|-------------------|--------------------|
| I33_RS07085 | 0.0664             | 0.5527            | 0.12022            |
| I33_RS07095 | 0.0645             | 0.39025           | 0.18074            |
| I33_RS07105 | 0.0136666666666667 | 0.305633333333333 | 0.03489            |
| I33_RS07115 | 0.0556             | 0.6978            | 0.07971            |
| I33_RS07120 | 0.0309             | 0.3424            | 0.0901             |
| I33_RS07125 | 0.0198             | 0.3722            | 0.0531             |
| I33_RS07130 | 0.0139             | 0.3786            | 0.0368             |
| I33_RS07135 | 0.0512333333333333 | 0.399566666666667 | 0.128003333333333  |
| I33_RS07145 | 0.015              | 0.4278            | 0.03495            |
| I33_RS07170 | 0.02135            | 0.2964            | 0.076575           |
| I33_RS07180 | 0.0114             | 0.2597            | 0.04391            |
| I33_RS07185 | 0.0035             | 0.187             | 0.01847            |
| I33_RS07190 | 0.0492             | 0.177666666666667 | 0.259903333333333  |
| I33_RS07210 | 0.0124             | 0.298             | 0.04173            |
| I33_RS07230 | 0.0189             | 0.2694            | 0.07008            |
| I33_RS07240 | 0.0308             | 0.2716            | 0.11341            |
| I33_RS07255 | 0.0238             | 0.4163            | 0.05723            |
| I33_RS07260 | 0.0117             | 0.2233            | 0.04903            |
| I33_RS07265 | 0.0221             | 0.370966666666667 | 0.0615433333333333 |
| I33_RS07270 | 0.0535             | 0.3592            | 0.14891            |
| I33_RS07275 | 0.023225           | 0.30365           | 0.059845           |
| I33_RS07285 | 0.0151             | 0.2137            | 0.07044            |
| I33_RS07290 | 0.0065             | 0.1384            | 0.04731            |
| I33_RS07295 | 0.0088             | 0.2558            | 0.03433            |
| I33_RS07300 | 0.0218             | 0.3153            | 0.0692             |
| I33_RS07310 | 0.0333             | 0.4127            | 0.08079            |
| I33_RS07320 | 0.0084             | 0.3223            | 0.02566            |
| I33_RS07325 | 0.0098             | 0.3037            | 0.03229            |
| I33_RS07330 | 0.0001             | 0.7566            | 0.0001             |
| I33_RS07345 | 0.03435            | 0.2018            | 0.171745           |
| I33_RS07350 | 0.0288             | 0.220166666666667 | 0.267106666666667  |
| I33_RS07355 | 0.0101             | 0.3031            | 0.03324            |
| I33_RS07370 | 0.03005            | 0.22035           | 0.13489            |
| I33_RS07375 | 0.0159             | 0.3559            | 0.04455            |
| I33_RS07380 | 0.0441             | 0.2602            | 0.16939            |
| I33_RS07385 | 0.003              | 0.2493            | 0.01188            |
| I33_RS07415 | 0.0008             | 0.1315            | 0.00619            |
| I33_RS07420 | 0.0056             | 0.4771            | 0.01174            |
| I33_RS07425 | 0.0118             | 0.2693            | 0.04387            |
| I33_RS07430 | 0.0853             | 0.3758            | 0.22696            |
| I33_RS07440 | 0.0248             | 0.2992            | 0.08291            |
| I33_RS07450 | 0.0161             | 0.3228            | 0.04995            |
| I33_RS07465 | 0.028              | 0.3834            | 0.07307            |
| I33_RS07470 | 0.06515            | 1.234975          | 0.0533275          |
| I33_RS07480 | 0.0077             | 0.2217            | 0.03454            |
| I33_RS07485 | 0.0143             | 0.3187            | 0.04473            |
| I33_RS07500 | 0.0106             | 0.265             | 0.0399             |

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Table S2 – continued from previous page

| Gene        | $dN$                 | $dS$               | $\omega$           |
|-------------|----------------------|--------------------|--------------------|
| I33_RS07505 | 0.0086               | 0.1896             | 0.041015           |
| I33_RS07510 | 0.061025             | 0.749825           | 0.08532            |
| I33_RS07515 | 0.0438               | 0.3469             | 0.12623            |
| I33_RS07540 | 0.0065               | 0.3919             | 0.0166             |
| I33_RS07545 | 0.002566666666666667 | 0.0911333333333333 | 0.01645            |
| I33_RS07555 | 0.0091               | 0.285              | 0.03189            |
| I33_RS07560 | 0.04415              | 0.3101             | 0.15263            |
| I33_RS07565 | 0.0289               | 0.27375            | 0.08779            |
| I33_RS07570 | 0.0138               | 0.3171             | 0.04354            |
| I33_RS07575 | 0.01525              | 0.3542             | 0.04274            |
| I33_RS07580 | 0.0075               | 0.3169             | 0.0238             |
| I33_RS07585 | 0.0142               | 0.2108             | 0.03553            |
| I33_RS07590 | 0.0189               | 0.25385            | 0.057555           |
| I33_RS07595 | 0.0351               | 0.1255             | 0.27992            |
| I33_RS07600 | 0.055                | 0.32745            | 0.17585            |
| I33_RS07605 | 0.0342               | 0.26085            | 0.13703            |
| I33_RS07610 | 0.018                | 0.2314             | 0.07766            |
| I33_RS07615 | 0.0291               | 0.3022             | 0.09617            |
| I33_RS07620 | 0.0232               | 0.2625             | 0.08849            |
| I33_RS07635 | 0.02765              | 0.293              | 0.094775           |
| I33_RS07640 | 0.0477               | 0.3827             | 0.12459            |
| I33_RS07645 | 0.0178               | 0.2652             | 0.06709            |
| I33_RS07650 | 0.01395              | 0.22495            | 0.03874            |
| I33_RS07655 | 0.0143               | 0.2024             | 0.07079            |
| I33_RS07660 | 0.003666666666666667 | 0.2323666666666667 | 0.01606            |
| I33_RS07670 | 0.0204               | 0.4161             | 0.049              |
| I33_RS07675 | 0.0069               | 0.2056             | 0.03349            |
| I33_RS07680 | 0.0052               | 0.309              | 0.01692            |
| I33_RS07695 | 0.0144               | 0.3478             | 0.0414             |
| I33_RS07700 | 0.006                | 0.2647             | 0.02341            |
| I33_RS07710 | 0.0154               | 0.247              | 0.06224            |
| I33_RS07720 | 0.0497               | 0.486              | 0.1023             |
| I33_RS07730 | 0.01675              | 0.36015            | 0.04081            |
| I33_RS07735 | 0.06255              | 0.34165            | 0.18506            |
| I33_RS07740 | 0.0213               | 0.6325             | 0.03368            |
| I33_RS07750 | 0.006                | 0.1971             | 0.05893            |
| I33_RS07755 | 0.0152               | 0.5002             | 0.03036            |
| I33_RS07760 | 0.0081               | 0.29505            | 0.02634            |
| I33_RS07775 | 0.002266666666666667 | 0.1401666666666667 | 0.0193833333333333 |
| I33_RS07780 | 0.0029               | 0.1904             | 0.0152             |
| I33_RS07790 | 0.013                | 0.4114             | 0.0317             |
| I33_RS07795 | 0.01328              | 0.3087             | 0.042918           |
| I33_RS07800 | 0.0325               | 0.25255            | 0.11721            |
| I33_RS07810 | 0.0481               | 0.4648             | 0.10497            |
| I33_RS07820 | 0.0143               | 0.2855             | 0.04993            |
| I33_RS07825 | 0                    | 0.1909             | 0                  |
| I33_RS07830 | 0.0766               | 0.3403             | 0.22506            |

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Table S2 – continued from previous page

| Gene        | $dN$                | $dS$               | $\omega$  |
|-------------|---------------------|--------------------|-----------|
| I33_RS07835 | 0.0559              | 0.3623             | 0.15428   |
| I33_RS07840 | 0.106               | 0.8823             | 0.12015   |
| I33_RS07845 | 0.3415              | 0.5936             | 0.57534   |
| I33_RS07850 | 0.1208              | 0.2213             | 0.54598   |
| I33_RS07855 | 0.09645             | 0.24535            | 0.39455   |
| I33_RS07860 | 0.0435              | 0.4612             | 0.09423   |
| I33_RS07865 | 0.003               | 0.2356             | 0.01274   |
| I33_RS07870 | 0.0101              | 0.1306             | 0.07752   |
| I33_RS07875 | 0.02293333333333333 | 0.2601             | 0.09846   |
| I33_RS07885 | 0.0032              | 0.273              | 0.01168   |
| I33_RS07890 | 0.0545              | 0.2416             | 0.22548   |
| I33_RS07895 | 0.0113              | 0.2739             | 0.04143   |
| I33_RS07900 | 0.0088              | 0.215              | 0.04559   |
| I33_RS07905 | 0.01435             | 0.3777             | 0.04444   |
| I33_RS07915 | 0.0106              | 0.3288             | 0.03227   |
| I33_RS07925 | 0.01195             | 0.25625            | 0.0475    |
| I33_RS07930 | 0.0031              | 0.1568             | 0.01962   |
| I33_RS07935 | 0.0142              | 0.2314             | 0.06118   |
| I33_RS07940 | 0.0089              | 0.2732             | 0.03262   |
| I33_RS07945 | 0.0141              | 0.26035            | 0.053065  |
| I33_RS07950 | 0.01715             | 0.3037             | 0.056435  |
| I33_RS07955 | 0.0168              | 0.31605            | 0.047665  |
| I33_RS07960 | 0.0156              | 0.2171             | 0.07166   |
| I33_RS07965 | 0.0107              | 0.20655            | 0.046505  |
| I33_RS07970 | 0.0156              | 0.1797             | 0.08661   |
| I33_RS07975 | 0.0157              | 0.28265            | 0.053265  |
| I33_RS07985 | 0.0194              | 0.2814             | 0.06909   |
| I33_RS07990 | 0.00835             | 0.22255            | 0.03749   |
| I33_RS07995 | 0.03148             | 0.24446            | 0.121164  |
| I33_RS08010 | 0                   | 0.167              | 0         |
| I33_RS08015 | 0.0132              | 0.1323             | 0.1139    |
| I33_RS08020 | 0.03105             | 1.357975           | 0.0417225 |
| I33_RS08025 | 0.0975              | 10.5519            | 0.00924   |
| I33_RS08030 | 0.0413              | 0.3818             | 0.10821   |
| I33_RS08035 | 0.0043              | 0.3422             | 0.01249   |
| I33_RS08055 | 0.0134              | 0.3012             | 0.04436   |
| I33_RS08060 | 0.0111              | 0.2037             | 0.05171   |
| I33_RS08065 | 0.0013              | 0.2242             | 0.00587   |
| I33_RS08075 | 0.0143              | 0.2056             | 0.06952   |
| I33_RS08080 | 0.0032              | 0.2036             | 0.01569   |
| I33_RS08085 | 0.0081              | 0.3142             | 0.02583   |
| I33_RS08090 | 0.0307              | 0.3103             | 0.09879   |
| I33_RS08095 | 0.0051              | 0.1169             | 0.042795  |
| I33_RS08105 | 0.04236666666666667 | 0.2618666666666667 | 0.15207   |
| I33_RS08110 | 0.04055             | 0.46195            | 0.14074   |
| I33_RS08115 | 0.0518              | 0.374              | 0.13857   |
| I33_RS08125 | 0.026               | 0.208              | 0.12523   |

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Table S2 – continued from previous page

| Gene        | $dN$              | $dS$              | $\omega$           |
|-------------|-------------------|-------------------|--------------------|
| I33_RS08130 | 0                 | 0.3845            | 0                  |
| I33_RS08135 | 0.0038            | 0.126             | 0.03028            |
| I33_RS08140 | 0.0405            | 0.485466666666667 | 0.0800166666666667 |
| I33_RS08145 | 0.0259            | 0.46265           | 0.055055           |
| I33_RS08150 | 0.02355           | 0.2833            | 0.06898            |
| I33_RS08155 | 0.0336            | 0.1812            | 0.18539            |
| I33_RS08160 | 0.0275            | 0.1208            | 0.22769            |
| I33_RS08165 | 0.0159            | 0.211333333333333 | 0.0764366666666667 |
| I33_RS08170 | 0.00425           | 0.30235           | 0.01656            |
| I33_RS08185 | 0.01375           | 0.254             | 0.052675           |
| I33_RS08195 | 0.0152            | 0.5214            | 0.02915            |
| I33_RS08200 | 0.01315           | 0.3133            | 0.0445375          |
| I33_RS08210 | 0.0202            | 0.3642            | 0.05558            |
| I33_RS08215 | 0.012             | 0.4039            | 0.0296             |
| I33_RS08225 | 0.0072            | 0.3532            | 0.0204             |
| I33_RS08230 | 0.0256            | 0.2145            | 0.11943            |
| I33_RS08235 | 0.0229            | 0.4116            | 0.05561            |
| I33_RS08240 | 0.0334            | 0.32995           | 0.10746            |
| I33_RS08245 | 0.0177            | 0.3256            | 0.05428            |
| I33_RS08260 | 0.0039            | 0.2442            | 0.016              |
| I33_RS08265 | 0.014666666666667 | 0.2576            | 0.0557533333333333 |
| I33_RS08270 | 0.0072            | 0.3446            | 0.02098            |
| I33_RS08275 | 0.0203            | 0.4379            | 0.04633            |
| I33_RS08280 | 0.0409            | 0.2787            | 0.1544325          |
| I33_RS08290 | 0.0147            | 0.4485            | 0.03276            |
| I33_RS08300 | 0.0079            | 0.3335            | 0.0238             |
| I33_RS08315 | 0.01725           | 0.269375          | 0.05667375         |
| I33_RS08320 | 0.0132            | 0.3081            | 0.04297            |
| I33_RS08335 | 0.0288            | 0.37135           | 0.08436            |
| I33_RS08360 | 0.0155            | 0.2559            | 0.06066            |
| I33_RS08365 | 0.0259            | 0.1777            | 0.14567            |
| I33_RS08375 | 0.0188            | 0.3017            | 0.06222            |
| I33_RS08380 | 0.01115           | 0.26505           | 0.04408            |
| I33_RS08390 | 0.0124            | 0.11145           | 0.05554            |
| I33_RS08395 | 0.015             | 0.2322            | 0.071605           |
| I33_RS08400 | 0.0259            | 0.3861            | 0.06719            |
| I33_RS08405 | 0.0064            | 0.26125           | 0.024555           |
| I33_RS08410 | 0.01015           | 0.33495           | 0.031285           |
| I33_RS08415 | 0.0026            | 0.1869            | 0.01367            |
| I33_RS08420 | 0.007             | 0.1883            | 0.03696            |
| I33_RS08425 | 0.0222            | 0.2669            | 0.08316            |
| I33_RS08430 | 0.0095            | 0.3565            | 0.02654            |
| I33_RS08435 | 0.0038            | 0.1159            | 0.03275            |
| I33_RS08450 | 0.01205           | 0.36335           | 0.034315           |
| I33_RS08455 | 0.0084            | 0.3264            | 0.02583            |
| I33_RS08465 | 0.02125           | 0.33215           | 0.062415           |
| I33_RS08470 | 0.0041            | 0.0364            | 0.11253            |

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Table S2 – continued from previous page

| Gene        | $dN$                 | $dS$                | $\omega$           |
|-------------|----------------------|---------------------|--------------------|
| I33_RS08480 | 0.006766666666666667 | 0.08256666666666667 | 0.3446166666666667 |
| I33_RS08485 | 0.0183               | 0.1409              | 0.13009            |
| I33_RS08490 | 0.022                | 0.2531              | 0.0871             |
| I33_RS08495 | 0.01                 | 0.2655              | 0.03761            |
| I33_RS08505 | 0.0048               | 0.1624              | 0.016015           |
| I33_RS08510 | 0.0318               | 0.2199              | 0.14451            |
| I33_RS08515 | 0.0534               | 0.3149              | 0.16949            |
| I33_RS08520 | 0.1949               | 0.4299              | 0.45338            |
| I33_RS08525 | 0.05275              | 0.2446              | 0.224925           |
| I33_RS08530 | 0.0156               | 0.2515              | 0.06194            |
| I33_RS08535 | 0.0075               | 0.1816              | 0.04115            |
| I33_RS08540 | 0.0016               | 0.1781              | 0.00881            |
| I33_RS08545 | 0.0409               | 0.23945             | 0.173215           |
| I33_RS08550 | 0.0075               | 0.4034              | 0.01854            |
| I33_RS08560 | 0.0062               | 0.3769              | 0.01645            |
| I33_RS08565 | 0.0058               | 0.1665              | 0.041905           |
| I33_RS08580 | 0                    | 0.2697              | 0                  |
| I33_RS08585 | 0.01445              | 0.1502              | 0.130645           |
| I33_RS08590 | 0.0124               | 0.2254              | 0.05485            |
| I33_RS08600 | 0.0138               | 0.2817              | 0.0489             |
| I33_RS08610 | 0.035                | 0.3442              | 0.10161            |
| I33_RS08620 | 0.0117               | 0.3496              | 0.0334             |
| I33_RS08625 | 0.035525             | 0.2426              | 0.1594775          |
| I33_RS08630 | 0.0657               | 0.2611666666666667  | 0.2334866666666667 |
| I33_RS08635 | 0.026025             | 0.334975            | 0.0844025          |
| I33_RS08640 | 0.008075             | 0.20705             | 0.04410875         |
| I33_RS08650 | 0.02165              | 0.366               | 0.057895           |
| I33_RS08665 | 0.0177               | 0.26685             | 0.065975           |
| I33_RS08680 | 0.0125               | 0.3027              | 0.04114            |
| I33_RS08685 | 0.0204               | 0.24755             | 0.08307            |
| I33_RS08695 | 0.01066666666666667  | 0.1797              | 0.06357            |
| I33_RS08700 | 0.00415              | 0.1593              | 0.023865           |
| I33_RS08705 | 0.05066666666666667  | 0.1163666666666667  | 0.30358            |
| I33_RS08715 | 0.0088               | 0.1893              | 0.0464             |
| I33_RS08720 | 0                    | 0.1309              | 0                  |
| I33_RS08725 | 0.0119               | 0.2404              | 0.04965            |
| I33_RS08730 | 0.0127               | 0.1869              | 0.067775           |
| I33_RS08735 | 0.0098               | 0.1731              | 0.0567             |
| I33_RS08740 | 0.02415              | 0.33715             | 0.066155           |
| I33_RS08745 | 0.0122               | 0.2703              | 0.04525            |
| I33_RS08755 | 0.0181               | 0.2692              | 0.06726            |
| I33_RS08760 | 0.0063               | 0.3082              | 0.02047            |
| I33_RS08770 | 0.0029               | 0.0824              | 0.0352             |
| I33_RS08775 | 0.0049               | 0.1014666666666667  | 0.0621133333333333 |
| I33_RS08780 | 0.0145               | 0.1107              | 0.13109            |
| I33_RS08795 | 0.00945              | 0.0928              | 0.10454            |
| I33_RS08800 | 0.0222               | 0.3233              | 0.06862            |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS08805 | 0.0207             | 0.3302             | 0.06259            |
| I33_RS08815 | 0.0092             | 0.2405             | 0.03843            |
| I33_RS08820 | 0.01855            | 0.23495            | 0.07817            |
| I33_RS08825 | 0.0108             | 0.276              | 0.03902            |
| I33_RS08835 | 0.0091             | 0.2746             | 0.03301            |
| I33_RS08840 | 0.0092             | 0.1713             | 0.05351            |
| I33_RS08845 | 0.00785            | 0.28265            | 0.0284             |
| I33_RS08860 | 0.016725           | 0.3518             | 0.0470225          |
| I33_RS08865 | 0.0037             | 0.2635             | 0.01395            |
| I33_RS08870 | 0.0088             | 0.3014             | 0.02918            |
| I33_RS08875 | 0                  | 0.254              | 0                  |
| I33_RS08885 | 0.0335             | 0.3663             | 0.09143            |
| I33_RS08895 | 0.0079             | 0.2657             | 0.0298             |
| I33_RS08900 | 0.0328             | 0.4052             | 0.08104            |
| I33_RS08905 | 0.0135666666666667 | 0.1690666666666667 | 0.1109             |
| I33_RS08915 | 0.0145             | 0.279              | 0.05212            |
| I33_RS08920 | 0.0053             | 0.1504             | 0.03492            |
| I33_RS08925 | 0.0427             | 0.3153             | 0.13546            |
| I33_RS08935 | 0.0122461538461538 | 0.247753846153846  | 0.0450553846153846 |
| I33_RS09120 | 0.039              | 0.3683             | 0.10582            |
| I33_RS09125 | 0.0228             | 0.257              | 0.08891            |
| I33_RS09130 | 0.0297             | 0.2666             | 0.11136            |
| I33_RS09145 | 0.0224             | 0.3148             | 0.07101            |
| I33_RS09150 | 0.0897             | 0.2446             | 0.36685            |
| I33_RS09155 | 0.017              | 0.478              | 0.03562            |
| I33_RS09165 | 0.0465             | 0.2342             | 0.19874            |
| I33_RS09170 | 0.017              | 0.0684             | 0.248              |
| I33_RS09175 | 0.0057             | 0.4849             | 0.01185            |
| I33_RS09180 | 0.0224             | 0.3798             | 0.05909            |
| I33_RS09185 | 0.0929             | 0.3128             | 0.2969             |
| I33_RS09190 | 0.00535            | 0.3157             | 0.017365           |
| I33_RS09200 | 0.0068             | 0.0853             | 0.08001            |
| I33_RS09280 | 0.03725            | 0.2545             | 0.171745           |
| I33_RS09290 | 0.0346             | 0.2916             | 0.11858            |
| I33_RS09300 | 0.0178             | 0.3491             | 0.05088            |
| I33_RS09305 | 0.0585             | 0.3368             | 0.17371            |
| I33_RS09310 | 0.0204             | 0.4469             | 0.0457             |
| I33_RS09345 | 0.0302             | 0.495              | 0.064375           |
| I33_RS09350 | 0.0583             | 0.4264             | 0.1368             |
| I33_RS09355 | 0.1562             | 0.2469             | 0.63246            |
| I33_RS09380 | 0.0531             | 0.4371             | 0.12157            |
| I33_RS09405 | 0.0545             | 0.31335            | 0.194785           |
| I33_RS09410 | 0.1084             | 0.3229             | 0.33576            |
| I33_RS09420 | 0.0621             | 0.3407             | 0.18221            |
| I33_RS09440 | 0.0582             | 0.3251             | 0.17907            |
| I33_RS09450 | 0.0415             | 0.34095            | 0.131065           |
| I33_RS09455 | 0.02026            | 0.32354            | 0.06587            |

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Table S2 – continued from previous page

| Gene        | $dN$                | $dS$              | $\omega$          |
|-------------|---------------------|-------------------|-------------------|
| I33_RS09465 | 0.00976666666666667 | 0.362266666666667 | 0.03028           |
| I33_RS09470 | 0.0064              | 0.137766666666667 | 0.05458           |
| I33_RS09475 | 0.0115              | 0.2199            | 0.05209           |
| I33_RS09480 | 0.02625             | 0.296125          | 0.0875525         |
| I33_RS09485 | 0.0042              | 0.54955           | 0.00929           |
| I33_RS09500 | 0.0426              | 0.3105            | 0.1371            |
| I33_RS09505 | 0.0238              | 0.526133333333333 | 0.056456666666667 |
| I33_RS09510 | 0.0168              | 0.3565            | 0.05077           |
| I33_RS09535 | 0.008               | 0.3367            | 0.02374           |
| I33_RS09560 | 0.0754              | 0.2963            | 0.27923           |
| I33_RS09570 | 0.0308              | 1.5625            | 0.04123           |
| I33_RS09575 | 0.0273375           | 0.45019375        | 0.0729875         |
| I33_RS09580 | 0.0322              | 0.3648            | 0.0925575         |
| I33_RS09655 | 0.0685              | 0.3032            | 0.22595           |
| I33_RS09660 | 0.0653              | 0.4234            | 0.15421           |
| I33_RS09665 | 0.0531              | 0.3525            | 0.15056           |
| I33_RS09680 | 0.0204              | 0.4311            | 0.04722           |
| I33_RS09685 | 0.0076              | 0.3002            | 0.02529           |
| I33_RS09690 | 0.0388              | 0.1404            | 0.27639           |
| I33_RS09695 | 0.011               | 0.367             | 0.02996           |
| I33_RS09700 | 0.0928              | 0.3919            | 0.2367            |
| I33_RS09710 | 0.00835             | 0.2608            | 0.05488           |
| I33_RS09720 | 0.0171              | 0.3292            | 0.05206           |
| I33_RS09735 | 0.0081              | 0.2097            | 0.03885           |
| I33_RS09750 | 0.02755             | 0.27295           | 0.09925           |
| I33_RS09755 | 0.0715              | 0.40125           | 0.23297           |
| I33_RS09760 | 0.1132              | 0.5119            | 0.22118           |
| I33_RS09770 | 0.0131              | 0.3196            | 0.04101           |
| I33_RS10055 | 0.0933              | 0.7687            | 0.12135           |
| I33_RS10060 | 0.04825             | 0.413025          | 0.124495          |
| I33_RS10095 | 0.0563              | 0.6491            | 0.08667           |
| I33_RS10105 | 0.0428              | 0.385             | 0.11117           |
| I33_RS10110 | 0.1095              | 0.4242            | 0.25811           |
| I33_RS10115 | 0.092766666666667   | 0.494966666666667 | 0.187903333333333 |
| I33_RS10120 | 0.05375             | 0.4353            | 0.1396175         |
| I33_RS10125 | 0.026               | 0.3992            | 0.098845          |
| I33_RS10130 | 0.0122333333333333  | 0.231433333333333 | 0.092343333333333 |
| I33_RS10135 | 0.063466666666667   | 0.329333333333333 | 0.230256666666667 |
| I33_RS10140 | 0.036366666666667   | 0.3749            | 0.100163333333333 |
| I33_RS10145 | 0.0219              | 0.3634            | 0.05991           |
| I33_RS10150 | 0.0303              | 0.19595           | 0.16631           |
| I33_RS10155 | 0.0237              | 0.2885            | 0.08208           |
| I33_RS10165 | 0.0105              | 0.2354            | 0.04476           |
| I33_RS10170 | 0.0321              | 0.4224            | 0.07592           |
| I33_RS10180 | 0.0192              | 0.2198            | 0.08749           |
| I33_RS10185 | 0.0095              | 0.2853            | 0.03316           |
| I33_RS10200 | 0.0511              | 0.309             | 0.16543           |

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Table S2 – continued from previous page

| Gene        | $dN$                 | $dS$                | $\omega$            |
|-------------|----------------------|---------------------|---------------------|
| I33_RS10210 | 0.02                 | 0.3952              | 0.05069             |
| I33_RS10215 | 0.0084               | 0.3141              | 0.02677             |
| I33_RS10220 | 0.017                | 0.2737              | 0.06196             |
| I33_RS10225 | 0.0299               | 0.3257              | 0.0919              |
| I33_RS10235 | 0.0111               | 0.2675              | 0.04159             |
| I33_RS10245 | 0.0096               | 0.237               | 0.04063             |
| I33_RS10255 | 0.0048               | 0.1619              | 0.02977             |
| I33_RS10260 | 0.0129               | 0.3143              | 0.04089             |
| I33_RS10265 | 0.0108               | 0.3403              | 0.03173             |
| I33_RS10270 | 0.0117               | 0.3025              | 0.03852             |
| I33_RS10275 | 0.0403               | 0.3696              | 0.10907             |
| I33_RS10280 | 0.0343               | 0.3334              | 0.1028              |
| I33_RS10290 | 0.06085              | 0.5464              | 0.111515            |
| I33_RS10300 | 0.0201               | 0.5225              | 0.03856             |
| I33_RS10315 | 0.0215               | 0.3765              | 0.055665            |
| I33_RS10320 | 0.0168               | 0.3473              | 0.04826             |
| I33_RS10325 | 0.013833333333333333 | 0.21323333333333333 | 0.09789333333333333 |
| I33_RS10330 | 0.0244               | 0.266               | 0.09173             |
| I33_RS10335 | 0.0146               | 0.50565             | 0.03454             |
| I33_RS10340 | 0.0665               | 0.2487              | 0.26756             |
| I33_RS10350 | 0.04015              | 0.51915             | 0.076215            |
| I33_RS10355 | 0.0114               | 0.2529              | 0.05371             |
| I33_RS10375 | 0.0093               | 0.4085              | 0.02279             |
| I33_RS10380 | 0.0245               | 0.2604              | 0.09411             |
| I33_RS10390 | 0.0243               | 0.2144              | 0.11326             |
| I33_RS10395 | 0.06125              | 0.2846              | 0.22642             |
| I33_RS10400 | 0.012                | 0.2397              | 0.05003             |
| I33_RS10415 | 0.0239               | 0.27415             | 0.070855            |
| I33_RS10425 | 0.012                | 0.1951              | 0.06149             |
| I33_RS10430 | 0.0159               | 0.2579              | 0.05998             |
| I33_RS10435 | 0.0558               | 0.3542              | 0.15762             |
| I33_RS10440 | 0.0657               | 0.4071              | 0.16144             |
| I33_RS10445 | 0.0201               | 0.3077              | 0.06522             |
| I33_RS10455 | 0.0234               | 0.3343              | 0.07006             |
| I33_RS10460 | 0.045                | 0.3556              | 0.12652             |
| I33_RS10465 | 0.02945              | 0.30805             | 0.095415            |
| I33_RS10470 | 0.063                | 0.4455              | 0.14135             |
| I33_RS10475 | 0.0492               | 0.2527              | 0.19389             |
| I33_RS10480 | 0.0417               | 0.33915             | 0.12256             |
| I33_RS10485 | 0.0827               | 0.2972              | 0.27824             |
| I33_RS10495 | 0.037                | 0.37535             | 0.10687             |
| I33_RS11245 | 0.01455              | 0.313425            | 0.04637             |
| I33_RS11255 | 0.0236               | 0.2943              | 0.0802              |
| I33_RS11260 | 0.0144               | 0.2905              | 0.04973             |
| I33_RS11265 | 0.0277               | 0.242               | 0.11456             |
| I33_RS11270 | 0.0261               | 0.2214              | 0.11779             |
| I33_RS11275 | 0.0424               | 0.2811              | 0.15068             |

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Table S2 – continued from previous page

| Gene        | $dN$                | $dS$               | $\omega$            |
|-------------|---------------------|--------------------|---------------------|
| I33_RS11280 | 0.0152              | 0.0763             | 0.19974             |
| I33_RS11290 | 0.0111              | 0.2224             | 0.04975             |
| I33_RS11305 | 0.0348              | 0.2617             | 0.13277             |
| I33_RS11315 | 0.013               | 0.382              | 0.03393             |
| I33_RS11320 | 0.0314              | 0.2624             | 0.11955             |
| I33_RS11325 | 0.0278              | 0.4218             | 0.06599             |
| I33_RS11330 | 0.0369              | 0.3872             | 0.09528             |
| I33_RS11335 | 0.0135              | 0.2172             | 0.06223             |
| I33_RS11340 | 0.0034              | 0.3101             | 0.01083             |
| I33_RS11345 | 0.05455             | 0.3238             | 0.15392             |
| I33_RS11350 | 0.043               | 0.3813             | 0.11283             |
| I33_RS11355 | 0.0175              | 0.1772             | 0.09876             |
| I33_RS11360 | 0.0107              | 0.2564             | 0.04185             |
| I33_RS11375 | 0.02783333333333333 | 0.2247666666666667 | 0.12048             |
| I33_RS11380 | 0.0621              | 0.3228             | 0.19231             |
| I33_RS11385 | 0.00555             | 0.17175            | 0.032595            |
| I33_RS11390 | 0.0363              | 0.3046             | 0.11932             |
| I33_RS11395 | 0.0597              | 0.3488             | 0.1712              |
| I33_RS11400 | 0.01295             | 0.2444             | 0.059495            |
| I33_RS11410 | 0.0501              | 0.2695             | 0.18581             |
| I33_RS11415 | 0.0471              | 0.3583             | 0.13158             |
| I33_RS11420 | 0.06645             | 0.30255            | 0.21382             |
| I33_RS11425 | 0.063               | 0.3857             | 0.16335             |
| I33_RS11430 | 0.0713              | 0.3434             | 0.20425             |
| I33_RS11440 | 0.0409              | 0.2695             | 0.15184             |
| I33_RS11445 | 0.0123              | 0.3822             | 0.03213             |
| I33_RS11450 | 0.0283              | 0.2921             | 0.09678             |
| I33_RS11455 | 0.0203              | 0.3046             | 0.06671             |
| I33_RS11460 | 0.0121              | 0.3049             | 0.03978             |
| I33_RS11465 | 0.03045             | 0.337              | 0.09158             |
| I33_RS11470 | 0.0254              | 0.2469             | 0.10273             |
| I33_RS11475 | 0.0287              | 0.42               | 0.06842             |
| I33_RS11485 | 0.0459              | 0.3137             | 0.14671             |
| I33_RS11490 | 0.0068              | 0.2835666666666667 | 0.02278333333333333 |
| I33_RS11495 | 0.0208              | 0.2765             | 0.086275            |
| I33_RS11500 | 0.01975             | 0.61665            | 0.01804             |
| I33_RS11505 | 0.0446              | 0.8345             | 0.05347             |
| I33_RS11515 | 0.0474              | 0.3483             | 0.13609             |
| I33_RS11525 | 0.0133              | 0.3049             | 0.04353             |
| I33_RS11530 | 0.0257              | 0.2125             | 0.12089             |
| I33_RS11535 | 0.03885             | 0.37485            | 0.103205            |
| I33_RS11540 | 0.0285              | 0.16705            | NA                  |
| I33_RS11545 | 0.03225             | 0.21055            | 0.112645            |
| I33_RS11550 | 0.03705             | 0.20265            | 0.214145            |
| I33_RS11555 | 0.0127              | 0.1307             | 0.09738             |
| I33_RS11560 | 0.0109              | 0.5333             | 0.02039             |
| I33_RS11565 | 0.048625            | 5.5537             | 0.036585            |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS11570 | 0.05235            | 0.3518             | 0.161675           |
| I33_RS11575 | 0.0021             | 0.3551             | 0.00592            |
| I33_RS11580 | 0.0082             | 0.4795             | 0.01702            |
| I33_RS11585 | 0.0053             | 0.2354             | 0.02271            |
| I33_RS11590 | 0.0165             | 0.2932             | 0.05641            |
| I33_RS11595 | 0.01585            | 0.18885            | 0.091155           |
| I33_RS11600 | 0.0206             | 0.197              | 0.10468            |
| I33_RS11605 | 0.0296             | 0.2773333333333333 | 0.1067666666666667 |
| I33_RS11610 | 0.0159             | 0.28335            | 0.04163            |
| I33_RS11615 | 0.02845            | 0.4116             | 0.07298            |
| I33_RS11625 | 0.0917             | 0.5553             | 0.16519            |
| I33_RS11630 | 0.0555666666666667 | 0.5560333333333333 | 0.1076233333333333 |
| I33_RS11635 | 0.03205            | 0.41895            | 0.077365           |
| I33_RS11640 | 0.02275            | 0.4983             | 0.0449             |
| I33_RS11645 | 0.0066             | 0.5438             | 0.01223            |
| I33_RS11650 | 0.0384             | 0.5935             | 0.06462            |
| I33_RS11655 | 0.0018             | 0.4755             | 0.00382            |
| I33_RS11660 | 0                  | 0.2663             | 0                  |
| I33_RS11670 | 0.0339666666666667 | 0.4461333333333333 | 0.0727333333333333 |
| I33_RS11675 | 0.0343             | 0.4289             | 0.07991            |
| I33_RS11680 | 0.0482             | 0.5734             | 0.08407            |
| I33_RS11685 | 0.06615            | 0.5355             | 0.139605           |
| I33_RS11695 | 0.0702             | 0.2876             | 0.24408            |
| I33_RS11700 | 0.0932             | 0.8084             | 0.11287            |
| I33_RS11705 | 0.063              | 0.3553             | 0.17743            |
| I33_RS11710 | 0.0474             | 0.5343             | 0.08865            |
| I33_RS11715 | 0.0942             | 0.55905            | 0.17557            |
| I33_RS11720 | 0.0468             | 0.5546             | 0.08431            |
| I33_RS11730 | 0.0425             | 0.5361             | 0.07933            |
| I33_RS11740 | 0.035              | 0.6452             | 0.05425            |
| I33_RS11745 | 0.0032             | 0.3529             | 0.00902            |
| I33_RS11755 | 0.0059             | 0.4615             | 0.01268            |
| I33_RS11760 | 0.0118             | 0.1114             | 0.113505           |
| I33_RS11770 | 0.006              | 0.1717             | 0.03482            |
| I33_RS11775 | 0                  | 0.1485             | 0                  |
| I33_RS11780 | 0                  | 0.0299             | 0                  |
| I33_RS11790 | 0.0038             | 0.2246             | 0.01695            |
| I33_RS11795 | 0.022              | 0.3102             | 0.07083            |
| I33_RS11800 | 0.0269             | 0.2239             | 0.12008            |
| I33_RS11810 | 0.0069             | 0.3337             | 0.02058            |
| I33_RS11815 | 0.0065             | 0.3237             | 0.02007            |
| I33_RS11820 | 0.0308             | 0.3021             | 0.10182            |
| I33_RS11825 | 0.0096             | 0.3295             | 0.029              |
| I33_RS11830 | 0.0359             | 0.2248             | 0.15987            |
| I33_RS11835 | 0.037              | 0.3359             | 0.11023            |
| I33_RS11840 | 0.0339666666666667 | 0.4152666666666667 | 0.0669066666666667 |
| I33_RS11845 | 0.0188             | 0.2226             | 0.08432            |

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Table S2 – continued from previous page

| Gene        | $dN$                | $dS$              | $\omega$           |
|-------------|---------------------|-------------------|--------------------|
| I33_RS11850 | 0.0521              | 0.3197            | 0.16302            |
| I33_RS11855 | 0.0118666666666667  | 0.425733333333333 | 0.0287966666666667 |
| I33_RS11860 | 0.0219              | 0.2689            | 0.08147            |
| I33_RS11885 | 0.00235             | 0.1661            | 0.01588            |
| I33_RS11890 | 0.0193              | 0.2497            | 0.07735            |
| I33_RS11905 | 0.0308              | 0.305             | 0.142295           |
| I33_RS11920 | 0.024               | 0.1699            | 0.14102            |
| I33_RS11925 | 0.0278              | 0.3585            | 0.07749            |
| I33_RS11930 | 0.0501              | 0.1881            | 0.26636            |
| I33_RS11935 | 0                   | 0.0621            | 0                  |
| I33_RS11940 | 0.0134              | 0.2869            | 0.04671            |
| I33_RS11945 | 0.0079              | 0.3244            | 0.02446            |
| I33_RS11955 | 0.0532              | 0.5461            | 0.0974             |
| I33_RS11960 | 0.0525              | 0.5897            | 0.08907            |
| I33_RS11965 | 0.09975             | 0.4342            | 0.236575           |
| I33_RS11980 | 0.0077              | 0.2084            | 0.03699            |
| I33_RS11985 | 0.0119              | 0.3131            | 0.03797            |
| I33_RS11990 | 0.0136              | 0.27475           | 0.050095           |
| I33_RS11995 | 0.016               | 0.2922            | 0.05469            |
| I33_RS12005 | 0.00815             | 0.19245           | 0.05522            |
| I33_RS12010 | 0.0055              | 0.2158            | 0.02535            |
| I33_RS12015 | 0.0265              | 0.3091            | 0.08565            |
| I33_RS12030 | 0.0048              | 0.2804            | 0.01722            |
| I33_RS12035 | 0.0127              | 0.1747            | 0.0726             |
| I33_RS12040 | 0.0475              | 0.3492            | 0.12571            |
| I33_RS12045 | 0                   | 0.13475           | 0                  |
| I33_RS12050 | 0.0116              | 0.2828            | 0.04114            |
| I33_RS12055 | 0.0128              | 0.2092            | 0.06111            |
| I33_RS12060 | 0.0253666666666667  | 0.335133333333333 | 0.110973333333333  |
| I33_RS12065 | 0.0368              | 0.4604            | 0.08001            |
| I33_RS12085 | 0.013               | 0.303             | 0.04282            |
| I33_RS12090 | 0.0061              | 0.34875           | 0.016395           |
| I33_RS12100 | 0.0627              | 1.4893            | 0.04213            |
| I33_RS12110 | 0.02035             | 0.30145           | 0.06618            |
| I33_RS12115 | 0.0357              | 0.2336            | 0.15296            |
| I33_RS12120 | 0.0088              | 0.2966            | 0.02967            |
| I33_RS12125 | 0.0055              | 0.342833333333333 | 0.02137            |
| I33_RS12130 | 0.0017              | 0.2183            | 0.00775            |
| I33_RS12135 | 0.0051              | 0.255566666666667 | 0.01802            |
| I33_RS12140 | 0.0191              | 0.32              | 0.05984            |
| I33_RS12160 | 0.00833333333333333 | 0.189166666666667 | 0.168846666666667  |
| I33_RS12165 | 0.0702              | 0.3025            | 0.23215            |
| I33_RS12170 | 0.0122              | 0.3107            | 0.03929            |
| I33_RS12175 | 0.0334              | 0.716             | 0.04662            |
| I33_RS12180 | 0.00556666666666667 | 0.5036            | 0.0108233333333333 |
| I33_RS12190 | 0.0192              | 0.2246            | 0.08546            |
| I33_RS12200 | 0.0178              | 0.3382            | 0.05249            |

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Table S2 – continued from previous page

| Gene        | $dN$                | $dS$               | $\omega$           |
|-------------|---------------------|--------------------|--------------------|
| I33_RS12210 | 0.0318              | 0.3178             | 0.10012            |
| I33_RS12215 | 0.03175             | 0.303              | 0.1054333333333333 |
| I33_RS12220 | 0.06725             | 0.2996             | 0.22708            |
| I33_RS12225 | 0.0327              | 0.24615            | 0.141245           |
| I33_RS12230 | 0.0503              | 0.2367             | 0.21259            |
| I33_RS12235 | 0.0038              | 0.2061             | 0.01821            |
| I33_RS12240 | 0.02155             | 0.38705            | 0.052475           |
| I33_RS12245 | 0.0336              | 0.2414             | 0.13903            |
| I33_RS12260 | 0.0297              | 0.3038             | 0.096095           |
| I33_RS12265 | 0.1056              | 0.37725            | 0.275455           |
| I33_RS12270 | 0.0176              | 0.2966             | 0.05942            |
| I33_RS12275 | 0.0376              | 0.35735            | 0.10458            |
| I33_RS12285 | 0.02805             | 0.425325           | 0.0611975          |
| I33_RS12295 | 0.02535             | 0.2401             | 0.132145           |
| I33_RS12300 | 0.0338              | 0.2969             | 0.113115           |
| I33_RS12305 | 0.0063              | 0.2929             | 0.02143            |
| I33_RS12315 | 0.001               | 0.2648             | 0.00376            |
| I33_RS12320 | 0.0291              | 0.3064             | 0.0949             |
| I33_RS12330 | 0.02826666666666667 | 0.3041333333333333 | 0.0972533333333333 |
| I33_RS12340 | 0.0264              | 0.30925            | 0.07722            |
| I33_RS12345 | 0.0305              | 0.2787             | 0.10939            |
| I33_RS12350 | 0.0565              | 0.3009             | 0.1877             |
| I33_RS12355 | 0.0328              | 0.2991             | 0.10979            |
| I33_RS12360 | 0.0115              | 0.4312             | 0.02662            |
| I33_RS12370 | 0.0158              | 0.3004             | 0.05266            |
| I33_RS12375 | 0.0066              | 0.2221             | 0.02961            |
| I33_RS12385 | 0.0257              | 0.2507             | 0.1024             |
| I33_RS12390 | 0.02635             | 0.41555            | 0.0584             |
| I33_RS12395 | 0.0525              | 0.5606             | 0.09373            |
| I33_RS12410 | 0.0235              | 0.3569             | 0.06589            |
| I33_RS12415 | 0.0373              | 0.3478             | 0.111285           |
| I33_RS12420 | 0.0044              | 0.3691             | 0.01185            |
| I33_RS12425 | 0.0084              | 0.2546             | 0.03284            |
| I33_RS12430 | 0                   | 0.1247             | 0                  |
| I33_RS12435 | 0.0251              | 0.3909             | 0.06429            |
| I33_RS12445 | 0.0101              | 0.3051             | 0.03302            |
| I33_RS12450 | 0.009               | 0.3679             | 0.02443            |
| I33_RS12455 | 0.0346              | 0.3003             | 0.11508            |
| I33_RS12465 | 0.0037              | 0.3675             | 0.01006            |
| I33_RS12470 | 0.01825             | 0.276225           | 0.1187225          |
| I33_RS12475 | 0.0239              | 0.3235             | 0.07391            |
| I33_RS12485 | 0.0328              | 0.3345             | 0.09802            |
| I33_RS12495 | 0.0573              | 0.2989             | 0.19031            |
| I33_RS12500 | 0.0344              | 0.3404             | 0.10097            |
| I33_RS12505 | 0.0139              | 0.3383             | 0.04105            |
| I33_RS12510 | 0.054125            | 0.3099             | 0.17197            |
| I33_RS12525 | 0.0218              | 0.3366             | 0.06475            |

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Table S2 – continued from previous page

| Gene        | $dN$                | $dS$                | $\omega$          |
|-------------|---------------------|---------------------|-------------------|
| I33_RS12550 | 0.0133              | 0.3785              | 0.03517           |
| I33_RS12555 | 0.0186              | 0.2624              | 0.07101           |
| I33_RS12565 | 0.0155              | 0.3192              | 0.04866           |
| I33_RS12570 | 0.0111              | 0.2752              | 0.04024           |
| I33_RS12580 | 0.013               | 0.3006              | 0.04496           |
| I33_RS12595 | 0.007               | 0.1204              | 0.0573            |
| I33_RS12605 | 0.015               | 0.1305              | 0.11464           |
| I33_RS12610 | 0.0159              | 0.189               | 0.08432           |
| I33_RS12615 | 0.0128              | 0.1328              | 0.09667           |
| I33_RS12620 | 0                   | 0.15785             | 0                 |
| I33_RS12630 | 0.0051              | 0.2606              | 0.017795          |
| I33_RS12635 | 0.0244              | 0.1851              | 0.13174           |
| I33_RS12645 | 0.0336              | 0.2918              | 0.11523           |
| I33_RS12650 | 0.0036              | 0.0851              | 0.04241           |
| I33_RS12660 | 0.0034              | 0.0749              | 0.04494           |
| I33_RS12675 | 0.0163              | 0.3837              | 0.04248           |
| I33_RS12685 | 0.0289              | 0.2664              | 0.10838           |
| I33_RS12690 | 0.0462              | 0.2619              | 0.17639           |
| I33_RS12700 | 0.0139              | 0.3644              | 0.03803           |
| I33_RS12710 | 0.027               | 0.319               | 0.08471           |
| I33_RS12715 | 0.0173              | 0.0801              | 0.21584           |
| I33_RS12725 | 0.0221              | 0.4365              | 0.05061           |
| I33_RS12730 | 0.016               | 0.3249              | 0.04932           |
| I33_RS12745 | 0.0193              | 0.33095             | 0.058705          |
| I33_RS12750 | 0.08413333333333333 | 0.319               | 0.270916666666667 |
| I33_RS12755 | 0.0242              | 0.2642              | 0.09167           |
| I33_RS12760 | 0.0284              | 0.27695             | 0.11481           |
| I33_RS12765 | 0.0383              | 0.5015              | 0.07644           |
| I33_RS12770 | 0.0133              | 0.1144              | 0.11655           |
| I33_RS12775 | 0.0302              | 0.4297              | 0.07034           |
| I33_RS12785 | 0.03106666666666667 | 0.23703333333333333 | 0.116601666666667 |
| I33_RS12790 | 0.0663              | 0.24255             | 0.315855          |
| I33_RS12800 | 0.0115              | 0.3095              | 0.03722           |
| I33_RS12810 | 0.0134              | 0.2602              | 0.05152           |
| I33_RS12815 | 0.05348             | 0.3855              | 0.147594          |
| I33_RS12820 | 0.123               | 0.3136              | 0.39233           |
| I33_RS12825 | 0.0865142857142857  | 0.395357142857143   | 0.222348571428571 |
| I33_RS12830 | 0.0139              | 0.3639              | 0.03827           |
| I33_RS12835 | 0.0128              | 0.3733              | 0.03419           |
| I33_RS12840 | 0.0061              | 0.3089              | 0.0196            |
| I33_RS12850 | 0.0654              | 29.74846            | 0.04979           |
| I33_RS12855 | 0                   | 0.2149              | 0                 |
| I33_RS12860 | 0.0124              | 0.3732              | 0.03316           |
| I33_RS12865 | 0.0041              | 0.1613              | 0.02535           |
| I33_RS12870 | 0.01995             | 0.32995             | 0.0614            |
| I33_RS12890 | 0.0063              | 0.2468              | 0.02533           |
| I33_RS12895 | 0.016975            | 0.2706              | 0.06479           |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS12910 | 0.02195            | 0.2143             | 0.10864            |
| I33_RS12915 | 0.0133             | 0.3539             | 0.03752            |
| I33_RS12920 | 0.0733             | 0.0986             | 0.7437             |
| I33_RS12925 | 0.0801             | 0.31735            | 0.251365           |
| I33_RS12935 | 0.0157             | 0.2841             | 0.05525            |
| I33_RS12940 | 0.0221             | 0.3759             | 0.05883            |
| I33_RS12945 | 0.0178             | 0.2540333333333333 | 0.0589966666666667 |
| I33_RS12950 | 0.0083             | 0.2328             | 0.03583            |
| I33_RS12960 | 0.0163             | 0.1365             | 0.11952            |
| I33_RS12965 | 0.0032             | 0.2658             | 0.01219            |
| I33_RS12970 | 0.0022             | 0.1506             | 0.01463            |
| I33_RS12985 | 0.00845            | 0.2779             | 0.03095            |
| I33_RS12990 | 0.0122             | 0.3363             | 0.03631            |
| I33_RS12995 | 0.0048             | 0.1947             | 0.02466            |
| I33_RS13000 | 0.0259666666666667 | 0.2036             | 0.1353666666666667 |
| I33_RS13005 | 0.0247             | 0.3234             | 0.07623            |
| I33_RS13010 | 0.004              | 0.2959             | 0.01365            |
| I33_RS13020 | 0.0159             | 0.1824             | 0.08746            |
| I33_RS13025 | 0.045475           | 0.34175            | 0.1346             |
| I33_RS13030 | 0.0058             | 0.1592             | 0.03672            |
| I33_RS13035 | 0                  | 0.0199             | 0                  |
| I33_RS13040 | 0.0131             | 0.35355            | 0.03593            |
| I33_RS13045 | 0.0363             | 0.152              | 0.23911            |
| I33_RS13050 | 0.00805            | 0.3337             | 0.02552            |
| I33_RS13065 | 0.0073             | 0.23435            | 0.030855           |
| I33_RS13075 | 0.02555            | 0.34565            | 0.075685           |
| I33_RS13080 | 0.0085             | 0.4476             | 0.01902            |
| I33_RS13095 | 0.02145            | 0.34925            | 0.064345           |
| I33_RS13100 | 0.01               | 0.2975             | 0.03353            |
| I33_RS13110 | 0.0053             | 0                  | NA                 |
| I33_RS13115 | 0.0109             | 0.254              | 0.04296            |
| I33_RS13125 | 0.106475           | 0.4393             | 0.23631            |
| I33_RS13130 | 0.0457             | 0.331              | 0.13807            |
| I33_RS13135 | 0.0829             | 0.3154             | 0.26278            |
| I33_RS13140 | 0.0203             | 0.3002             | 0.06778            |
| I33_RS13150 | 0.02975            | 0.2394             | 0.125395           |
| I33_RS13155 | 0.0072             | 0.1636             | 0.04416            |
| I33_RS13160 | 0.0043             | 0.1478             | 0.02895            |
| I33_RS13165 | 0.0087             | 0.2925             | 0.02961            |
| I33_RS13170 | 0                  | 0.1678             | 0                  |
| I33_RS13175 | 0.0083             | 0.2084             | 0.02292            |
| I33_RS13180 | 0.0597             | 0.511              | 0.11676            |
| I33_RS13185 | 0.0621             | 0.4237             | 0.14663            |
| I33_RS13195 | 0.0701             | 0.31845            | 0.23334            |
| I33_RS13200 | 0.0215             | 0.4026             | 0.05346            |
| I33_RS13510 | 0.0692             | 0.7312             | 0.09466            |
| I33_RS13515 | 0.0837             | 2.0099             | 0.07182            |

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Table S2 – continued from previous page

| Gene        | $dN$                 | $dS$               | $\omega$            |
|-------------|----------------------|--------------------|---------------------|
| I33_RS13685 | 0.0151               | 0.588              | 0.02573             |
| I33_RS13690 | 0.04                 | 0.7288             | 0.05487             |
| I33_RS13700 | 0.0298               | 0.4031             | 0.07397             |
| I33_RS13710 | 0.00135              | 0.37715            | 0.00319             |
| I33_RS13715 | 0.05065              | 0.3216             | 0.15883             |
| I33_RS13720 | 0.0035               | 0.3496             | 0.0099              |
| I33_RS13725 | 0.025625             | 0.246275           | 0.13349             |
| I33_RS13745 | 0.0322               | 0.3291             | 0.09797             |
| I33_RS13760 | 0.0209               | 0.5138             | 0.04061             |
| I33_RS13790 | 0.0108               | 0.4306             | 0.02518             |
| I33_RS13795 | 0.0418               | 0.3366333333333333 | 0.12504             |
| I33_RS13800 | 0.07335              | 0.4526             | 0.18663             |
| I33_RS13805 | 0.0202               | 0.3039             | 0.06648             |
| I33_RS13810 | 0.0188               | 0.434              | 0.04339             |
| I33_RS13815 | 0.0061               | 0.262              | 0.02339             |
| I33_RS13825 | 0.0175               | 0.3234             | 0.05416             |
| I33_RS13830 | 0.014                | 0.3202             | 0.04376             |
| I33_RS13835 | 0.0199               | 0.2806             | 0.07086             |
| I33_RS13840 | 0.02855              | 0.2875             | 0.09874             |
| I33_RS13845 | 0.01586666666666667  | 0.2459666666666667 | 0.07690333333333333 |
| I33_RS13850 | 0.0099               | 0.4032             | 0.02463             |
| I33_RS13855 | 0.0162               | 0.2615             | 0.06202             |
| I33_RS13860 | 0                    | 0.1943             | 0                   |
| I33_RS13865 | 0.0149               | 0.238125           | 0.06546             |
| I33_RS13875 | 0.0091               | 0.2535             | 0.03597             |
| I33_RS13885 | 0                    | 0.0205             | 0                   |
| I33_RS13895 | 0.0158               | 0.2697             | 0.05871             |
| I33_RS13905 | 0.0164               | 0.4066             | 0.04022             |
| I33_RS13920 | 0.0067               | 0.1135             | 0.05865             |
| I33_RS13925 | 0.0327               | 0.2164             | 0.15115             |
| I33_RS13930 | 0.0077               | 0.2881             | 0.02661             |
| I33_RS13945 | 0.0096               | 0.2409             | 0.03995             |
| I33_RS13955 | 0.0194               | 0.2273             | 0.08532             |
| I33_RS13965 | 0.012133333333333333 | 0.2978             | 0.04381333333333333 |
| I33_RS13970 | 0.0192               | 0.4262             | 0.04499             |
| I33_RS13980 | 0.0159               | 0.2859             | 0.05558             |
| I33_RS13985 | 0.0256               | 0.3081             | 0.08318             |
| I33_RS13990 | 0.02576666666666667  | 0.2987             | 0.09582333333333333 |
| I33_RS13995 | 0.0019               | 0.2529             | 0.00754             |
| I33_RS14000 | 0.0089               | 0.1106             | 0.08019             |
| I33_RS14015 | 0.01735              | 0.30805            | 0.057345            |
| I33_RS14020 | 0.05605              | 0.45655            | 0.101975            |
| I33_RS14025 | 0.0295               | 0.3966             | 0.07444             |
| I33_RS14030 | 0.0206               | 0.16245            | 0.23146             |
| I33_RS14035 | 0.0332               | 0.1313             | 0.25316             |
| I33_RS14040 | 0.02735              | 0.34895            | 0.07747             |
| I33_RS14045 | 0.0076               | 0.1631             | 0.09284             |

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Table S2 – continued from previous page

| Gene        | $dN$                | $dS$               | $\omega$           |
|-------------|---------------------|--------------------|--------------------|
| I33_RS14055 | 0.0147              | 0.3472             | 0.04225            |
| I33_RS14060 | 0.00675             | 0.3533             | 0.02332            |
| I33_RS14065 | 0.017               | 0.3072             | 0.059295           |
| I33_RS14075 | 0.0216              | 0.2675             | 0.08076            |
| I33_RS14085 | 0.0369              | 0.303              | 0.12167            |
| I33_RS14100 | 0.04963333333333333 | 0.3127             | 0.1597066666666667 |
| I33_RS14105 | 0.0242              | 0.2402             | 0.10064            |
| I33_RS14110 | 0.0209              | 0.1453             | 0.14409            |
| I33_RS14115 | 0.0415              | 0.3213             | 0.12931            |
| I33_RS14120 | 0.0575              | 0.4033             | 0.14261            |
| I33_RS14125 | 0.06405             | 0.31025            | 0.21162            |
| I33_RS14130 | 0.06115             | 0.2998             | 0.22526            |
| I33_RS14135 | 0.0322              | 0.2867             | 0.11225            |
| I33_RS14140 | 0.0207              | 0.2784             | 0.07426            |
| I33_RS14145 | 0.0043              | 0.3512             | 0.01212            |
| I33_RS14150 | 0.01005             | 0.1737             | 0.065145           |
| I33_RS14155 | 0.00965             | 0.1059             | 0.05187            |
| I33_RS14160 | 0.0104              | 0.18885            | 0.09045            |
| I33_RS14165 | 0.0248              | 0.3828             | 0.06484            |
| I33_RS14170 | 0.0069              | 0.3064             | 0.02252            |
| I33_RS14175 | 0.0136              | 0.20525            | 0.06651            |
| I33_RS14180 | 0.0016              | 0.1745             | 0.00911            |
| I33_RS14185 | 0.0014              | 0.2756             | 0.0051             |
| I33_RS14190 | 0.0239              | 0.1888             | 0.12856            |
| I33_RS14195 | 0                   | 0.048              | 0                  |
| I33_RS14200 | 0.0465              | 0.3471             | 0.13385            |
| I33_RS14205 | 0.02695             | 0.28915            | 0.0955             |
| I33_RS14215 | 0.0089              | 0.2631             | 0.03401            |
| I33_RS14225 | 0.02425             | 0.1149             | 0.20163            |
| I33_RS14230 | 0.0484              | 0.2565             | 0.19661            |
| I33_RS14235 | 0.1631              | 0.154              | 1.05913            |
| I33_RS14240 | 0.1105              | 0.2841666666666667 | 0.3512             |
| I33_RS14245 | 0.014               | 0.3164             | 0.04426            |
| I33_RS14250 | 0.035525            | 0.31265            | 0.1090525          |
| I33_RS14255 | 0                   | 0.179              | 0                  |
| I33_RS14260 | 0.007               | 0.2559             | 0.02738            |
| I33_RS14265 | 0.0327              | 0.3319             | 0.09847            |
| I33_RS14270 | 0.0025              | 0.2844             | 0.00871            |
| I33_RS14275 | 0.0054              | 0.3286             | 0.01639            |
| I33_RS14285 | 0.0084              | 0.3672             | 0.02301            |
| I33_RS14290 | 0.0011              | 0.198              | 0.00548            |
| I33_RS14300 | 0.0061              | 0.1888             | 0.03208            |
| I33_RS14305 | 0.0133              | 0.37               | 0.03586            |
| I33_RS14310 | 0.02205             | 0.4085             | 0.05687            |
| I33_RS14315 | 0.005               | 0.255              | 0.01945            |
| I33_RS14320 | 0.0184              | 0.243              | 0.07564            |
| I33_RS14325 | 0.0127              | 0.3449             | 0.03686            |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$              | $\omega$           |
|-------------|--------------------|-------------------|--------------------|
| I33_RS14335 | 0.0056             | 0.32625           | 0.022405           |
| I33_RS14350 | 0.0429             | 0.4466            | 0.09617            |
| I33_RS14355 | 0.00865            | 0.24365           | 0.02175            |
| I33_RS14360 | 0.013              | 0.2706            | 0.0577333333333333 |
| I33_RS14365 | 0.0215             | 0.3591            | 0.05997            |
| I33_RS14370 | 0.0207             | 0.4617            | 0.04493            |
| I33_RS14375 | 0.003              | 0.1471            | 0.02008            |
| I33_RS14380 | 0.0184666666666667 | 0.202266666666667 | 0.0595066666666667 |
| I33_RS14390 | 0.0015             | 0.2623            | 0.00586            |
| I33_RS14395 | 0                  | 0.1233            | 0                  |
| I33_RS14400 | 0                  | 0.1386            | 0                  |
| I33_RS14405 | 0.0092             | 0.2681            | 0.03433            |
| I33_RS14410 | 0.0113             | 0.3016            | 0.03751            |
| I33_RS14420 | 0.014              | 0.2957            | 0.04752            |
| I33_RS14425 | 0                  | 0.353             | 0                  |
| I33_RS14435 | 0.0266             | 0.3315            | 0.08029            |
| I33_RS14440 | 0.02275            | 0.326             | 0.06931            |
| I33_RS14445 | 0.0146             | 0.244             | 0.05897            |
| I33_RS14450 | 0.021              | 0.3087            | 0.06806            |
| I33_RS14455 | 0.01055            | 0.12125           | 0.105245           |
| I33_RS14470 | 0.0045             | 0.2126            | 0.02128            |
| I33_RS14475 | 0.0253             | 0.2654            | 0.09539            |
| I33_RS14480 | 0.0141             | 0.2043            | 0.069              |
| I33_RS14485 | 0.01705            | 0.1322            | 0.14769            |
| I33_RS14490 | 0.0126             | 0.3591            | 0.03497            |
| I33_RS14525 | 0.0079             | 0.2406            | 0.03264            |
| I33_RS14530 | 0.0406666666666667 | 0.237033333333333 | 0.170616666666667  |
| I33_RS14535 | 0.0068             | 0.1832            | 0.03699            |
| I33_RS14540 | 0.0195             | 0.3754            | 0.05189            |
| I33_RS14545 | 0.0282             | 0.3386            | 0.08343            |
| I33_RS14550 | 0.034              | 0.4548            | 0.07482            |
| I33_RS14555 | 0.02485            | 0.3524            | 0.06127            |
| I33_RS14560 | 0.0099             | 0.3704            | 0.02685            |
| I33_RS14565 | 0.0018             | 0.3804            | 0.00477            |
| I33_RS14570 | 0.0156             | 0.3898            | 0.0399             |
| I33_RS14575 | 0.0087             | 0.3138            | 0.02782            |
| I33_RS14580 | 0.009              | 0.31825           | 0.02315            |
| I33_RS14585 | 0.0766             | 0.4673            | 0.153096666666667  |
| I33_RS14590 | 0.0101             | 0.2947            | 0.03439            |
| I33_RS14600 | 0.0315             | 0.3374            | 0.09346            |
| I33_RS14605 | 0.0139             | 0.3               | 0.04618            |
| I33_RS14610 | 0.0231666666666667 | 0.487333333333333 | 0.0532333333333333 |
| I33_RS14620 | 0.0128             | 0.3196            | 0.04012            |
| I33_RS14625 | 0.0125666666666667 | 0.1511            | 0.06024            |
| I33_RS14630 | 0                  | 0.0448            | 0                  |
| I33_RS14635 | 0.0768             | 0.0966            | 0.79443            |
| I33_RS14640 | 0.01525            | 0.22695           | 0.06663            |

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Table S2 – continued from previous page

| Gene        | $dN$    | $dS$               | $\omega$           |
|-------------|---------|--------------------|--------------------|
| I33_RS14645 | 0.0244  | 0.2685             | 0.09091            |
| I33_RS14650 | 0.0278  | 0.29295            | 0.097875           |
| I33_RS14655 | 0.0042  | 0.2926             | 0.01437            |
| I33_RS14660 | 0.02575 | 0.262              | 0.097865           |
| I33_RS14785 | 0.0361  | 0.3447             | 0.10479            |
| I33_RS14790 | 0.0045  | 0.2883             | 0.01562            |
| I33_RS14795 | 0.0134  | 0.2979             | 0.04514            |
| I33_RS14810 | 0.013   | 0.2919             | 0.04452            |
| I33_RS14820 | 0.02855 | 0.2604             | 0.14326            |
| I33_RS14835 | 0.0075  | 0.1464             | 0.05099            |
| I33_RS14840 | 0.0064  | 0.1991             | 0.03238            |
| I33_RS14850 | 0.0088  | 0.1964             | 0.04492            |
| I33_RS14855 | 0.0131  | 0.2509             | 0.06116            |
| I33_RS14870 | 0.0127  | 0.3032             | 0.04197            |
| I33_RS14875 | 0.0043  | 0.2033             | 0.02119            |
| I33_RS14880 | 0.007   | 0.1928             | 0.03637            |
| I33_RS14885 | 0.0047  | 0.1406             | 0.03374            |
| I33_RS14895 | 0.0137  | 0.2491             | 0.06018            |
| I33_RS14900 | 0.0213  | 0.3425             | 0.06213            |
| I33_RS14905 | 0.0159  | 0.2742             | 0.05816            |
| I33_RS14915 | 0.0065  | 0.231325           | 0.0314075          |
| I33_RS14920 | 0.008   | 0.22255            | 0.04483            |
| I33_RS14975 | 0.0083  | 0.2636             | 0.03156            |
| I33_RS14990 | 0.0241  | 0.296              | 0.08138            |
| I33_RS14995 | 0.0012  | 0.2817             | 0.0041             |
| I33_RS15000 | 0.0111  | 0.2811             | 0.03959            |
| I33_RS15005 | 0       | 0.2248             | 0                  |
| I33_RS15015 | 0.01835 | 0.3242             | 0.05852            |
| I33_RS15020 | 0.0029  | 0.1415             | 0.02064            |
| I33_RS15025 | 0.0246  | 0.29785            | 0.078465           |
| I33_RS15030 | 0.0276  | 0.2807             | 0.09849            |
| I33_RS15035 | 0.02335 | 0.2755             | 0.082965           |
| I33_RS15040 | 0.0171  | 0.3745             | 0.04558            |
| I33_RS15045 | 0.0454  | 0.315              | 0.14401            |
| I33_RS15060 | 0.0174  | 0.3111             | 0.05581            |
| I33_RS15065 | 0.0075  | 0.17875            | 0.02099            |
| I33_RS15075 | 0.0417  | 0.3363             | 0.12402            |
| I33_RS15080 | 0.1059  | 26.47185           | 0.01628            |
| I33_RS15095 | 0.0173  | 0.2406333333333333 | 0.0714133333333333 |
| I33_RS15100 | 0.0894  | 0.2081             | 0.42959            |
| I33_RS15105 | 0.0342  | 0.323              | 0.10586            |
| I33_RS15110 | 0.0022  | 0.0648             | 0.03318            |
| I33_RS15120 | 0.0089  | 0.3015             | 0.02962            |
| I33_RS15130 | 0.0201  | 0.1623             | 0.12362            |
| I33_RS15135 | 0.0267  | 0.3381             | 0.0898333333333333 |
| I33_RS15150 | 0.0192  | 0.4158             | 0.04623            |
| I33_RS15160 | 0.0123  | 0.2391             | 0.0516             |

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Table S2 – continued from previous page

| Gene        | $dN$                 | $dS$               | $\omega$            |
|-------------|----------------------|--------------------|---------------------|
| I33_RS15165 | 0.0034               | 0.2303             | 0.01547             |
| I33_RS15175 | 0.0389               | 0.297              | 0.14651             |
| I33_RS15185 | 0.0041               | 0.2584             | 0.01594             |
| I33_RS15210 | 0.019                | 0.2069             | 0.09164             |
| I33_RS15220 | 0.0087               | 0.22815            | 0.03777             |
| I33_RS15235 | 0.0089               | 0.3382             | 0.02642             |
| I33_RS15240 | 0.0139               | 0.1609             | 0.08619             |
| I33_RS15250 | 0.015525             | 0.298975           | 0.048355            |
| I33_RS15255 | 0.05053333333333333  | 0.3587166666666667 | 0.130255            |
| I33_RS15260 | 0.04343333333333333  | 0.2627333333333333 | 0.1617266666666667  |
| I33_RS15275 | 0.0303               | 0.3945             | 0.07671             |
| I33_RS15280 | 0.008033333333333333 | 0.3054666666666667 | 0.03312333333333333 |
| I33_RS15285 | 0.1109666666666667   | 0.3682             | 0.3923066666666667  |
| I33_RS15290 | 0.0989               | 0.509              | 0.19436             |
| I33_RS15295 | 0.0224               | 0.4718333333333333 | 0.04867             |
| I33_RS15300 | 0.04376666666666667  | 0.2492666666666667 | 0.16237             |
| I33_RS15305 | 0.046025             | 0.2958             | 0.3105275           |
| I33_RS15310 | 0.04335              | 0.42065            | 0.10392             |
| I33_RS15315 | 0.0107               | 0.1986             | 0.05393             |
| I33_RS15320 | 0.041                | 0.387              | 0.10594             |
| I33_RS15325 | 0.0101               | 0.3903             | 0.02586             |
| I33_RS15330 | 0.0207               | 0.3941             | 0.05253             |
| I33_RS15335 | 0.0214               | 0.3168             | 0.06755             |
| I33_RS15340 | 0.0049               | 0.1774             | 0.02756             |
| I33_RS15350 | 0.0691               | 0.371              | 0.18611             |
| I33_RS15360 | 0.03695              | 0.33995            | 0.101655            |
| I33_RS15365 | 0.0632               | 0.3851             | 0.16423             |
| I33_RS15370 | 0.0308               | 0.3305             | 0.08748             |
| I33_RS15380 | 0.0717               | 0.3887             | 0.18453             |
| I33_RS15385 | 0.05145              | 0.3156             | 0.16918             |
| I33_RS15390 | 0.0192               | 0.3376333333333333 | 0.05658             |
| I33_RS15400 | 0.03                 | 0.4232             | 0.07095             |
| I33_RS15405 | 0.0216               | 0.2671             | 0.08103             |
| I33_RS15420 | 0.0222               | 0.1612             | 0.13786             |
| I33_RS15425 | 0.0119               | 0.241              | 0.04951             |
| I33_RS15435 | 0.0042               | 0.0384             | 0.10849             |
| I33_RS15445 | 0.0337               | 0.3493             | 0.09645             |
| I33_RS15450 | 0.03513333333333333  | 0.3615333333333333 | 0.1307133333333333  |
| I33_RS15455 | 0.0555               | 0.2955             | 0.17898             |
| I33_RS15460 | 0.0631               | 0.3237             | 0.20022             |
| I33_RS15465 | 0.0329               | 0.36655            | 0.12927             |
| I33_RS15470 | 0.0344               | 0.3181             | 0.10809             |
| I33_RS15475 | 0.0223               | 0.3377             | 0.06611             |
| I33_RS15480 | 0.0135               | 0.3874             | 0.03487             |
| I33_RS15485 | 0.0167               | 0.4222             | 0.03944             |
| I33_RS15495 | 0.0093               | 0.7099             | 0.0131              |
| I33_RS15500 | 0.1367               | 1.1537333333333333 | 0.1262866666666667  |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS15505 | 0.2462             | 2.5731             | 0.09568            |
| I33_RS15510 | 0.0074             | 0.1231             | 0.06027            |
| I33_RS15520 | 0.01415            | 0.3778             | 0.040875           |
| I33_RS15525 | 0.0258666666666667 | 0.3807333333333333 | 0.0683533333333333 |
| I33_RS15530 | 0.0105             | 0.2748             | 0.03836            |
| I33_RS15535 | 0.0216             | 0.3356             | 0.06437            |
| I33_RS15540 | 0.01775            | 0.3945             | 0.071975           |
| I33_RS15545 | 0.017              | 0.4076             | 0.04162            |
| I33_RS15550 | 0.0021             | 0.1787             | 0.012              |
| I33_RS15555 | 0.0047             | 0.1687             | 0.02815            |
| I33_RS15580 | 0.0055             | 0.2388             | 0.02317            |
| I33_RS15585 | 0.0166             | 0.2751666666666667 | 0.0675166666666667 |
| I33_RS15590 | 0.0063             | 0.2345             | 0.02679            |
| I33_RS15595 | 0.0158             | 0.3407             | 0.04645            |
| I33_RS15600 | 0.00645            | 0.2418             | 0.022715           |
| I33_RS15605 | 0.0001             | 0.558              | 0.0001             |
| I33_RS15610 | 0.0098             | 0.4004             | 0.02458            |
| I33_RS15615 | 0.0542             | 0.4423             | 0.12263            |
| I33_RS15620 | 0.0206             | 0.384              | 0.05372            |
| I33_RS15630 | 0.02915            | 0.42525            | 0.068365           |
| I33_RS15635 | 0.022              | 0.3805             | 0.05786            |
| I33_RS15640 | 0.0122             | 0.3974             | 0.03072            |
| I33_RS15645 | 0.0316             | 0.242              | 0.13072            |
| I33_RS15650 | 0                  | 0.2344             | 0                  |
| I33_RS15655 | 0.0618             | 0.2875             | 0.21508            |
| I33_RS15660 | 0.0282666666666667 | 0.2794333333333333 | 0.1262766666666667 |
| I33_RS15670 | 0.0155             | 0.2566             | 0.06052            |
| I33_RS15675 | 0.0095             | 0.1623             | 0.05845            |
| I33_RS15680 | 0.02715            | 0.54445            | 0.062675           |
| I33_RS15685 | 0.0123             | 0.4011             | 0.03073            |
| I33_RS15690 | 0.0471666666666667 | 0.3479666666666667 | 0.15339            |
| I33_RS15695 | 0.0472333333333333 | 0.3867333333333333 | 0.1355666666666667 |
| I33_RS15700 | 0.1033             | 0.2546             | 0.40595            |
| I33_RS15710 | 0.03965            | 0.36225            | 0.13585            |
| I33_RS15715 | 0.0194             | 0.3873             | 0.05017            |
| I33_RS15720 | 0.0228             | 0.2054             | 0.1111             |
| I33_RS15730 | 0.0318             | 0.2628             | 0.12085            |
| I33_RS15740 | 0.0631             | 0.3891             | 0.16217            |
| I33_RS15755 | 0.02695            | 0.4131             | 0.06559            |
| I33_RS15760 | 0.03415            | 0.3117             | 0.108495           |
| I33_RS15765 | 0.0155             | 0.3424             | 0.049135           |
| I33_RS15770 | 0.0328             | 0.3007             | 0.10892            |
| I33_RS15825 | 0.0225             | 0.3833             | 0.05875            |
| I33_RS15830 | 0.1001             | 0.3417             | 0.29289            |
| I33_RS15835 | 0.0089             | 0.3107             | 0.02866            |
| I33_RS15840 | 0.0413             | 0.28845            | 0.1432             |
| I33_RS15845 | 0.045              | 0.2563             | 0.17557            |

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Table S2 – continued from previous page

| Gene        | $dN$                | $dS$               | $\omega$           |
|-------------|---------------------|--------------------|--------------------|
| I33_RS15850 | 0.0105              | 0.2714             | 0.0386             |
| I33_RS15855 | 0.0154              | 0.3342             | 0.04603            |
| I33_RS15860 | 0.02735             | 0.2677             | 0.1047             |
| I33_RS15870 | 0.0277              | 0.4379             | 0.06493            |
| I33_RS15875 | 0                   | 0.2378             | 0                  |
| I33_RS15880 | 0.0279              | 0.293              | 0.09527            |
| I33_RS15885 | 0.0397              | 0.3251             | 0.12216            |
| I33_RS15890 | 0.064               | 0.3917             | 0.1633             |
| I33_RS15895 | 0.0318              | 0.3052             | 0.10412            |
| I33_RS15900 | 0.0142              | 0.2919             | 0.04851            |
| I33_RS15910 | 0.0168              | 0.3665             | 0.04584            |
| I33_RS15915 | 0.0231              | 0.3768             | 0.06132            |
| I33_RS15925 | 0.0554              | 0.2759666666666667 | 0.1997633333333333 |
| I33_RS15930 | 0.03963333333333333 | 0.2761             | 0.1478966666666667 |
| I33_RS15935 | 0.0293              | 0.2632             | 0.11132            |
| I33_RS15940 | 0.0518              | 0.279              | 0.1856             |
| I33_RS15945 | 0.0224              | 0.4048             | 0.05545            |
| I33_RS15955 | 0.0334              | 0.3773             | 0.08848            |
| I33_RS15965 | 0.0113              | 0.3062             | 0.0369             |
| I33_RS15970 | 0.0126              | 0.2265             | 0.05572            |
| I33_RS15980 | 0.0435              | 0.32005            | 0.13643            |
| I33_RS15990 | 0.0079              | 0.3088             | 0.02553            |
| I33_RS15995 | 0.0347              | 0.28305            | 0.13049            |
| I33_RS16000 | 0.03335             | 0.5056             | 0.06841            |
| I33_RS16005 | 0.0354              | 0.3361             | 0.10547            |
| I33_RS16010 | 0.0188              | 0.3366             | 0.05596            |
| I33_RS16020 | 0.0392              | 0.162              | 0.2046             |
| I33_RS16030 | 0.0452              | 0.2847             | 0.1587             |
| I33_RS16035 | 0.0393              | 0.3030333333333333 | 0.1332633333333333 |
| I33_RS16050 | 0.013               | 0.3021             | 0.04313            |
| I33_RS16055 | 0                   | 0.1841             | 0                  |
| I33_RS16065 | 0.0058              | 0.22885            | 0.02373            |
| I33_RS16070 | 0.0402              | 0.2677             | 0.23969            |
| I33_RS16075 | 0.0421              | 0.2733             | 0.163235           |
| I33_RS16080 | 0.01775             | 0.27145            | 0.084625           |
| I33_RS16085 | 0.0138              | 0.2617             | 0.05281            |
| I33_RS16100 | 0.0203              | 0.22595            | 0.076555           |
| I33_RS16105 | 0.0098              | 0.2545             | 0.038225           |
| I33_RS16135 | 0.05735             | 0.2594             | 0.26908            |
| I33_RS16150 | 0.0235              | 0.296              | 0.07929            |
| I33_RS16165 | 0.0149              | 0.2799             | 0.05336            |
| I33_RS16170 | 0.0459              | 0.3678             | 0.12487            |
| I33_RS16175 | 0.19985             | 10.728025          | 0.019675           |
| I33_RS16180 | 1.2971              | 21.3381            | 0.06457            |
| I33_RS16190 | 0.9433              | 8.1929             | 0.11513            |
| I33_RS16195 | 0                   | 0.0237             | 0                  |
| I33_RS16210 | 0.018               | 0.2228             | 0.08094            |

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Table S2 – continued from previous page

| Gene        | $dN$                | $dS$               | $\omega$           |
|-------------|---------------------|--------------------|--------------------|
| I33_RS16215 | 0.0057              | 0.2985             | 0.019              |
| I33_RS16220 | 0.015               | 0.1432             | 0.10474            |
| I33_RS16225 | 0.0553              | 0.2917             | 0.18733            |
| I33_RS16230 | 0.1177              | 1.1763             | 0.10002            |
| I33_RS16235 | 0.03415             | 0.2947             | 0.10758            |
| I33_RS16240 | 0.0059              | 0.1528             | 0.03857            |
| I33_RS16245 | 0.0157              | 0.3122             | 0.05024            |
| I33_RS16250 | 0.0381              | 0.30145            | 0.126415           |
| I33_RS16260 | 0.0301              | 0.2641             | 0.11406            |
| I33_RS16265 | 0.6444              | 53.0155            | 0.01215            |
| I33_RS16270 | 0.0083              | 0.2424             | 0.03419            |
| I33_RS16285 | 0.0169              | 0.288              | 0.05856            |
| I33_RS16300 | 0.0119              | 0.0887             | 0.102385           |
| I33_RS16305 | 0.0241              | 0.3547             | 0.06795            |
| I33_RS16310 | 0.0306              | 0.4074             | 0.07518            |
| I33_RS16315 | 0.0191              | 0.3967             | 0.04805            |
| I33_RS16320 | 0.0267              | 0.1478             | 0.18088            |
| I33_RS16325 | 0.0349              | 0.2487             | 0.14673            |
| I33_RS16330 | 0.0659              | 0.3548             | 0.18569            |
| I33_RS16335 | 0.04825             | 0.3261             | 0.147495           |
| I33_RS16345 | 0.0403              | 0.3182             | 0.1267             |
| I33_RS16350 | 0.0226              | 0.31355            | 0.08407            |
| I33_RS16355 | 0.0328              | 0.3555             | 0.09235            |
| I33_RS16360 | 0.02715             | 0.5038             | 0.05793            |
| I33_RS16365 | 0.041775            | 0.348175           | 0.120235           |
| I33_RS16370 | 0.0513              | 0.3223             | 0.15907            |
| I33_RS16375 | 0.0214              | 0.4211             | 0.05074            |
| I33_RS16380 | 0.01955             | 0.34565            | 0.06137            |
| I33_RS16385 | 0.0145              | 0.3991             | 0.03637            |
| I33_RS16390 | 0.0377              | 0.3373             | 0.109085           |
| I33_RS16395 | 0.0177              | 0.3346             | 0.05301            |
| I33_RS16400 | 0.03645             | 0.19145            | 0.22146            |
| I33_RS16405 | 0.02695             | 0.22785            | 0.15189            |
| I33_RS16410 | 0.006               | 0.3377             | 0.017175           |
| I33_RS16420 | 0.0212              | 0.3688             | 0.05747            |
| I33_RS16425 | 0.0544666666666667  | 0.4326666666666667 | 0.1160333333333333 |
| I33_RS16430 | 0.0237              | 0.2759             | 0.08584            |
| I33_RS16440 | 0.0067              | 0.18305            | 0.040605           |
| I33_RS16445 | 0.02403333333333333 | 0.1922666666666667 | 0.1203633333333333 |
| I33_RS16450 | 0.0681              | 0.3372             | 0.20194            |
| I33_RS16455 | 0.0331              | 0.3467             | 0.09556            |
| I33_RS16460 | 0.0125              | 0.2844             | 0.04382            |
| I33_RS16470 | 0.0121              | 0.3425             | 0.03524            |
| I33_RS16475 | 0.0065              | 0.2142             | 0.03018            |
| I33_RS16480 | 0.0252              | 0.3456             | 0.07294            |
| I33_RS16485 | 0.0129              | 0.2352             | 0.058985           |
| I33_RS16490 | 0.029               | 0.2323             | 0.1137933333333333 |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$              | $\omega$          |
|-------------|--------------------|-------------------|-------------------|
| I33_RS16495 | 0.0363             | 0.2431            | 0.14924           |
| I33_RS16500 | 0                  | 0.2612            | 0                 |
| I33_RS16505 | 0.0141             | 0.2681            | 0.05274           |
| I33_RS16510 | 0.0266             | 0.2292            | 0.10003           |
| I33_RS16515 | 0.0209             | 0.3136            | 0.066345          |
| I33_RS16520 | 0.0045             | 0.281             | 0.01609           |
| I33_RS16525 | 0.0792             | 0.3583            | 0.22104           |
| I33_RS16530 | 0.0287             | 0.3369            | 0.08504           |
| I33_RS16535 | 0.0693             | 0.777             | 0.096085          |
| I33_RS16550 | 0.0364             | 0.3695            | 0.09856           |
| I33_RS16555 | 0.0287             | 0.3266            | 0.08784           |
| I33_RS16560 | 0.047125           | 0.45475           | 0.10385           |
| I33_RS16565 | 0.0975             | 0.554166666666667 | 0.193443333333333 |
| I33_RS16570 | 0.038675           | 0.329125          | 0.125965          |
| I33_RS16575 | 0.0377             | 0.4096            | 0.09206           |
| I33_RS16580 | 0.0703             | 0.3153            | 0.22286           |
| I33_RS16590 | 0.0808             | 0.2894            | 0.27929           |
| I33_RS16600 | 0.0607             | 0.3595            | 0.16886           |
| I33_RS16605 | 0.0383             | 0.4177            | 0.09179           |
| I33_RS16610 | 0.0360333333333333 | 0.393166666666667 | 0.091443333333333 |
| I33_RS16615 | 0.037725           | 0.3743            | 0.10906           |
| I33_RS16620 | 0.0561             | 0.3468            | 0.1617            |
| I33_RS16625 | 0.008              | 0.4921            | 0.01616           |
| I33_RS16630 | 0.027              | 0.3121            | 0.078365          |
| I33_RS16635 | 0.0047             | 0.2219            | 0.02113           |
| I33_RS16640 | 0.02235            | 0.24165           | 0.09053           |
| I33_RS16645 | 0.0223             | 0.3275            | 0.068             |
| I33_RS16650 | 0.0683             | 0.4529            | 0.146515          |
| I33_RS16660 | 0.088              | 0.3957            | 0.22251           |
| I33_RS16665 | 0.001              | 0.1501            | 0.00648           |
| I33_RS16670 | 0.0031             | 0.195             | 0.01586           |
| I33_RS16675 | 0.0075             | 0.15705           | 0.04777           |
| I33_RS16680 | 0.0035             | 0.1248            | 0.0278            |
| I33_RS16685 | 0.0138             | 0.2889            | 0.04782           |
| I33_RS16690 | 0.0118             | 0.1788            | 0.06611           |
| I33_RS16700 | 0.0068             | 0.2951            | 0.02313           |
| I33_RS16705 | 0.0126             | 0.2256            | 0.05592           |
| I33_RS16710 | 0.0273             | 0.1613            | 0.16948           |
| I33_RS16715 | 0.0317             | 0.19245           | 0.163885          |
| I33_RS16720 | 0.0186             | 0.11395           | 0.18399           |
| I33_RS16725 | 0                  | 0.2876            | 0                 |
| I33_RS16730 | 0.0119             | 0.3573            | 0.03337           |
| I33_RS16750 | 0.02625            | 0.255             | 0.103025          |
| I33_RS16765 | 0.01515            | 0.2549            | 0.06149           |
| I33_RS16770 | 0.03915            | 0.368525          | 0.10745           |
| I33_RS16775 | 0.016              | 0.2681            | 0.05985           |
| I33_RS16780 | 0.0183             | 0.254             | 0.06528           |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$              | $\omega$           |
|-------------|--------------------|-------------------|--------------------|
| I33_RS16800 | 0.07875            | 0.15055           | 0.807945           |
| I33_RS16805 | 0.01285            | 0.28415           | 0.03959            |
| I33_RS16810 | 0.0106             | 0.2864            | 0.03695            |
| I33_RS16820 | 0.017              | 0.1558            | 0.10939            |
| I33_RS16830 | 0.003              | 0.2058            | 0.01457            |
| I33_RS16835 | 0.0309             | 0.4287            | 0.067795           |
| I33_RS16840 | 0.0261             | 0.4056            | 0.06423            |
| I33_RS16845 | 0.0393             | 0.4695            | 0.08361            |
| I33_RS16850 | 0.06035            | 0.4314            | 0.1496225          |
| I33_RS16855 | 0.05375            | 0.2615            | 0.20603            |
| I33_RS16865 | 0.023              | 0.3118            | 0.07368            |
| I33_RS16870 | 0.0328             | 0.2669            | 0.12281            |
| I33_RS16875 | 0.1114             | 0.326666666666667 | 0.37067            |
| I33_RS16880 | 0.0145             | 0.29765           | 0.048005           |
| I33_RS16885 | 0.019              | 0.4146            | 0.04593            |
| I33_RS16890 | 0.0233             | 0.229             | 0.10162            |
| I33_RS16895 | 0.0679             | 0.321133333333333 | 0.21179            |
| I33_RS16900 | 0.0643166666666667 | 0.358516666666667 | 0.18               |
| I33_RS16910 | 0.0264             | 0.3265            | 0.08085            |
| I33_RS16920 | 0.0202             | 0.3372            | 0.05985            |
| I33_RS16930 | 0.004              | 0.2407            | 0.01672            |
| I33_RS16935 | 0.038625           | 0.43975           | 0.0944175          |
| I33_RS16940 | 0.019825           | 0.389875          | 0.063375           |
| I33_RS16945 | 0.0221             | 0.2212            | 0.09999            |
| I33_RS16950 | 0.0212666666666667 | 0.2556            | 0.08162            |
| I33_RS16955 | 0.0375             | 0.3394            | 0.11062            |
| I33_RS16960 | 0.03285            | 0.38715           | 0.09395            |
| I33_RS16965 | 0.0189             | 0.3549            | 0.05313            |
| I33_RS16975 | 0.0241             | 0.2188            | 0.0925866666666667 |
| I33_RS16980 | 0.0275             | 0.3879            | 0.07099            |
| I33_RS16985 | 0.04065            | 0.33985           | 0.1206             |
| I33_RS16990 | 0.0518             | 0.2941            | 0.17604            |
| I33_RS16995 | 0.0347             | 0.376             | 0.09232            |
| I33_RS17000 | 0.02985            | 0.25805           | 0.12907            |
| I33_RS17005 | 0.0221             | 0.4091            | 0.054075           |
| I33_RS17025 | 0.0106             | 0.3355            | 0.03148            |
| I33_RS17030 | 0.0312             | 0.2397            | 0.13007            |
| I33_RS17055 | 0.0378             | 0.33455           | 0.114985           |
| I33_RS17060 | 0.0378             | 0.3288            | 0.111285           |
| I33_RS17065 | 0.0275333333333333 | 0.267966666666667 | 0.10308            |
| I33_RS17075 | 0.0482             | 0.2664            | 0.18092            |
| I33_RS17085 | 0.0355             | 0.3122            | 0.11359            |
| I33_RS17090 | 0.0212             | 0.2901            | 0.07318            |
| I33_RS17095 | 0.0276             | 0.4705            | 0.05872            |
| I33_RS17100 | 0.0556             | 0.4733            | 0.11739            |
| I33_RS17105 | 0.01505            | 0.28835           | 0.05767            |
| I33_RS17110 | 0.0526             | 0.3734            | 0.14078            |

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Table S2 – continued from previous page

| Gene        | $dN$                 | $dS$               | $\omega$           |
|-------------|----------------------|--------------------|--------------------|
| I33_RS17115 | 0.0086               | 0.4296             | 0.02007            |
| I33_RS17120 | 0.0575               | 0.37055            | 0.14938            |
| I33_RS17125 | 0.0728               | 0.5702             | 0.12767            |
| I33_RS17135 | 0.0108               | 0.2222             | 0.04852            |
| I33_RS17155 | 0.0018               | 0.14795            | 0.008705           |
| I33_RS17160 | 0.00375              | 0.1663             | 0.02417            |
| I33_RS17175 | 0.02713333333333333  | 0.3196666666666667 | 0.08417            |
| I33_RS17180 | 0.009                | 0.3509             | 0.02575            |
| I33_RS17185 | 0.0256               | 0.2475             | 0.10346            |
| I33_RS17190 | 0.0172               | 0.3631             | 0.04751            |
| I33_RS17210 | 0.0149               | 0.3882             | 0.039435           |
| I33_RS17215 | 0.01165              | 0.29265            | 0.042915           |
| I33_RS17225 | 0.05795              | 0.3978             | 0.145765           |
| I33_RS17230 | 0.0846               | 0.5154             | 0.163335           |
| I33_RS17235 | 0.1458               | 1.88055            | 0.0705             |
| I33_RS17240 | 0.007466666666666667 | 0.1517666666666667 | 0.0451466666666667 |
| I33_RS17245 | 0.0037               | 0.0903             | 0.04097            |
| I33_RS17250 | 0.0059               | 0.1073             | 0.05464            |
| I33_RS17255 | 0.0021               | 0.06665            | 0.021745           |
| I33_RS17265 | 0.0113               | 0.4144             | 0.02724            |
| I33_RS17270 | 0.0077               | 0.3782             | 0.02035            |
| I33_RS17275 | 0.0057               | 0.3627             | 0.01568            |
| I33_RS17285 | 0.0419               | 0.2644             | 0.16229            |
| I33_RS17295 | 0.04505              | 0.33845            | 0.13337            |
| I33_RS17300 | 0.0096               | 0.39815            | 0.02577            |
| I33_RS17310 | 0.0193               | 0.243              | 0.07941            |
| I33_RS17315 | 0.03424              | 0.34476            | 0.110194           |
| I33_RS17320 | 0.05135              | 0.3086             | 0.1669             |
| I33_RS17325 | 0.0509               | 0.3296             | 0.15455            |
| I33_RS17340 | 0.1327               | 0.3269             | 0.40604            |
| I33_RS17345 | 0.062                | 0.4754333333333333 | 0.13701            |
| I33_RS17355 | 0.0156               | 0.348              | 0.04489            |
| I33_RS17360 | 0.02845              | 0.38985            | 0.068915           |
| I33_RS17365 | 0.018                | 0.331              | 0.05424            |
| I33_RS17370 | 0.0501               | 0.2507             | 0.1999             |
| I33_RS17375 | 0.0168               | 0.3264             | 0.05152            |
| I33_RS17385 | 0.0228               | 0.3473             | 0.06573            |
| I33_RS17395 | 0.0246               | 0.33785            | 0.07539            |
| I33_RS17400 | 0.034                | 0.2943             | 0.11547            |
| I33_RS17405 | 0.0279               | 0.4908             | 0.05685            |
| I33_RS17410 | 0                    | 0.2534             | 0                  |
| I33_RS17415 | 0.0403               | 0.3599             | 0.11183            |
| I33_RS17420 | 0.0402               | 0.4094             | 0.09824            |
| I33_RS17425 | 0.0636               | 0.3589             | 0.17728            |
| I33_RS17440 | 0.05533333333333333  | 0.3077333333333333 | 0.2019566666666667 |
| I33_RS17450 | 0.0217               | 0.1618             | 0.13417            |
| I33_RS17455 | 0.0505               | 0.3522             | 0.14334            |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS17460 | 0.0159             | 0.36885            | 0.04105            |
| I33_RS17465 | 0.0309             | 0.3337             | 0.094365           |
| I33_RS17470 | 0.0136             | 0.316              | 0.043              |
| I33_RS17475 | 0.0314             | 0.4211             | 0.07465            |
| I33_RS17480 | 0.016              | 0.2566             | 0.06226            |
| I33_RS17485 | 0.0196             | 0.2842333333333333 | 0.0758233333333333 |
| I33_RS17490 | 0.07125            | 0.4788             | 0.148865           |
| I33_RS17495 | 0.0684             | 0.5285             | 0.12945            |
| I33_RS17520 | 0.03544            | 0.35422            | 0.09725            |
| I33_RS17525 | 0.0325             | 0.4759             | 0.06794            |
| I33_RS17605 | 0.0186             | 0.6032             | 0.03084            |
| I33_RS17610 | 0.01555            | 0.3487             | 0.04467            |
| I33_RS17620 | 0.0247             | 0.2837             | 0.0871             |
| I33_RS17630 | 0.0264             | 0.80265            | 0.042055           |
| I33_RS17635 | 0.0385             | 0.3674             | 0.1049             |
| I33_RS17640 | 0.0262             | 0.3001             | 0.0872             |
| I33_RS17645 | 0.0394             | 0.5581             | 0.07063            |
| I33_RS17650 | 0.0620666666666667 | 0.309066666666667  | 0.2407933333333333 |
| I33_RS17655 | 0.0153             | 0.259              | 0.05921            |
| I33_RS17665 | 0.04755            | 0.2833             | 0.167905           |
| I33_RS17670 | 0                  | 0.1599             | 0                  |
| I33_RS17675 | 0.0061             | 0.2393             | 0.02546            |
| I33_RS17685 | 0.0078             | 0.3811             | 0.0204             |
| I33_RS17705 | 0.0061             | 0.3216             | 0.01886            |
| I33_RS17715 | 0.0166             | 0.1759             | 0.09416            |
| I33_RS17720 | 0.0171             | 0.3439             | 0.04965            |
| I33_RS17725 | 0.0154             | 0.392              | 0.03933            |
| I33_RS17735 | 0.0188             | 0.4476             | 0.04199            |
| I33_RS17740 | 0.1197             | 1.7529             | 0.06827            |
| I33_RS17745 | 0.3164             | 11.4988            | 0.02752            |
| I33_RS17750 | 0.0446             | 0.5476             | 0.08146            |
| I33_RS17760 | 0.0269             | 0.4303             | 0.06248            |
| I33_RS17765 | 0                  | 0.173              | 0                  |
| I33_RS17770 | 0.0407             | 0.3687333333333333 | 0.1184466666666667 |
| I33_RS17775 | 0.0316             | 0.2975             | 0.11345            |
| I33_RS17780 | 0.0212             | 0.2958             | 0.076735           |
| I33_RS17785 | 0.0169             | 0.3309             | 0.05107            |
| I33_RS17800 | 0.048              | 0.3796             | 0.12657            |
| I33_RS17805 | 0.0256             | 0.3836             | 0.0666             |
| I33_RS17810 | 0.0313             | 0.3622             | 0.08634            |
| I33_RS17815 | 0.0318             | 0.3716             | 0.0855             |
| I33_RS17820 | 0.0163             | 0.2287             | 0.07139            |
| I33_RS17825 | 0.0047             | 0.3296             | 0.01415            |
| I33_RS17835 | 0.0438             | 0.4181             | 0.10477            |
| I33_RS17840 | 0.03155            | 0.3319             | 0.086355           |
| I33_RS17845 | 0.0268             | 0.3573             | 0.07508            |
| I33_RS17865 | 0.036              | 0.4024             | 0.08939            |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$             |
|-------------|--------------------|--------------------|----------------------|
| I33_RS17905 | 0.02015            | 0.2543             | 0.09613              |
| I33_RS17910 | 0.02605            | 0.2755             | 0.09494              |
| I33_RS17925 | 0.0161             | 0.3422             | 0.04713              |
| I33_RS17940 | 0.0075             | 0.3014             | 0.03337              |
| I33_RS17955 | 0.0146             | 0.2412             | 0.0607               |
| I33_RS17960 | 0.024              | 0.2004             | 0.12                 |
| I33_RS17965 | 0.0074             | 0.4309             | 0.01722              |
| I33_RS17980 | 0.0115             | 0.21055            | 0.058085             |
| I33_RS17985 | 0.026              | 0.20025            | 0.17012              |
| I33_RS17995 | 0.0041             | 0.2802             | 0.01477              |
| I33_RS18005 | 0.0305166666666667 | 0.29985            | 0.10749              |
| I33_RS18010 | 0.0465             | 0.7269             | 0.0639               |
| I33_RS18015 | 0.0754             | 0.78815            | 0.12396              |
| I33_RS18020 | 0.0365             | 0.9422             | 0.03879              |
| I33_RS18025 | 0.0213             | 0.3731             | 0.0589566666666667   |
| I33_RS18030 | 0.02235            | 0.3717             | 0.060175             |
| I33_RS18045 | 0.037              | 0.2298666666666667 | 0.1665333333333333   |
| I33_RS18055 | 0.0495             | 0.2631             | 0.18796              |
| I33_RS18060 | 0.0763             | 0.320225           | 0.234585             |
| I33_RS18065 | 0.02               | 0.2563             | 0.07784              |
| I33_RS18070 | 0.002              | 0.1416             | 0.01392              |
| I33_RS18075 | 0.0022             | 0.2507             | 0.00877              |
| I33_RS18080 | 0.0252             | 0.2815             | 0.08966              |
| I33_RS18090 | 0.0027             | 0.3153             | 0.00869              |
| I33_RS18095 | 0.01895            | 0.3358             | 0.062475             |
| I33_RS18110 | 0.0589             | 35.8862            | 0.027765             |
| I33_RS18120 | 0.12372            | 16.30198           | 0.022118             |
| I33_RS18130 | 0.0925             | 1.605              | 0.05764              |
| I33_RS18135 | 0.119              | 30.6684            | 0.00388              |
| I33_RS18145 | 0.0539             | 1.9401             | 0.02778              |
| I33_RS18150 | 0.043              | 3.2228             | 0.01333              |
| I33_RS18155 | 0.2454             | 12.5512            | 0.01955              |
| I33_RS18175 | 0.0988             | 6.5283             | 0.01514              |
| I33_RS18180 | 0.0383             | 7.1577             | 0.00536              |
| I33_RS18185 | 0.0305             | 3.01095            | 0.010215             |
| I33_RS18225 | 0.10595            | 6.3534             | 0.02388              |
| I33_RS18230 | 0.0651             | 9.8082             | 0.00664              |
| I33_RS18255 | 0.3182666666666667 | 61.25676666666667  | 0.009833333333333333 |
| I33_RS18260 | 0.4349             | 56.9795            | 0.00763              |
| I33_RS18265 | 0.0805             | 0.3682             | 0.21867              |
| I33_RS18275 | 0.0395             | 0.4037             | 0.09796              |
| I33_RS18285 | 0.0474             | 0.3632             | 0.1306               |
| I33_RS18295 | 0.0797             | 0.8804             | 0.09048              |
| I33_RS18300 | 0.0846             | 1.7002             | 0.04977              |
| I33_RS18305 | 0.1043             | 0.9762             | 0.104625             |
| I33_RS18320 | 0.0807666666666667 | 8.9418             | 0.04222              |
| I33_RS18325 | 0.045              | 0.5219             | 0.08619              |

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Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS18335 | 0.0291             | 0.3358             | 0.08653            |
| I33_RS18345 | 0.01475            | 0.30965            | 0.03907            |
| I33_RS18355 | 0.0035             | 0.1505             | 0.02304            |
| I33_RS18370 | 0.0327333333333333 | 0.3379             | 0.0983433333333333 |
| I33_RS18380 | 0.0227             | 0.4703             | 0.04823            |
| I33_RS18385 | 0.0107             | 0.2635             | 0.04066            |
| I33_RS18390 | 0.0359             | 0.33225            | 0.1084             |
| I33_RS18400 | 0.0146             | 0.2499             | 0.05851            |
| I33_RS18405 | 0.0123666666666667 | 0.3607             | 0.0330666666666667 |
| I33_RS18430 | 0.038              | 0.4516             | 0.08412            |
| I33_RS18440 | 0.03425            | 0.4104             | 0.1024825          |
| I33_RS18445 | 0.0547             | 0.3704             | 0.1477             |
| I33_RS18455 | 0.0185666666666667 | 0.387666666666667  | 0.0476966666666667 |
| I33_RS18485 | 0.0200333333333333 | 0.3971333333333333 | 0.0487866666666667 |
| I33_RS18490 | 0.0188             | 0.2851             | 0.06608            |
| I33_RS18495 | 0.013              | 0.1136             | 0.11469            |
| I33_RS18500 | 0.03685            | 0.33035            | 0.105035           |
| I33_RS18505 | 0.059775           | 0.336525           | 0.195745           |
| I33_RS18510 | 0.0154             | 0.1511             | 0.10205            |
| I33_RS18520 | 0.016              | 0.1825             | 0.08768            |
| I33_RS18525 | 0.0297             | 0.3779             | 0.07869            |
| I33_RS18535 | 0.0144             | 0.3691             | 0.03892            |
| I33_RS18545 | 0.034              | 0.2217             | 0.15325            |
| I33_RS18550 | 0.0607             | 0.4072             | 0.14904            |
| I33_RS18560 | 0.021              | 0.1532             | 0.13693            |
| I33_RS18565 | 0.0443             | 0.393              | 0.1204             |
| I33_RS18570 | 0.01195            | 0.2249             | 0.05981            |
| I33_RS18575 | 0.0134             | 0.2589             | 0.05156            |
| I33_RS18580 | 0.0208             | 0.37915            | 0.055335           |
| I33_RS18585 | 0.0014             | 0.0947             | 0.01488            |
| I33_RS18590 | 0                  | 0.0713             | 0                  |
| I33_RS18595 | 0.0082             | 0.23995            | 0.03408            |
| I33_RS18600 | 0.050175           | 0.311175           | 0.16925            |
| I33_RS18605 | 0.03               | 0.284              | 0.10566            |
| I33_RS18610 | 0.0161             | 0.362              | 0.04457            |
| I33_RS18620 | 0.0233             | 0.3642             | 0.065              |
| I33_RS18625 | 0.0468             | 0.3441             | 0.14883            |
| I33_RS18635 | 0.0059             | 0.2971             | 0.01983            |
| I33_RS18640 | 0.0296             | 0.33985            | 0.09636            |
| I33_RS18645 | 0.0878333333333333 | 0.3885333333333333 | 0.2166166666666667 |
| I33_RS18650 | 0.0628333333333333 | 0.4310333333333333 | 0.1399233333333333 |
| I33_RS18660 | 0.0159             | 0.2261             | 0.07038            |
| I33_RS18665 | 0.0113             | 0.3611             | 0.03123            |
| I33_RS18670 | 0.0419666666666667 | 0.2566333333333333 | 0.1547733333333333 |
| I33_RS18675 | 0.0473             | 0.3379             | 0.14               |
| I33_RS18680 | 0.0125             | 0.3208             | 0.03885            |
| I33_RS18685 | 0.0208             | 0.27245            | 0.082745           |

Continued on next page

Table S2 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$           |
|-------------|--------------------|--------------------|--------------------|
| I33_RS18690 | 0.0682             | 0.2272             | 0.30035            |
| I33_RS18695 | 0.0356             | 0.4516             | 0.07889            |
| I33_RS18700 | 0.0132             | 0.2835             | 0.04653            |
| I33_RS18710 | 0.0374             | 0.408              | 0.09156            |
| I33_RS18720 | 0.0123             | 0.26835            | 0.046805           |
| I33_RS18730 | 0.0231             | 0.2365             | 0.09763            |
| I33_RS18735 | 0.0386             | 0.2924             | 0.13188            |
| I33_RS18740 | 0.0356             | 0.1504             | 0.225165           |
| I33_RS18745 | 0.0265             | 0.2125666666666667 | 0.15935            |
| I33_RS18750 | 0.0051             | 0.1458             | 0.03488            |
| I33_RS18755 | 0.005              | 0.1408             | 0.03537            |
| I33_RS18765 | 0.0327             | 0.1582             | 0.20689            |
| I33_RS18770 | 0.0012             | 0.02845            | 0.030765           |
| I33_RS18775 | 0.0075             | 0.1255             | 0.05966            |
| I33_RS18780 | 0.0089             | 0.4377             | 0.02027            |
| I33_RS18785 | 0.0065             | 0.2358             | 0.02778            |
| I33_RS18790 | 0.02105            | 0.31125            | 0.06887            |
| I33_RS18795 | 0.03365            | 0.2114             | 0.160335           |
| I33_RS18805 | 0.0228             | 0.3572             | 0.06393            |
| I33_RS18810 | 0.0302             | 0.4205             | 0.07183            |
| I33_RS18815 | 0.0305             | 0.2381333333333333 | 0.15041            |
| I33_RS18820 | 0.044              | 0.3118             | 0.14096            |
| I33_RS18825 | 0.0013             | 0.2165             | 0.00611            |
| I33_RS18830 | 0.0481             | 0.1981             | 0.24259            |
| I33_RS18835 | 0.028              | 0.2293             | 0.12226            |
| I33_RS18840 | 0.0045             | 0.1763             | 0.02549            |
| I33_RS18845 | 0.0242             | 0.2108             | 0.11497            |
| I33_RS18850 | 0                  | 0.0209             | 0                  |
| I33_RS18855 | 0                  | 0.236              | 0                  |
| I33_RS18860 | 0.0044             | 0.2545             | 0.01726            |
| I33_RS18865 | 0.0022             | 0.2486             | 0.00884            |
| I33_RS18870 | 0.0092             | 0.1553             | 0.0594             |
| I33_RS18875 | 0.0047             | 0.0996             | 0.04675            |
| I33_RS18880 | 0                  | 0.3943             | 0                  |
| I33_RS18885 | 0.01565            | 0.23605            | 0.093985           |
| I33_RS18890 | 0.0211             | 0.2136             | 0.09859            |
| I33_RS18895 | 0.0184             | 0.3598             | 0.05114            |
| I33_RS18910 | 0.0746             | 0.6661666666666667 | 0.1132066666666667 |
| I33_RS18915 | 0.0209             | 0.3216             | 0.06617            |
| I33_RS18940 | 0.0238             | 0.3451             | 0.06883            |
| I33_RS18945 | 0.0288142857142857 | 0.346542857142857  | 0.0862057142857143 |
| I33_RS18950 | 0.0173             | 0.2147             | 0.08036            |
| I33_RS18955 | 0.06155            | 0.4013             | 0.153385           |
| I33_RS18960 | 0.01595            | 0.34045            | 0.04605            |
| I33_RS18965 | 0.0099             | 0.2797             | 0.03545            |
| I33_RS18990 | 0.0167             | 0.2326             | 0.07194            |
| I33_RS19000 | 0                  | 0.1044             | 0                  |

Continued on next page

Table S2 – continued from previous page

| Gene        | $dN$                | $dS$               | $\omega$           |
|-------------|---------------------|--------------------|--------------------|
| I33_RS19005 | 0.0164              | 0.247              | 0.06621            |
| I33_RS19015 | 0.0581              | 0.3361             | 0.17486            |
| I33_RS19020 | 0.0333              | 0.2439             | 0.13635            |
| I33_RS19025 | 0.0468              | 0.3044             | 0.15382            |
| I33_RS19035 | 0.1485              | 0.40245            | 0.390015           |
| I33_RS19045 | 0.0257              | 0.3022             | 0.08515            |
| I33_RS19050 | 0.0083              | 0.2333             | 0.03547            |
| I33_RS19055 | 0.0035              | 0.2867             | 0.01204            |
| I33_RS19060 | 0.0197              | 0.4438             | 0.047695           |
| I33_RS19065 | 0.01445             | 0.35895            | 0.040465           |
| I33_RS19070 | 0.0155              | 0.1675             | 0.061605           |
| I33_RS19075 | 0.0467              | 0.3503             | 0.13324            |
| I33_RS19095 | 0.0076              | 0.2265             | 0.03353            |
| I33_RS19105 | 0.01673333333333333 | 0.2615             | 0.06563            |
| I33_RS19110 | 0.03083333333333333 | 0.3039333333333333 | 0.1084233333333333 |
| I33_RS19115 | 0.0155              | 0.3092             | 0.052895           |
| I33_RS19125 | 0.0086              | 0.1749             | 0.04901            |
| I33_RS19130 | 0.0109              | 0.3246             | 0.03357            |
| I33_RS19140 | 0.0255              | 0.31085            | 0.080285           |
| I33_RS19150 | 0.0175              | 0.2613             | 0.0671             |
| I33_RS19160 | 0.0069              | 0.3381             | 0.02039            |
| I33_RS19170 | 0.0159              | 0.3097             | 0.05136            |
| I33_RS19175 | 0.008               | 0.4332             | 0.01852            |
| I33_RS19185 | 0.0307              | 0.3584             | 0.0856             |
| I33_RS19195 | 0.0217              | 0.3181             | 0.06825            |
| I33_RS19200 | 0.04                | 0.4243             | 0.09432            |
| I33_RS19205 | 0.0375              | 0.2243             | 0.16712            |
| I33_RS19220 | 0.0138              | 0.3949             | 0.03504            |
| I33_RS19225 | 0.0111              | 0.39705            | 0.03354            |
| I33_RS19230 | 0.0064              | 0.2959             | 0.02168            |
| I33_RS19235 | 0.0144              | 0.359              | 0.03999            |
| I33_RS19240 | 0.02985             | 0.2525             | 0.12394            |
| I33_RS19245 | 0.08386666666666667 | 0.2838             | 0.3496366666666667 |
| I33_RS19250 | 0.0322              | 0.3392             | 0.09491            |
| I33_RS19255 | 0.0348              | 0.2176             | 0.15999            |
| I33_RS19260 | 0.0227              | 0.2205             | 0.10283            |
| I33_RS19265 | 0.047               | 0.2881             | 0.16321            |
| I33_RS19270 | 0.0205              | 0.1801             | 0.11387            |
| I33_RS19275 | 0.00855             | 0.2221             | 0.038035           |
| I33_RS19285 | 0.0288              | 0.3462             | 0.08314            |
| I33_RS19290 | 0.0347              | 0.2648             | 0.15887            |
| I33_RS19295 | 0.04156666666666667 | 0.3838             | 0.10325            |
| I33_RS19300 | 0.01636666666666667 | 0.4153333333333333 | 0.04476            |
| I33_RS19315 | 0.0054              | 0.2155             | 0.02509            |
| I33_RS19320 | 0.0418              | 0.4394             | 0.0952             |
| I33_RS19330 | 0.0177              | 0.6305             | 0.02814            |
| I33_RS19340 | 0.0484              | 0.5821             | 0.08316            |

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Table S2 – continued from previous page

| Gene        | $dN$                 | $dS$                | $\omega$            |
|-------------|----------------------|---------------------|---------------------|
| I33_RS19345 | 0                    | 0.2564              | 0                   |
| I33_RS19355 | 0.0241               | 0.3112              | 0.07741             |
| I33_RS19370 | 0.0255               | 0.4084              | 0.06245             |
| I33_RS19375 | 0.0231               | 0.2838              | 0.08122             |
| I33_RS19380 | 0.0501               | 0.8123              | 0.052445            |
| I33_RS19385 | 0                    | 0.189               | 0                   |
| I33_RS19390 | 0.002966666666666667 | 0.09383333333333333 | 0.03076             |
| I33_RS19395 | 0.0035               | 0.2024              | 0.01741             |
| I33_RS19400 | 0.0091               | 0.1638              | 0.05562             |
| I33_RS19405 | 0.0643               | 0.2767              | 0.2322              |
| I33_RS19410 | 0.02485              | 0.26255             | 0.095295            |
| I33_RS19415 | 0.02483333333333333  | 0.2768666666666667  | 0.09094             |
| I33_RS19420 | 0.02555              | 0.2094              | 0.197545            |
| I33_RS19435 | 0.0193               | 0.343               | 0.05628             |
| I33_RS19445 | 0.0261               | 0.3246              | 0.08027             |
| I33_RS19450 | 0.0375               | 0.185               | 0.20252             |
| I33_RS19460 | 0.03465              | 0.4673              | 0.0802              |
| I33_RS19475 | 0.02366666666666667  | 0.2439              | 0.0959666666666667  |
| I33_RS19480 | 0.035925             | 0.340525            | 0.11176             |
| I33_RS19485 | 0.0247               | 0.5649              | 0.04376             |
| I33_RS19500 | 0.0485               | 0.22745             | 0.216855            |
| I33_RS19515 | 0.0322               | 0.3408              | 0.094975            |
| I33_RS19520 | 0.0244               | 0.2164              | 0.1127              |
| I33_RS19530 | 0.0372               | 0.3875666666666667  | 0.0869066666666667  |
| I33_RS19540 | 0.0189               | 0.3271              | 0.05772             |
| I33_RS19545 | 0.0581               | 0.4672              | 0.1259066666666667  |
| I33_RS19550 | 0.0355               | 0.3893              | 0.09107             |
| I33_RS19555 | 0.0044               | 0.2102              | 0.02082             |
| I33_RS19560 | 0.01533333333333333  | 0.1738              | 0.07960333333333333 |
| I33_RS19570 | 0.0062               | 0.1858              | 0.03337             |
| I33_RS19575 | 0.0089               | 0.16215             | 0.070795            |
| I33_RS19580 | 0.0155               | 0.2332              | 0.065815            |
| I33_RS19610 | 0.0155               | 0.3663              | 0.04221             |
| I33_RS19615 | 0                    | 0.1858              | 0                   |
| I33_RS19620 | 0.03595              | 0.2679              | 0.1361              |
| I33_RS19635 | 0.0216               | 0.2546              | 0.08491             |
| I33_RS19640 | 0.03833333333333333  | 0.4474333333333333  | 0.08257             |
| I33_RS19645 | 0.0826               | 0.2514              | 0.32871             |
| I33_RS19650 | 0.06518              | 0.34084             | 0.201456            |
| I33_RS19655 | 0.032                | 0.26465             | 0.135255            |
| I33_RS19665 | 0.0071               | 0.2019              | 0.03505             |
| I33_RS19670 | 0.0124               | 0.2562              | 0.04828             |
| I33_RS19675 | 0.0541               | 0.3267              | 0.16567             |
| I33_RS19680 | 0.0237               | 0.4126              | 0.05744             |
| I33_RS19690 | 0.0264               | 0.3773              | 0.071535            |
| I33_RS19695 | 0.0561               | 0.4247              | 0.13201             |
| I33_RS19700 | 0.0085               | 0.2303              | 0.03702             |

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Table S2 – continued from previous page

| Gene         | $dN$                | $dS$               | $\omega$           |
|--------------|---------------------|--------------------|--------------------|
| I33_RS19710  | 0.0119              | 0.3392             | 0.03503            |
| I33_RS19720  | 0.0937              | 0.281              | 0.33338            |
| I33_RS19725  | 0.0835              | 0.4226             | 0.19767            |
| I33_RS19730  | 0.03895             | 0.34215            | 0.096765           |
| I33_RS19735  | 0.0842666666666667  | 0.3485             | 0.27505            |
| I33_RS19740  | 0.0511              | 0.3426             | 0.14908            |
| I33_RS19755  | 0.0038              | 0.4002             | 0.0094             |
| I33_RS19760  | 0.0666              | 0.2079             | 0.32028            |
| I33_RS19770  | 0.05645             | 0.3419             | 0.17064            |
| I33_RS19775  | 0.0133              | 0.2884             | 0.04599            |
| I33_RS19780  | 0.0058              | 0.59045            | 0.008565           |
| I33_RS19785  | 0.0127              | 0.4195             | 0.03021            |
| I33_RS19820  | 0.0258              | 0.3578             | 0.07201            |
| I33_RS19835  | 0.0342              | 0.4293             | 0.08241            |
| I33_RS19845  | 0.0161              | 0.2959             | 0.05438            |
| I33_RS19850  | 0.0177              | 0.3053             | 0.05806            |
| I33_RS19855  | 0.0254              | 0.2948             | 0.08602            |
| I33_RS19860  | 0.0371              | 0.3554             | 0.10446            |
| I33_RS19870  | 0.09443333333333333 | 0.4068666666666667 | 0.2285366666666667 |
| I33_RS19880  | 0.0095              | 0.2834             | 0.03343            |
| I33_RS19885  | 0.0169              | 0.4372             | 0.041905           |
| I33_RS19890  | 0.0726              | 0.423              | 0.17169            |
| I33_RS19945  | 0.0067              | 0.306              | 0.02191            |
| U712_RS01560 | 0.027               | 0.253              | 0.10684            |
| U712_RS01695 | 0.0148              | 0.2573             | 0.05758            |
| U712_RS01705 | 0.0037              | 0.3353             | 0.01098            |
| U712_RS01890 | 0.0397              | 0.4255             | 0.09325            |
| U712_RS02675 | 0.0055              | 0.266              | 0.02079            |
| U712_RS02695 | 0.0121              | 0.311              | 0.03899            |
| U712_RS02990 | 0.1825              | 0.7743             | 0.23571            |
| U712_RS05860 | 0.0868              | 0.2747             | 0.31588            |
| U712_RS06190 | 0.0047              | 0.2411             | 0.0196             |
| U712_RS06255 | 0.0036              | 0.1361             | 0.02613            |
| U712_RS06265 | 0.0017              | 0.2728             | 0.0062             |
| U712_RS07205 | 0.0163              | 0.1356             | 0.12042            |
| U712_RS07390 | 0.0266              | 0.3026             | 0.08789            |
| U712_RS07555 | 0                   | 0.312              | 0                  |
| U712_RS07705 | 0.005               | 0.2934             | 0.01691            |
| U712_RS07715 | 0.0472              | 0.4377             | 0.10778            |
| U712_RS08360 | 0.0223              | 0.3501             | 0.06357            |
| U712_RS08685 | 0.0263              | 0.2712             | 0.09704            |
| U712_RS09120 | 0.0351              | 0.172              | 0.20391            |
| U712_RS09155 | 0.0293              | 0.28               | 0.10472            |
| U712_RS09160 | 0                   | 0.0701             | 0                  |
| U712_RS09230 | 0.0061              | 0.2764             | 0.02198            |
| U712_RS10350 | 0                   | 0.2697             | 0                  |
| U712_RS11405 | 0.006               | 0                  | NA                 |

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Table S2 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| U712_RS11450 | 0.0409  | 0.5158  | 0.07926  |
| U712_RS11530 | 0.051   | 0.3094  | 0.16465  |
| U712_RS11535 | 0.0119  | 0.2545  | 0.0466   |
| U712_RS11710 | 0.0111  | 0.2439  | 0.0457   |
| U712_RS11970 | 0.038   | 0.234   | 0.16221  |
| U712_RS12560 | 0.0332  | 0.3766  | 0.08817  |
| U712_RS12615 | 0.0032  | 0.4089  | 0.00776  |
| U712_RS12620 | 0.0092  | 0.3249  | 0.02835  |
| U712_RS12690 | 0.0062  | 0.2671  | 0.02339  |
| U712_RS12710 | 0.0195  | 0.1877  | 0.10409  |
| U712_RS12790 | 0.0668  | 0.279   | 0.23928  |
| U712_RS13800 | 0.0255  | 0.3612  | 0.07069  |
| U712_RS13875 | 0.0229  | 0.372   | 0.06155  |
| U712_RS14245 | 0.0433  | 0.3371  | 0.12837  |
| U712_RS14765 | 0.033   | 0.3246  | 0.1016   |
| U712_RS14770 | 0.0155  | 0.3807  | 0.04082  |
| U712_RS14775 | 0.0238  | 0.30965 | 0.07691  |
| U712_RS14795 | 0.0118  | 0.2831  | 0.04155  |
| U712_RS14835 | 0.008   | 0.2006  | 0.03991  |
| U712_RS15475 | 0.0208  | 0.4478  | 0.04647  |
| U712_RS15505 | 0.0163  | 0.3361  | 0.0485   |
| U712_RS15600 | 0.0138  | 0.3593  | 0.03833  |
| U712_RS16660 | 0.0889  | 0.3914  | 0.22722  |
| U712_RS17840 | 0.0764  | 0.39    | 0.19584  |
| U712_RS18005 | 0.0192  | 0.3057  | 0.06288  |
| U712_RS18285 | 0.0771  | 5.1135  | 0.01508  |
| U712_RS18470 | 0.0442  | 0.4512  | 0.09792  |
| U712_RS19180 | 0.0547  | 0.4709  | 0.11613  |
| U712_RS19730 | 0.0183  | 0.5565  | 0.03287  |
| U712_RS20125 | 0.0196  | 0.398   | 0.04935  |
| U712_RS20135 | 0.0332  | 0.2915  | 0.11395  |
| U712_RS20140 | 0.01985 | 0.2078  | 0.091735 |

Table S3: Per gene  $dN$ ,  $dS$ , and  $\omega$  values calculated for *Streptomyces*.

| <i>Streptomyces</i> |        |        |          |
|---------------------|--------|--------|----------|
| Gene                | $dN$   | $dS$   | $\omega$ |
| gene_name           | dN     | dS     | omega    |
| FQ762_RS04400       | 0      | 0.0445 | 0        |
| FQ762_RS04585       | 0      | 0.0411 | 0        |
| FQ762_RS04700       | 0.0008 | 0.0323 | 0.02507  |
| FQ762_RS04760       | NA     | NA     | NA       |
| FQ762_RS04770       | NA     | NA     | NA       |
| FQ762_RS04810       | NA     | NA     | NA       |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| FQ762_RS04815 | NA     | NA     | NA       |
| FQ762_RS04870 | 0.0014 | 0.031  | 0.04371  |
| FQ762_RS05070 | NA     | NA     | NA       |
| FQ762_RS05075 | NA     | NA     | NA       |
| FQ762_RS05130 | 0.002  | 0.0181 | 0.11204  |
| FQ762_RS05135 | 0      | 0      | 0        |
| FQ762_RS05140 | NA     | NA     | NA       |
| FQ762_RS05145 | 0      | 0.0554 | 0        |
| FQ762_RS05150 | 0      | 0.0558 | 0        |
| FQ762_RS05155 | NA     | NA     | NA       |
| FQ762_RS05165 | 0      | 0.0239 | 0        |
| FQ762_RS05240 | 0.0046 | 0.0683 | 0.06704  |
| FQ762_RS05320 | NA     | NA     | NA       |
| FQ762_RS05370 | NA     | NA     | NA       |
| FQ762_RS05400 | NA     | NA     | NA       |
| FQ762_RS05435 | NA     | NA     | NA       |
| FQ762_RS05465 | NA     | NA     | NA       |
| FQ762_RS05525 | 0.0013 | 0.0418 | 0.03042  |
| FQ762_RS05580 | NA     | NA     | NA       |
| FQ762_RS05585 | 0.0019 | 0.0512 | 0.03725  |
| FQ762_RS05610 | NA     | NA     | NA       |
| FQ762_RS05620 | 0      | 0.0111 | 0        |
| FQ762_RS05625 | 0.007  | 0.0252 | 0.27611  |
| FQ762_RS05630 | 0.0015 | 0.0822 | 0.0182   |
| FQ762_RS05665 | 0.0013 | 0.0199 | 0.06711  |
| FQ762_RS05710 | NA     | NA     | NA       |
| FQ762_RS05755 | 0.0024 | 0      | NA       |
| FQ762_RS05760 | NA     | NA     | NA       |
| FQ762_RS05775 | 0.0026 | 0.0136 | 0.19007  |
| FQ762_RS05805 | NA     | NA     | NA       |
| FQ762_RS05850 | 0.0189 | 0.0189 | 1.00227  |
| FQ762_RS05855 | 0.0013 | 0.0124 | 0.10874  |
| FQ762_RS05890 | 0      | 0.0228 | 0        |
| FQ762_RS05920 | 0.0033 | 0.0075 | 0.44234  |
| FQ762_RS05940 | 0.0014 | 0.0083 | 0.16845  |
| FQ762_RS06015 | NA     | NA     | NA       |
| FQ762_RS06050 | 0.0015 | 0.0245 | 0.06019  |
| FQ762_RS06065 | 0      | 0      | 0        |
| FQ762_RS06145 | 0      | 0      | 0        |
| FQ762_RS06170 | NA     | NA     | NA       |
| FQ762_RS06335 | NA     | NA     | NA       |
| FQ762_RS06350 | 0      | 0.0042 | 0        |
| FQ762_RS06365 | 0.0029 | 0.0158 | 0.18233  |
| FQ762_RS06385 | NA     | NA     | NA       |
| FQ762_RS06480 | NA     | NA     | NA       |
| FQ762_RS06535 | NA     | NA     | NA       |
| FQ762_RS06545 | 0      | 0.0128 | 0        |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| FQ762_RS06555 | NA     | NA     | NA       |
| FQ762_RS06560 | NA     | NA     | NA       |
| FQ762_RS06625 | 0      | 0      | 0        |
| FQ762_RS06650 | NA     | NA     | NA       |
| FQ762_RS06655 | NA     | NA     | NA       |
| FQ762_RS06865 | NA     | NA     | NA       |
| FQ762_RS06870 | NA     | NA     | NA       |
| FQ762_RS06900 | 0.0048 | 0      | NA       |
| FQ762_RS06915 | NA     | NA     | NA       |
| FQ762_RS06930 | 0      | 0.0266 | 0        |
| FQ762_RS06935 | 0      | 0.0393 | 0        |
| FQ762_RS06990 | NA     | NA     | NA       |
| FQ762_RS07000 | NA     | NA     | NA       |
| FQ762_RS07030 | 0      | 0.0205 | 0        |
| FQ762_RS07070 | NA     | NA     | NA       |
| FQ762_RS07135 | NA     | NA     | NA       |
| FQ762_RS07145 | NA     | NA     | NA       |
| FQ762_RS07150 | 0      | 0      | 0        |
| FQ762_RS07200 | NA     | NA     | NA       |
| FQ762_RS07300 | 0.003  | 0.0105 | 0.28622  |
| FQ762_RS07390 | NA     | NA     | NA       |
| FQ762_RS07505 | NA     | NA     | NA       |
| FQ762_RS07510 | NA     | NA     | NA       |
| FQ762_RS07515 | NA     | NA     | NA       |
| FQ762_RS07530 | NA     | NA     | NA       |
| FQ762_RS07535 | NA     | NA     | NA       |
| FQ762_RS07555 | NA     | NA     | NA       |
| FQ762_RS07595 | NA     | NA     | NA       |
| FQ762_RS07645 | NA     | NA     | NA       |
| FQ762_RS07650 | NA     | NA     | NA       |
| FQ762_RS07655 | NA     | NA     | NA       |
| FQ762_RS07660 | NA     | NA     | NA       |
| FQ762_RS07665 | NA     | NA     | NA       |
| FQ762_RS07685 | NA     | NA     | NA       |
| FQ762_RS07690 | NA     | NA     | NA       |
| FQ762_RS07695 | NA     | NA     | NA       |
| FQ762_RS07720 | 0.0005 | 0.0374 | 0.01364  |
| FQ762_RS07745 | NA     | NA     | NA       |
| FQ762_RS07750 | 0      | 0.0089 | 0        |
| FQ762_RS07780 | NA     | NA     | NA       |
| FQ762_RS07805 | 0      | 0.0288 | 0        |
| FQ762_RS07830 | NA     | NA     | NA       |
| FQ762_RS07835 | NA     | NA     | NA       |
| FQ762_RS07875 | NA     | NA     | NA       |
| FQ762_RS07885 | NA     | NA     | NA       |
| FQ762_RS07905 | NA     | NA     | NA       |
| FQ762_RS07910 | NA     | NA     | NA       |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| FQ762_RS07995 | 0      | 0      | 0        |
| FQ762_RS08030 | 0.0022 | 0.0227 | 0.09556  |
| FQ762_RS08040 | NA     | NA     | NA       |
| FQ762_RS08055 | NA     | NA     | NA       |
| FQ762_RS08130 | 0      | 0.0333 | 0        |
| FQ762_RS08170 | 0.0034 | 0.0228 | 0.14995  |
| FQ762_RS08215 | NA     | NA     | NA       |
| FQ762_RS08225 | NA     | NA     | NA       |
| FQ762_RS08315 | NA     | NA     | NA       |
| FQ762_RS08345 | NA     | NA     | NA       |
| FQ762_RS08355 | NA     | NA     | NA       |
| FQ762_RS08360 | NA     | NA     | NA       |
| FQ762_RS08430 | 0      | 0.0084 | 0        |
| FQ762_RS08475 | NA     | NA     | NA       |
| FQ762_RS08485 | 0      | 0      | 0        |
| FQ762_RS08500 | 0      | 0      | 0        |
| FQ762_RS08505 | NA     | NA     | NA       |
| FQ762_RS08525 | 0.0058 | 0.1433 | 0.0403   |
| FQ762_RS08530 | NA     | NA     | NA       |
| FQ762_RS08535 | 0      | 0      | 0        |
| FQ762_RS08630 | 0      | 0.0275 | 0        |
| FQ762_RS08680 | NA     | NA     | NA       |
| FQ762_RS08695 | NA     | NA     | NA       |
| FQ762_RS08705 | NA     | NA     | NA       |
| FQ762_RS08725 | NA     | NA     | NA       |
| FQ762_RS08745 | NA     | NA     | NA       |
| FQ762_RS08775 | 0.0043 | 0.0157 | 0.27479  |
| FQ762_RS08785 | 0      | 0.0216 | 0        |
| FQ762_RS08805 | 0.005  | 0.0151 | 0.32811  |
| FQ762_RS08810 | NA     | NA     | NA       |
| FQ762_RS08865 | 0.0014 | 0      | NA       |
| FQ762_RS08870 | 0.002  | 0.0051 | 0.38989  |
| FQ762_RS08880 | 0      | 0      | 0        |
| FQ762_RS08950 | NA     | NA     | NA       |
| FQ762_RS08955 | NA     | NA     | NA       |
| FQ762_RS08980 | 0.0017 | 0.0126 | 0.13125  |
| FQ762_RS09040 | NA     | NA     | NA       |
| FQ762_RS09075 | NA     | NA     | NA       |
| FQ762_RS09085 | 0      | 0.0171 | 0        |
| FQ762_RS09160 | NA     | NA     | NA       |
| FQ762_RS09170 | NA     | NA     | NA       |
| FQ762_RS09185 | NA     | NA     | NA       |
| FQ762_RS09195 | 0.0035 | 0.0093 | 0.36986  |
| FQ762_RS09200 | 0      | 0      | 0        |
| FQ762_RS09210 | NA     | NA     | NA       |
| FQ762_RS09215 | 0.0064 | 0.0128 | 0.49931  |
| FQ762_RS09225 | NA     | NA     | NA       |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| FQ762_RS09230 | NA     | NA     | NA       |
| FQ762_RS09240 | NA     | NA     | NA       |
| FQ762_RS09265 | 0.0008 | 0.0516 | 0.01511  |
| FQ762_RS09280 | 0      | 0.063  | 0        |
| FQ762_RS09315 | 0.0011 | 0      | NA       |
| FQ762_RS09400 | NA     | NA     | NA       |
| FQ762_RS09405 | NA     | NA     | NA       |
| FQ762_RS09410 | 0      | 0      | 0        |
| FQ762_RS09535 | NA     | NA     | NA       |
| FQ762_RS09565 | 0      | 0      | 0        |
| FQ762_RS09585 | NA     | NA     | NA       |
| FQ762_RS09615 | NA     | NA     | NA       |
| FQ762_RS09620 | NA     | NA     | NA       |
| FQ762_RS09630 | NA     | NA     | NA       |
| FQ762_RS09635 | NA     | NA     | NA       |
| FQ762_RS09650 | NA     | NA     | NA       |
| FQ762_RS09700 | 0      | 0      | 0        |
| FQ762_RS09720 | NA     | NA     | NA       |
| FQ762_RS09810 | NA     | NA     | NA       |
| FQ762_RS09815 | NA     | NA     | NA       |
| FQ762_RS09820 | NA     | NA     | NA       |
| FQ762_RS09825 | 0      | 0      | 0        |
| FQ762_RS09830 | 0      | 0      | 0        |
| FQ762_RS09835 | 0      | 0.0056 | 0        |
| FQ762_RS09880 | 0      | 0.0419 | 0        |
| FQ762_RS09885 | 0      | 0.0273 | 0        |
| FQ762_RS09890 | 0      | 0.0263 | 0        |
| FQ762_RS09975 | 0.0011 | 0.0065 | 0.16452  |
| FQ762_RS10075 | NA     | NA     | NA       |
| FQ762_RS10080 | 0      | 0      | 0        |
| FQ762_RS10140 | 0.0022 | 0.0228 | 0.09766  |
| FQ762_RS10210 | NA     | NA     | NA       |
| FQ762_RS10310 | NA     | NA     | NA       |
| FQ762_RS10340 | 0      | 0.112  | 0        |
| FQ762_RS10380 | 0      | 0.095  | 0        |
| FQ762_RS10425 | NA     | NA     | NA       |
| FQ762_RS10430 | NA     | NA     | NA       |
| FQ762_RS10485 | NA     | NA     | NA       |
| FQ762_RS10490 | NA     | NA     | NA       |
| FQ762_RS10525 | NA     | NA     | NA       |
| FQ762_RS10565 | NA     | NA     | NA       |
| FQ762_RS10570 | 0      | 0.0046 | 0        |
| FQ762_RS10585 | NA     | NA     | NA       |
| FQ762_RS10590 | NA     | NA     | NA       |
| FQ762_RS10640 | NA     | NA     | NA       |
| FQ762_RS10645 | NA     | NA     | NA       |
| FQ762_RS10650 | NA     | NA     | NA       |

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**Table S3 – continued from previous page**

| <b>Gene</b>   | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|---------------|------------------------|------------------------|----------------------------|
| FQ762_RS10655 | NA                     | NA                     | NA                         |
| FQ762_RS10675 | NA                     | NA                     | NA                         |
| FQ762_RS10680 | NA                     | NA                     | NA                         |
| FQ762_RS10700 | 0                      | 0.0126                 | 0                          |
| FQ762_RS10735 | NA                     | NA                     | NA                         |
| FQ762_RS10740 | NA                     | NA                     | NA                         |
| FQ762_RS10745 | NA                     | NA                     | NA                         |
| FQ762_RS10770 | 0                      | 0.0333                 | 0                          |
| FQ762_RS10805 | 0.0008                 | 0.0061                 | 0.125                      |
| FQ762_RS10850 | 0                      | 0.0241                 | 0                          |
| FQ762_RS10855 | NA                     | NA                     | NA                         |
| FQ762_RS10860 | NA                     | NA                     | NA                         |
| FQ762_RS10865 | NA                     | NA                     | NA                         |
| FQ762_RS10870 | NA                     | NA                     | NA                         |
| FQ762_RS10900 | NA                     | NA                     | NA                         |
| FQ762_RS10910 | NA                     | NA                     | NA                         |
| FQ762_RS10920 | NA                     | NA                     | NA                         |
| FQ762_RS10925 | 0.0017                 | 0.0062                 | 0.26786                    |
| FQ762_RS10935 | 0                      | 0                      | 0                          |
| FQ762_RS11035 | NA                     | NA                     | NA                         |
| FQ762_RS11055 | NA                     | NA                     | NA                         |
| FQ762_RS11060 | NA                     | NA                     | NA                         |
| FQ762_RS11065 | NA                     | NA                     | NA                         |
| FQ762_RS11085 | 0.0012                 | 0                      | NA                         |
| FQ762_RS11185 | NA                     | NA                     | NA                         |
| FQ762_RS11190 | 0.0013                 | 0.0373                 | 0.03404                    |
| FQ762_RS11195 | 0.0035                 | 0.008                  | 0.43837                    |
| FQ762_RS11240 | NA                     | NA                     | NA                         |
| FQ762_RS11285 | 0                      | 0                      | 0                          |
| FQ762_RS11315 | 0.0018                 | 0.0153                 | 0.11725                    |
| FQ762_RS11325 | 0.0007                 | 0                      | NA                         |
| FQ762_RS11365 | NA                     | NA                     | NA                         |
| FQ762_RS11450 | 0                      | 0.1059                 | 0                          |
| FQ762_RS11525 | 0                      | 0.1019                 | 0                          |
| FQ762_RS11575 | 0                      | 0.0564                 | 0                          |
| FQ762_RS11580 | 0                      | 0.0462                 | 0                          |
| FQ762_RS11605 | 0.0023                 | 0.0297                 | 0.07711                    |
| FQ762_RS11610 | 0.0011                 | 0.0119                 | 0.09329                    |
| FQ762_RS11615 | 0.0013                 | 0                      | NA                         |
| FQ762_RS11620 | 0.0009                 | 0                      | NA                         |
| FQ762_RS11715 | NA                     | NA                     | NA                         |
| FQ762_RS11765 | NA                     | NA                     | NA                         |
| FQ762_RS11770 | 0                      | 0                      | 0                          |
| FQ762_RS11805 | NA                     | NA                     | NA                         |
| FQ762_RS11820 | 0                      | 0.0196                 | 0                          |
| FQ762_RS11825 | 0.0024                 | 0.0115                 | 0.21118                    |
| FQ762_RS11830 | 0                      | 0.0118                 | 0                          |

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**Table S3 – continued from previous page**

| <b>Gene</b>   | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|---------------|------------------------|------------------------|----------------------------|
| FQ762_RS11855 | 0                      | 0.0238                 | 0                          |
| FQ762_RS11870 | 0.0111                 | 0.0664                 | 0.16653                    |
| FQ762_RS11885 | 0.0041                 | 0.0789                 | 0.05173                    |
| FQ762_RS11915 | 0.0018                 | 0.2062                 | 0.00875                    |
| FQ762_RS11925 | 0.0031                 | 0.0492                 | 0.06338                    |
| FQ762_RS12015 | 0                      | 0                      | 0                          |
| FQ762_RS12045 | 0                      | 0                      | 0                          |
| FQ762_RS12105 | NA                     | NA                     | NA                         |
| FQ762_RS12160 | NA                     | NA                     | NA                         |
| FQ762_RS12230 | NA                     | NA                     | NA                         |
| FQ762_RS12310 | 0                      | 0.0046                 | 0                          |
| FQ762_RS12315 | 0.0011                 | 0.0156                 | 0.06718                    |
| FQ762_RS12375 | NA                     | NA                     | NA                         |
| FQ762_RS12435 | NA                     | NA                     | NA                         |
| FQ762_RS12445 | NA                     | NA                     | NA                         |
| FQ762_RS12455 | 0.0091                 | 0.0138                 | 0.65455                    |
| FQ762_RS12495 | 0                      | 0                      | 0                          |
| FQ762_RS12565 | NA                     | NA                     | NA                         |
| FQ762_RS12605 | 0                      | 0                      | 0                          |
| FQ762_RS12635 | 0.0023                 | 0.0095                 | 0.23988                    |
| FQ762_RS12660 | 0                      | 0.0381                 | 0                          |
| FQ762_RS12730 | 0.0009                 | 0.0221                 | 0.04                       |
| FQ762_RS12785 | NA                     | NA                     | NA                         |
| FQ762_RS12850 | NA                     | NA                     | NA                         |
| FQ762_RS12855 | NA                     | NA                     | NA                         |
| FQ762_RS12860 | NA                     | NA                     | NA                         |
| FQ762_RS12870 | 0.0016                 | 0.0316                 | 0.04937                    |
| FQ762_RS12875 | 0                      | 0.0369                 | 0                          |
| FQ762_RS12880 | 0.0023                 | 0                      | NA                         |
| FQ762_RS12985 | NA                     | NA                     | NA                         |
| FQ762_RS13010 | NA                     | NA                     | NA                         |
| FQ762_RS13020 | NA                     | NA                     | NA                         |
| FQ762_RS13050 | NA                     | NA                     | NA                         |
| FQ762_RS13080 | NA                     | NA                     | NA                         |
| FQ762_RS13095 | NA                     | NA                     | NA                         |
| FQ762_RS13145 | NA                     | NA                     | NA                         |
| FQ762_RS13260 | 0.0005                 | 0.0283                 | 0.0174                     |
| FQ762_RS13270 | 0.0026                 | 0.0174                 | 0.14983                    |
| FQ762_RS13285 | NA                     | NA                     | NA                         |
| FQ762_RS13325 | NA                     | NA                     | NA                         |
| FQ762_RS13340 | 0.0008                 | 0.004                  | 0.19138                    |
| FQ762_RS13410 | 0                      | 0.0377                 | 0                          |
| FQ762_RS13425 | NA                     | NA                     | NA                         |
| FQ762_RS13430 | NA                     | NA                     | NA                         |
| FQ762_RS13445 | NA                     | NA                     | NA                         |
| FQ762_RS13450 | 0.002                  | 0.0191                 | 0.10562                    |
| FQ762_RS13455 | NA                     | NA                     | NA                         |

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**Table S3 – continued from previous page**

| <b>Gene</b>   | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|---------------|------------------------|------------------------|----------------------------|
| FQ762_RS13460 | NA                     | NA                     | NA                         |
| FQ762_RS13510 | NA                     | NA                     | NA                         |
| FQ762_RS13520 | 0.0022                 | 0.0147                 | 0.14678                    |
| FQ762_RS13545 | 0.0009                 | 0.0527                 | 0.01761                    |
| FQ762_RS13570 | NA                     | NA                     | NA                         |
| FQ762_RS13620 | 0.001                  | 0.0156                 | 0.06156                    |
| FQ762_RS13795 | 0                      | 0                      | 0                          |
| FQ762_RS13885 | 0.0043                 | 0.0115                 | 0.37156                    |
| FQ762_RS13960 | NA                     | NA                     | NA                         |
| FQ762_RS13980 | NA                     | NA                     | NA                         |
| FQ762_RS14000 | 0                      | 0.1457                 | 0                          |
| FQ762_RS14005 | 0.0005                 | 0.0293                 | 0.01628                    |
| FQ762_RS14035 | NA                     | NA                     | NA                         |
| FQ762_RS14060 | NA                     | NA                     | NA                         |
| FQ762_RS14085 | 0                      | 0.0307                 | 0                          |
| FQ762_RS14105 | NA                     | NA                     | NA                         |
| FQ762_RS14115 | 0                      | 0.0253                 | 0                          |
| FQ762_RS14155 | NA                     | NA                     | NA                         |
| FQ762_RS14260 | 0.0015                 | 0.0678                 | 0.02208                    |
| FQ762_RS14445 | 0                      | 0.0044                 | 0                          |
| FQ762_RS14470 | NA                     | NA                     | NA                         |
| FQ762_RS14475 | NA                     | NA                     | NA                         |
| FQ762_RS14520 | 0.0014                 | 0.0169                 | 0.08523                    |
| FQ762_RS14550 | 0.0012                 | 0.0099                 | 0.11633                    |
| FQ762_RS14565 | NA                     | NA                     | NA                         |
| FQ762_RS14615 | 0                      | 0.056                  | 0                          |
| FQ762_RS14630 | NA                     | NA                     | NA                         |
| FQ762_RS14680 | 0.0033                 | 0.0263                 | 0.12729                    |
| FQ762_RS14810 | NA                     | NA                     | NA                         |
| FQ762_RS14840 | NA                     | NA                     | NA                         |
| FQ762_RS14890 | NA                     | NA                     | NA                         |
| FQ762_RS14945 | NA                     | NA                     | NA                         |
| FQ762_RS14960 | NA                     | NA                     | NA                         |
| FQ762_RS15010 | NA                     | NA                     | NA                         |
| FQ762_RS15080 | 0.0011                 | 0.0542                 | 0.02034                    |
| FQ762_RS15110 | NA                     | NA                     | NA                         |
| FQ762_RS15125 | NA                     | NA                     | NA                         |
| FQ762_RS15135 | 0                      | 0.0101                 | 0                          |
| FQ762_RS15150 | NA                     | NA                     | NA                         |
| FQ762_RS15180 | NA                     | NA                     | NA                         |
| FQ762_RS15195 | NA                     | NA                     | NA                         |
| FQ762_RS15200 | NA                     | NA                     | NA                         |
| FQ762_RS15210 | NA                     | NA                     | NA                         |
| FQ762_RS15240 | NA                     | NA                     | NA                         |
| FQ762_RS15255 | NA                     | NA                     | NA                         |
| FQ762_RS15275 | NA                     | NA                     | NA                         |
| FQ762_RS15315 | 0.0034                 | 0.026                  | 0.13144                    |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| FQ762_RS15320 | 0.0014 | 0.0297 | 0.04777  |
| FQ762_RS15370 | 0      | 0.0174 | 0        |
| FQ762_RS15375 | 0.0013 | 0.1701 | 0.00757  |
| FQ762_RS15380 | 0.0005 | 0      | NA       |
| FQ762_RS15385 | 0.0013 | 0      | NA       |
| FQ762_RS15455 | NA     | NA     | NA       |
| FQ762_RS15560 | NA     | NA     | NA       |
| FQ762_RS15575 | NA     | NA     | NA       |
| FQ762_RS15595 | NA     | NA     | NA       |
| FQ762_RS15635 | 0      | 0      | 0        |
| FQ762_RS15685 | NA     | NA     | NA       |
| FQ762_RS15690 | 0      | 0.0238 | 0        |
| FQ762_RS15740 | NA     | NA     | NA       |
| FQ762_RS15750 | 0      | 0      | 0        |
| FQ762_RS15775 | NA     | NA     | NA       |
| FQ762_RS15780 | NA     | NA     | NA       |
| FQ762_RS15790 | NA     | NA     | NA       |
| FQ762_RS15820 | 0      | 0.0294 | 0        |
| FQ762_RS15890 | 0      | 0.0084 | 0        |
| FQ762_RS15915 | NA     | NA     | NA       |
| FQ762_RS15950 | NA     | NA     | NA       |
| FQ762_RS15955 | NA     | NA     | NA       |
| FQ762_RS15960 | NA     | NA     | NA       |
| FQ762_RS15970 | 0.0033 | 0.0664 | 0.05033  |
| FQ762_RS16135 | 0      | 0      | 0        |
| FQ762_RS16245 | NA     | NA     | NA       |
| FQ762_RS16325 | NA     | NA     | NA       |
| FQ762_RS16370 | NA     | NA     | NA       |
| FQ762_RS16390 | 0      | 0.0244 | 0        |
| FQ762_RS16430 | 0.001  | 0      | NA       |
| FQ762_RS16450 | NA     | NA     | NA       |
| FQ762_RS16495 | NA     | NA     | NA       |
| FQ762_RS16510 | NA     | NA     | NA       |
| FQ762_RS16830 | 0      | 0      | 0        |
| FQ762_RS16915 | 0.0083 | 0.041  | 0.20147  |
| FQ762_RS16920 | 0      | 0.0077 | 0        |
| FQ762_RS16925 | NA     | NA     | NA       |
| FQ762_RS17030 | NA     | NA     | NA       |
| FQ762_RS17090 | NA     | NA     | NA       |
| FQ762_RS17095 | NA     | NA     | NA       |
| FQ762_RS17110 | NA     | NA     | NA       |
| FQ762_RS17195 | NA     | NA     | NA       |
| FQ762_RS17200 | NA     | NA     | NA       |
| FQ762_RS17215 | NA     | NA     | NA       |
| FQ762_RS17220 | NA     | NA     | NA       |
| FQ762_RS17300 | NA     | NA     | NA       |
| FQ762_RS17315 | 0.0027 | 0.0956 | 0.02789  |

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**Table S3 – continued from previous page**

| <b>Gene</b>   | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|---------------|------------------------|------------------------|----------------------------|
| FQ762_RS17340 | 0                      | 0.0141                 | 0                          |
| FQ762_RS17360 | 0.0016                 | 0.0602                 | 0.02697                    |
| FQ762_RS17445 | 0.0022                 | 0.0112                 | 0.20042                    |
| FQ762_RS17460 | NA                     | NA                     | NA                         |
| FQ762_RS17470 | NA                     | NA                     | NA                         |
| FQ762_RS17480 | NA                     | NA                     | NA                         |
| FQ762_RS17485 | 0                      | 0                      | 0                          |
| FQ762_RS17540 | 0                      | 0                      | 0                          |
| FQ762_RS17550 | NA                     | NA                     | NA                         |
| FQ762_RS17615 | NA                     | NA                     | NA                         |
| FQ762_RS17620 | NA                     | NA                     | NA                         |
| FQ762_RS17625 | NA                     | NA                     | NA                         |
| FQ762_RS17630 | NA                     | NA                     | NA                         |
| FQ762_RS17650 | NA                     | NA                     | NA                         |
| FQ762_RS18110 | 0.0195                 | 0.3715                 | 0.100995                   |
| FQ762_RS18115 | 0.00575                | 0.3498                 | 0.017295                   |
| FQ762_RS18165 | 0.032                  | 0.1919                 | 0.16704                    |
| FQ762_RS18250 | NA                     | NA                     | NA                         |
| FQ762_RS18275 | NA                     | NA                     | NA                         |
| FQ762_RS18280 | NA                     | NA                     | NA                         |
| FQ762_RS18285 | NA                     | NA                     | NA                         |
| FQ762_RS18290 | NA                     | NA                     | NA                         |
| FQ762_RS18305 | NA                     | NA                     | NA                         |
| FQ762_RS18310 | NA                     | NA                     | NA                         |
| FQ762_RS18325 | NA                     | NA                     | NA                         |
| FQ762_RS18335 | 0                      | 0                      | 0                          |
| FQ762_RS18345 | 0                      | 0                      | 0                          |
| FQ762_RS18350 | NA                     | NA                     | NA                         |
| FQ762_RS18355 | 0.00025                | 0.0021                 | 0.061025                   |
| FQ762_RS18420 | NA                     | NA                     | NA                         |
| FQ762_RS18430 | NA                     | NA                     | NA                         |
| FQ762_RS18470 | 0                      | 0.0972                 | 0                          |
| FQ762_RS18510 | NA                     | NA                     | NA                         |
| FQ762_RS18520 | 0.0035                 | 0.0517                 | 0.06798                    |
| FQ762_RS18525 | 0.004                  | 0.0485                 | 0.08205                    |
| FQ762_RS18530 | 0.0074                 | 0.016                  | 0.46352                    |
| FQ762_RS18535 | 0.0034                 | 0.043                  | 0.07947                    |
| FQ762_RS18540 | 0.0059                 | 0.0521                 | 0.11298                    |
| FQ762_RS18555 | NA                     | NA                     | NA                         |
| FQ762_RS18580 | NA                     | NA                     | NA                         |
| FQ762_RS18585 | 0                      | 0                      | 0                          |
| FQ762_RS18610 | NA                     | NA                     | NA                         |
| FQ762_RS18630 | NA                     | NA                     | NA                         |
| FQ762_RS18655 | NA                     | NA                     | NA                         |
| FQ762_RS18700 | NA                     | NA                     | NA                         |
| FQ762_RS18710 | 0.0025                 | 0.0194                 | 0.12849                    |
| FQ762_RS18755 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| FQ762_RS18815 | NA     | NA     | NA       |
| FQ762_RS18895 | NA     | NA     | NA       |
| FQ762_RS18930 | 0      | 0.0116 | 0        |
| FQ762_RS18945 | 0.0011 | 0.0064 | 0.17817  |
| FQ762_RS18975 | 0      | 0.0089 | 0        |
| FQ762_RS19000 | NA     | NA     | NA       |
| FQ762_RS19065 | NA     | NA     | NA       |
| FQ762_RS19075 | 0.0025 | 0      | NA       |
| FQ762_RS19155 | NA     | NA     | NA       |
| FQ762_RS19160 | NA     | NA     | NA       |
| FQ762_RS19195 | NA     | NA     | NA       |
| FQ762_RS19205 | 0      | 0      | 0        |
| FQ762_RS19300 | NA     | NA     | NA       |
| FQ762_RS19345 | NA     | NA     | NA       |
| FQ762_RS19385 | NA     | NA     | NA       |
| FQ762_RS19410 | 0      | 0      | 0        |
| FQ762_RS19485 | NA     | NA     | NA       |
| FQ762_RS19500 | NA     | NA     | NA       |
| FQ762_RS19530 | 0      | 0.0401 | 0        |
| FQ762_RS19535 | 0      | 0.0385 | 0        |
| FQ762_RS19540 | 0      | 0      | 0        |
| FQ762_RS19550 | NA     | NA     | NA       |
| FQ762_RS19555 | NA     | NA     | NA       |
| FQ762_RS19560 | 0      | 0.0378 | 0        |
| FQ762_RS19565 | NA     | NA     | NA       |
| FQ762_RS19575 | NA     | NA     | NA       |
| FQ762_RS19580 | 0      | 0.1063 | 0        |
| FQ762_RS19595 | NA     | NA     | NA       |
| FQ762_RS19600 | 0.0036 | 0      | NA       |
| FQ762_RS19615 | NA     | NA     | NA       |
| FQ762_RS19620 | 0.0013 | 0      | NA       |
| FQ762_RS19625 | NA     | NA     | NA       |
| FQ762_RS19630 | NA     | NA     | NA       |
| FQ762_RS19650 | 0.0077 | 0.0055 | 1.41515  |
| FQ762_RS19665 | NA     | NA     | NA       |
| FQ762_RS19710 | 0      | 0.018  | 0        |
| FQ762_RS19810 | 0      | 0      | 0        |
| FQ762_RS19815 | 0.0007 | 0.0085 | 0.0835   |
| FQ762_RS19820 | 0.0146 | 0.0348 | 0.41989  |
| FQ762_RS19850 | NA     | NA     | NA       |
| FQ762_RS19855 | NA     | NA     | NA       |
| FQ762_RS19920 | 0.0015 | 0.0186 | 0.08043  |
| FQ762_RS19925 | 0.0043 | 0.0261 | 0.16618  |
| FQ762_RS19990 | NA     | NA     | NA       |
| FQ762_RS20015 | NA     | NA     | NA       |
| FQ762_RS20020 | 0      | 0      | 0        |
| FQ762_RS20105 | NA     | NA     | NA       |

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**Table S3 – continued from previous page**

| <b>Gene</b>   | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|---------------|------------------------|------------------------|----------------------------|
| FQ762_RS20110 | NA                     | NA                     | NA                         |
| FQ762_RS20185 | NA                     | NA                     | NA                         |
| FQ762_RS20190 | NA                     | NA                     | NA                         |
| FQ762_RS20195 | 0.0018                 | 0.0244                 | 0.07582                    |
| FQ762_RS20200 | 0                      | 0.0945                 | 0                          |
| FQ762_RS20205 | NA                     | NA                     | NA                         |
| FQ762_RS20210 | NA                     | NA                     | NA                         |
| FQ762_RS20215 | NA                     | NA                     | NA                         |
| FQ762_RS20220 | NA                     | NA                     | NA                         |
| FQ762_RS20225 | NA                     | NA                     | NA                         |
| FQ762_RS20230 | NA                     | NA                     | NA                         |
| FQ762_RS20245 | 0                      | 0.0127                 | 0                          |
| FQ762_RS20250 | 0                      | 0.02                   | 0                          |
| FQ762_RS20260 | 0.0007                 | 0.0314                 | 0.02268                    |
| FQ762_RS20310 | 0                      | 0.1774                 | 0                          |
| FQ762_RS20315 | 0.0016                 | 0.0092                 | 0.17873                    |
| FQ762_RS20405 | 0                      | 0                      | 0                          |
| FQ762_RS20410 | 0                      | 0.0085                 | 0                          |
| FQ762_RS20435 | NA                     | NA                     | NA                         |
| FQ762_RS20495 | NA                     | NA                     | NA                         |
| FQ762_RS20505 | 0.0007                 | 0.0281                 | 0.02587                    |
| FQ762_RS20510 | NA                     | NA                     | NA                         |
| FQ762_RS20665 | 0.0018                 | 0                      | NA                         |
| FQ762_RS20670 | NA                     | NA                     | NA                         |
| FQ762_RS20830 | NA                     | NA                     | NA                         |
| FQ762_RS20850 | NA                     | NA                     | NA                         |
| FQ762_RS20865 | NA                     | NA                     | NA                         |
| FQ762_RS20925 | NA                     | NA                     | NA                         |
| FQ762_RS20995 | 0                      | 0.0725                 | 0                          |
| FQ762_RS21065 | 0                      | 0.0879                 | 0                          |
| FQ762_RS21080 | 0                      | 0                      | 0                          |
| FQ762_RS21095 | 0                      | 0                      | 0                          |
| FQ762_RS21110 | NA                     | NA                     | NA                         |
| FQ762_RS21215 | NA                     | NA                     | NA                         |
| FQ762_RS21260 | NA                     | NA                     | NA                         |
| FQ762_RS21265 | NA                     | NA                     | NA                         |
| FQ762_RS21270 | 0                      | 0                      | 0                          |
| FQ762_RS21315 | NA                     | NA                     | NA                         |
| FQ762_RS21345 | NA                     | NA                     | NA                         |
| FQ762_RS21360 | NA                     | NA                     | NA                         |
| FQ762_RS21395 | 0                      | 0.0283                 | 0                          |
| FQ762_RS21415 | 0                      | 0                      | 0                          |
| FQ762_RS21420 | 0.0011                 | 0.0103                 | 0.1092                     |
| FQ762_RS21455 | NA                     | NA                     | NA                         |
| FQ762_RS21470 | 0                      | 0.0046                 | 0                          |
| FQ762_RS21535 | 0                      | 0.0297                 | 0                          |
| FQ762_RS21595 | 0                      | 0.0149                 | 0                          |

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**Table S3 – continued from previous page**

| <b>Gene</b>   | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|---------------|------------------------|------------------------|----------------------------|
| FQ762_RS21700 | 0.0033                 | 0.0308                 | 0.10808                    |
| FQ762_RS21715 | 0.0017                 | 0.0521                 | 0.03191                    |
| FQ762_RS21755 | NA                     | NA                     | NA                         |
| FQ762_RS21840 | NA                     | NA                     | NA                         |
| FQ762_RS21845 | NA                     | NA                     | NA                         |
| FQ762_RS21860 | NA                     | NA                     | NA                         |
| FQ762_RS21865 | NA                     | NA                     | NA                         |
| FQ762_RS21905 | 0                      | 0                      | 0                          |
| FQ762_RS21915 | 0                      | 0                      | 0                          |
| FQ762_RS21920 | 0.0022                 | 0                      | NA                         |
| FQ762_RS21925 | 0.0016                 | 0                      | NA                         |
| FQ762_RS21930 | 0.0011                 | 0.0338                 | 0.03375                    |
| FQ762_RS21940 | NA                     | NA                     | NA                         |
| FQ762_RS21985 | NA                     | NA                     | NA                         |
| FQ762_RS22015 | NA                     | NA                     | NA                         |
| FQ762_RS22025 | 0.0004                 | 0.0118                 | 0.03535                    |
| FQ762_RS22115 | 0                      | 0                      | 0                          |
| FQ762_RS22145 | 0                      | 0.1053                 | 0                          |
| FQ762_RS22150 | NA                     | NA                     | NA                         |
| FQ762_RS22155 | NA                     | NA                     | NA                         |
| FQ762_RS22160 | 0.0007                 | 0.0281                 | 0.02318                    |
| FQ762_RS22165 | 0.00065                | 0                      | NA                         |
| FQ762_RS22185 | 0.0008                 | 0.0617                 | 0.01367                    |
| FQ762_RS22190 | 0.0048                 | 0                      | NA                         |
| FQ762_RS22280 | NA                     | NA                     | NA                         |
| FQ762_RS22360 | NA                     | NA                     | NA                         |
| FQ762_RS22365 | 0.0036                 | 0.0064                 | 0.56784                    |
| FQ762_RS22370 | 0.0018                 | 0.034                  | 0.05427                    |
| FQ762_RS22565 | 0                      | 0.0083                 | 0                          |
| FQ762_RS22570 | 0.001                  | 0.0176                 | 0.05537                    |
| FQ762_RS22590 | NA                     | NA                     | NA                         |
| FQ762_RS22595 | 0.0008                 | 0.0232                 | 0.03315                    |
| FQ762_RS22605 | 0.0025                 | 0.0235                 | 0.10798                    |
| FQ762_RS22660 | 0.0007                 | 0.0382                 | 0.01776                    |
| FQ762_RS22665 | 0                      | 0.0057                 | 0                          |
| FQ762_RS22680 | 0.002                  | 0.0124                 | 0.16255                    |
| FQ762_RS22760 | 0.0067                 | 0.0136                 | 0.49617                    |
| FQ762_RS22765 | 0.0031                 | 0.0038                 | 0.7954                     |
| FQ762_RS22770 | NA                     | NA                     | NA                         |
| FQ762_RS22780 | 0                      | 0.0002                 | 0                          |
| FQ762_RS22815 | 0                      | 0                      | 0                          |
| FQ762_RS22865 | 0                      | 0.0203                 | 0                          |
| FQ762_RS22955 | 0                      | 0.0045                 | 0                          |
| FQ762_RS23025 | NA                     | NA                     | NA                         |
| FQ762_RS23030 | NA                     | NA                     | NA                         |
| FQ762_RS23085 | 0                      | 0                      | 0                          |
| FQ762_RS23135 | 0                      | 0.0099                 | 0                          |

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Table S3 – continued from previous page

| Gene          | $dN$    | $dS$    | $\omega$ |
|---------------|---------|---------|----------|
| FQ762_RS23140 | 0.0008  | 0.0611  | 0.01371  |
| FQ762_RS23170 | NA      | NA      | NA       |
| FQ762_RS23190 | 0.0055  | 0.0292  | 0.266145 |
| FQ762_RS23215 | 0       | 0       | 0        |
| FQ762_RS23300 | 0       | 0.0194  | 0        |
| FQ762_RS23350 | NA      | NA      | NA       |
| FQ762_RS23405 | 0.0091  | 0.0071  | 1.28609  |
| FQ762_RS23420 | 0       | 0.0138  | 0        |
| FQ762_RS23445 | 0       | 0.0136  | 0        |
| FQ762_RS23490 | NA      | NA      | NA       |
| FQ762_RS23630 | 0       | 0.0063  | 0        |
| FQ762_RS23665 | 0       | 0.0553  | 0        |
| FQ762_RS23670 | 0       | 0.0476  | 0        |
| FQ762_RS23675 | NA      | NA      | NA       |
| FQ762_RS23725 | 0.0026  | 0.0066  | 0.39611  |
| FQ762_RS23735 | 0.0017  | 0.0198  | 0.08426  |
| FQ762_RS23740 | NA      | NA      | NA       |
| FQ762_RS23745 | NA      | NA      | NA       |
| FQ762_RS23750 | 0       | 0.0217  | 0        |
| FQ762_RS23755 | NA      | NA      | NA       |
| FQ762_RS23760 | NA      | NA      | NA       |
| FQ762_RS23765 | NA      | NA      | NA       |
| FQ762_RS23835 | 0.0007  | 0.1133  | 0.00604  |
| FQ762_RS23865 | NA      | NA      | NA       |
| FQ762_RS24070 | 0       | 0.0296  | 0        |
| FQ762_RS24075 | 0       | 0.0353  | 0        |
| FQ762_RS24080 | 0       | 0       | 0        |
| FQ762_RS24085 | 0       | 0       | 0        |
| FQ762_RS24090 | 0       | 0       | 0        |
| FQ762_RS24125 | 0.0065  | 0       | NA       |
| FQ762_RS24135 | 0       | 0.004   | 0        |
| FQ762_RS24165 | 0.0009  | 0.0201  | 0.04384  |
| FQ762_RS24180 | NA      | NA      | NA       |
| FQ762_RS24195 | NA      | NA      | NA       |
| FQ762_RS24210 | NA      | NA      | NA       |
| FQ762_RS24230 | NA      | NA      | NA       |
| FQ762_RS24235 | 0       | 0       | 0        |
| FQ762_RS24255 | 0.0092  | 0.1578  | 0.05842  |
| FQ762_RS24270 | NA      | NA      | NA       |
| FQ762_RS24275 | 0.0078  | 0.166   | 0.04703  |
| FQ762_RS24330 | 0       | 0.0101  | 0        |
| FQ762_RS24375 | 0       | 0       | 0        |
| FQ762_RS24450 | 0.00565 | 0.04135 | 0.068255 |
| FQ762_RS24455 | 0.0025  | 0       | NA       |
| FQ762_RS24470 | 0       | 0.0173  | 0        |
| FQ762_RS24510 | 0       | 0.0223  | 0        |
| FQ762_RS24520 | NA      | NA      | NA       |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| FQ762_RS24540 | NA     | NA     | NA       |
| FQ762_RS24560 | 0      | 0.0508 | 0        |
| FQ762_RS24590 | 0      | 0      | 0        |
| FQ762_RS24615 | 0      | 0      | 0        |
| FQ762_RS24640 | 0      | 0      | 0        |
| FQ762_RS24660 | NA     | NA     | NA       |
| FQ762_RS24670 | NA     | NA     | NA       |
| FQ762_RS24690 | 0      | 0.0322 | 0        |
| FQ762_RS24730 | 0.0016 | 0.0643 | 0.02529  |
| FQ762_RS24740 | 0      | 0.0292 | 0        |
| FQ762_RS24795 | 0      | 0.013  | 0        |
| FQ762_RS24870 | 0.0096 | 0.0095 | 1.01129  |
| FQ762_RS24920 | NA     | NA     | NA       |
| FQ762_RS24945 | NA     | NA     | NA       |
| FQ762_RS24990 | 0      | 0      | 0        |
| FQ762_RS25105 | NA     | NA     | NA       |
| FQ762_RS25200 | 0      | 0.0693 | 0        |
| FQ762_RS25205 | NA     | NA     | NA       |
| FQ762_RS25220 | 0.0012 | 0.0421 | 0.02832  |
| FQ762_RS25265 | 0.0048 | 0.0738 | 0.06461  |
| FQ762_RS25405 | NA     | NA     | NA       |
| FQ762_RS25435 | NA     | NA     | NA       |
| FQ762_RS25440 | NA     | NA     | NA       |
| FQ762_RS25480 | NA     | NA     | NA       |
| FQ762_RS25565 | 0.0034 | 0.0306 | 0.11132  |
| FQ762_RS25635 | NA     | NA     | NA       |
| FQ762_RS25640 | 0.0051 | 0.0124 | 0.41271  |
| FQ762_RS25645 | NA     | NA     | NA       |
| FQ762_RS25650 | NA     | NA     | NA       |
| FQ762_RS25655 | NA     | NA     | NA       |
| FQ762_RS25660 | 0.0009 | 0      | NA       |
| FQ762_RS25665 | 0.0012 | 0.0073 | 0.16052  |
| FQ762_RS25680 | NA     | NA     | NA       |
| FQ762_RS25685 | 0      | 0      | 0        |
| FQ762_RS25690 | 0      | 0.0272 | 0        |
| FQ762_RS25775 | 0.0026 | 0.0112 | 0.23651  |
| FQ762_RS25840 | NA     | NA     | NA       |
| FQ762_RS25845 | 0.0077 | 0.0233 | 0.32997  |
| FQ762_RS25905 | 0.0023 | 0.1004 | 0.02277  |
| FQ762_RS25935 | NA     | NA     | NA       |
| FQ762_RS25955 | 0      | 0.0148 | 0        |
| FQ762_RS26005 | 0      | 0      | 0        |
| FQ762_RS26010 | 0      | 0.0036 | 0        |
| FQ762_RS26020 | NA     | NA     | NA       |
| FQ762_RS26105 | 0      | 0.038  | 0        |
| FQ762_RS26110 | NA     | NA     | NA       |
| FQ762_RS26185 | 0.0017 | 0.0193 | 0.0862   |

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**Table S3 – continued from previous page**

| <b>Gene</b>   | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|---------------|------------------------|------------------------|----------------------------|
| FQ762_RS26200 | 0.0059                 | 0.026                  | 0.22531                    |
| FQ762_RS26215 | NA                     | NA                     | NA                         |
| FQ762_RS26320 | 0.0013                 | 0.0095                 | 0.13578                    |
| FQ762_RS26325 | 0                      | 0                      | 0                          |
| FQ762_RS26330 | NA                     | NA                     | NA                         |
| FQ762_RS26340 | 0                      | 0.0206                 | 0                          |
| FQ762_RS26355 | 0.0037                 | 0.0169                 | 0.21764                    |
| FQ762_RS26435 | 0                      | 0.0196                 | 0                          |
| FQ762_RS26450 | 0                      | 0.0246                 | 0                          |
| FQ762_RS26525 | 0.0019                 | 0                      | NA                         |
| FQ762_RS26550 | 0                      | 0.034                  | 0                          |
| FQ762_RS26585 | 0                      | 0                      | 0                          |
| FQ762_RS26635 | NA                     | NA                     | NA                         |
| FQ762_RS26665 | 0.0019                 | 0.018                  | 0.10468                    |
| FQ762_RS26680 | 0                      | 0.0067                 | 0                          |
| FQ762_RS26720 | NA                     | NA                     | NA                         |
| FQ762_RS26725 | NA                     | NA                     | NA                         |
| FQ762_RS26740 | 0.001                  | 0                      | NA                         |
| FQ762_RS26760 | 0.0022                 | 0.0367                 | 0.05877                    |
| FQ762_RS26825 | 0.0042                 | 0                      | NA                         |
| FQ762_RS26895 | 0                      | 0                      | 0                          |
| FQ762_RS26945 | NA                     | NA                     | NA                         |
| FQ762_RS26965 | 0.0015                 | 0.0266                 | 0.05471                    |
| FQ762_RS27005 | 0.0011                 | 0.0057                 | 0.19738                    |
| FQ762_RS27010 | 0.0017                 | 0.0182                 | 0.09587                    |
| FQ762_RS27140 | 0                      | 0.0122                 | 0                          |
| FQ762_RS27225 | 0.0021                 | 0.0122                 | 0.17177                    |
| FQ762_RS27230 | NA                     | NA                     | NA                         |
| FQ762_RS27275 | 0.0349                 | 0.0493                 | 0.70851                    |
| FQ762_RS27350 | NA                     | NA                     | NA                         |
| FQ762_RS27360 | 0                      | 0                      | 0                          |
| FQ762_RS27375 | 0                      | 0.0563                 | 0                          |
| FQ762_RS27380 | NA                     | NA                     | NA                         |
| FQ762_RS27405 | NA                     | NA                     | NA                         |
| FQ762_RS27425 | NA                     | NA                     | NA                         |
| FQ762_RS27515 | 0.0013                 | 0.0614                 | 0.0218                     |
| FQ762_RS27710 | 0                      | 0                      | 0                          |
| FQ762_RS27775 | 0                      | 0                      | 0                          |
| FQ762_RS27820 | NA                     | NA                     | NA                         |
| FQ762_RS27825 | NA                     | NA                     | NA                         |
| FQ762_RS27845 | 0                      | 0                      | 0                          |
| FQ762_RS27890 | NA                     | NA                     | NA                         |
| FQ762_RS27930 | 0                      | 0                      | 0                          |
| FQ762_RS27960 | 0.0032                 | 0.0429                 | 0.0742                     |
| FQ762_RS27990 | 0                      | 0                      | 0                          |
| FQ762_RS27995 | 0.0006                 | 0.041                  | 0.01544                    |
| FQ762_RS28000 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene          | $dN$    | $dS$    | $\omega$ |
|---------------|---------|---------|----------|
| FQ762_RS28005 | 0.0034  | 0.0423  | 0.08052  |
| FQ762_RS28025 | 0.0075  | 0.0194  | 0.38735  |
| FQ762_RS28035 | 0.006   | 0       | NA       |
| FQ762_RS28145 | NA      | NA      | NA       |
| FQ762_RS28150 | 0.0017  | 0.0315  | 0.05359  |
| FQ762_RS28155 | NA      | NA      | NA       |
| FQ762_RS28175 | NA      | NA      | NA       |
| FQ762_RS28205 | 0.0017  | 0.0242  | 0.06968  |
| FQ762_RS28255 | 0       | 0.0536  | 0        |
| FQ762_RS28275 | NA      | NA      | NA       |
| FQ762_RS28310 | 0       | 0       | 0        |
| FQ762_RS28330 | 0.00435 | 0.00635 | NA       |
| FQ762_RS28335 | 0       | 0.0955  | 0        |
| FQ762_RS28355 | 0       | 0.0643  | 0        |
| FQ762_RS28360 | 0.0009  | 0.0251  | 0.03671  |
| FQ762_RS28370 | 0       | 0       | 0        |
| FQ762_RS28380 | NA      | NA      | NA       |
| FQ762_RS28390 | 0       | 0       | 0        |
| FQ762_RS28395 | 0.0012  | 0.0162  | 0.07218  |
| FQ762_RS28405 | 0.0005  | 0.0282  | 0.01766  |
| FQ762_RS28425 | 0       | 0       | 0        |
| FQ762_RS28445 | 0       | 0       | 0        |
| FQ762_RS28510 | NA      | NA      | NA       |
| FQ762_RS28570 | 0       | 0.074   | 0        |
| FQ762_RS28710 | 0.0037  | 0       | NA       |
| FQ762_RS28740 | NA      | NA      | NA       |
| FQ762_RS28755 | 0.0012  | 0       | NA       |
| FQ762_RS28890 | 0.0016  | 0.0859  | 0.01829  |
| FQ762_RS28920 | NA      | NA      | NA       |
| FQ762_RS28965 | 0       | 0       | 0        |
| FQ762_RS28975 | 0       | 0       | 0        |
| FQ762_RS29085 | 0       | 0.0473  | 0        |
| FQ762_RS29230 | NA      | NA      | NA       |
| FQ762_RS29285 | 0.0017  | 0.0133  | 0.12705  |
| FQ762_RS29345 | 0.0015  | 0.0333  | 0.04429  |
| FQ762_RS29350 | NA      | NA      | NA       |
| FQ762_RS29365 | 0.0052  | 0.0929  | 0.05548  |
| FQ762_RS29395 | NA      | NA      | NA       |
| FQ762_RS29460 | 0       | 0.0471  | 0        |
| FQ762_RS29465 | 0       | 0       | 0        |
| FQ762_RS29495 | 0       | 0.0542  | 0        |
| FQ762_RS29505 | 0       | 0.0258  | 0        |
| FQ762_RS29560 | NA      | NA      | NA       |
| FQ762_RS29575 | NA      | NA      | NA       |
| FQ762_RS29650 | NA      | NA      | NA       |
| FQ762_RS29695 | 0.0014  | 0.1483  | 0.00966  |
| FQ762_RS29730 | 0.0018  | 0.0367  | 0.05003  |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$    | $\omega$ |
|---------------|--------|---------|----------|
| FQ762_RS29760 | 0      | 0.0377  | 0        |
| FQ762_RS29815 | NA     | NA      | NA       |
| FQ762_RS29925 | NA     | NA      | NA       |
| FQ762_RS29930 | NA     | NA      | NA       |
| FQ762_RS29940 | 0      | 0.019   | 0        |
| FQ762_RS29945 | NA     | NA      | NA       |
| FQ762_RS30005 | NA     | NA      | NA       |
| FQ762_RS30025 | 0.0011 | 0.0456  | 0.0241   |
| FQ762_RS30035 | 0      | 0.0347  | 0        |
| FQ762_RS30075 | 0      | 0.0349  | 0        |
| FQ762_RS30155 | 0.0014 | 0.01725 | 0.039985 |
| FQ762_RS30210 | 0      | 0       | 0        |
| FQ762_RS30225 | 0      | 0.00725 | 0        |
| FQ762_RS30230 | 0.0016 | 0.0382  | 0.04275  |
| FQ762_RS30250 | 0      | 0       | 0        |
| FQ762_RS30315 | 0.0077 | 0.0141  | 0.5438   |
| FQ762_RS30375 | 0      | 0       | 0        |
| FQ762_RS30380 | 0      | 0.0592  | 0        |
| FQ762_RS30685 | NA     | NA      | NA       |
| FQ762_RS30795 | 0      | 0.0368  | 0        |
| FQ762_RS30810 | 0.0005 | 0.0307  | 0.01509  |
| FQ762_RS30835 | NA     | NA      | NA       |
| FQ762_RS30920 | 0      | 0.0166  | 0        |
| FQ762_RS30935 | NA     | NA      | NA       |
| FQ762_RS31060 | NA     | NA      | NA       |
| FQ762_RS31100 | 0      | 0.0093  | 0        |
| FQ762_RS31120 | 0      | 0.0043  | 0        |
| FQ762_RS31140 | 0.0012 | 0.0264  | 0.04412  |
| FQ762_RS31145 | 0      | 0.0318  | 0        |
| FQ762_RS31170 | 0      | 0.0231  | 0        |
| FQ762_RS31190 | NA     | NA      | NA       |
| FQ762_RS31230 | 0.0019 | 0.0378  | 0.04984  |
| FQ762_RS31260 | 0      | 0.0524  | 0        |
| FQ762_RS31270 | NA     | NA      | NA       |
| FQ762_RS31275 | NA     | NA      | NA       |
| FQ762_RS31315 | NA     | NA      | NA       |
| FQ762_RS31320 | NA     | NA      | NA       |
| FQ762_RS31325 | NA     | NA      | NA       |
| FQ762_RS31330 | NA     | NA      | NA       |
| FQ762_RS31335 | NA     | NA      | NA       |
| FQ762_RS31350 | 0.0008 | 0.0084  | 0.09406  |
| FQ762_RS31355 | 0      | 0       | 0        |
| FQ762_RS31360 | 0.0009 | 0.0868  | 0.01082  |
| FQ762_RS31370 | 0.0017 | 0.018   | 0.09248  |
| FQ762_RS31400 | NA     | NA      | NA       |
| FQ762_RS31425 | NA     | NA      | NA       |
| FQ762_RS31435 | 0.0038 | 0.0214  | 0.17568  |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| FQ762_RS31520 | NA     | NA     | NA       |
| FQ762_RS31535 | NA     | NA     | NA       |
| FQ762_RS31605 | NA     | NA     | NA       |
| FQ762_RS31705 | NA     | NA     | NA       |
| FQ762_RS31715 | NA     | NA     | NA       |
| FQ762_RS31725 | NA     | NA     | NA       |
| FQ762_RS31785 | 0      | 0.0068 | 0        |
| FQ762_RS31835 | 0.0006 | 0.0789 | 0.00771  |
| FQ762_RS31945 | NA     | NA     | NA       |
| FQ762_RS31985 | 0.0012 | 0.0273 | 0.04269  |
| FQ762_RS32025 | 0.001  | 0.0083 | 0.12342  |
| FQ762_RS32055 | 0.0003 | 0.0145 | 0.0238   |
| FQ762_RS32060 | 0.0015 | 0.0135 | 0.11196  |
| FQ762_RS32160 | 0.0003 | 0.0198 | 0.01569  |
| FQ762_RS32165 | 0.0002 | 0.0253 | 0.00638  |
| FQ762_RS32170 | 0      | 0.1264 | 0        |
| FQ762_RS32175 | NA     | NA     | NA       |
| FQ762_RS32205 | 0.0098 | 0.2564 | 0.03838  |
| FQ762_RS32220 | NA     | NA     | NA       |
| FQ762_RS32235 | 0.0077 | 0.0566 | 0.13583  |
| FQ762_RS32245 | NA     | NA     | NA       |
| FQ762_RS32265 | NA     | NA     | NA       |
| FQ762_RS32290 | 0      | 0.015  | 0        |
| FQ762_RS32300 | 0      | 0.0255 | 0        |
| FQ762_RS32320 | 0.004  | 0.0197 | 0.20364  |
| FQ762_RS32355 | 0      | 0.0564 | 0        |
| FQ762_RS32360 | 0      | 0.0111 | 0        |
| FQ762_RS32365 | 0      | 0.0895 | 0        |
| FQ762_RS32370 | 0      | 0.0364 | 0        |
| FQ762_RS32375 | 0.0132 | 0.0161 | 0.81504  |
| FQ762_RS32405 | NA     | NA     | NA       |
| FQ762_RS32565 | NA     | NA     | NA       |
| FQ762_RS32575 | 0.0148 | 0.0348 | 0.4242   |
| FQ762_RS32610 | 0.0084 | 0.0667 | 0.12594  |
| FQ762_RS32720 | 0.0397 | 0.6872 | 0.05779  |
| FQ762_RS32740 | NA     | NA     | NA       |
| FQ762_RS32765 | 0      | 0      | 0        |
| FQ762_RS32785 | NA     | NA     | NA       |
| FQ762_RS33120 | NA     | NA     | NA       |
| FQ762_RS33125 | 0      | 0      | 0        |
| FQ762_RS33165 | NA     | NA     | NA       |
| FQ762_RS33290 | 0.001  | 0.0243 | 0.04261  |
| FQ762_RS33345 | 0.0118 | 0.1712 | 0.06897  |
| FQ762_RS33350 | 0.0206 | 0.0939 | 0.21935  |
| FQ762_RS33355 | 0      | 0      | 0        |
| FQ762_RS33415 | NA     | NA     | NA       |
| FQ762_RS33420 | NA     | NA     | NA       |

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Table S3 – continued from previous page

| Gene          | $dN$    | $dS$   | $\omega$ |
|---------------|---------|--------|----------|
| FQ762_RS33470 | NA      | NA     | NA       |
| FQ762_RS33475 | NA      | NA     | NA       |
| FQ762_RS33500 | 0.0026  | 0.0466 | 0.05677  |
| FQ762_RS33525 | 0.0036  | 0.0613 | 0.05827  |
| FQ762_RS33530 | 0       | 0.0819 | 0        |
| FQ762_RS33575 | 0       | 0      | 0        |
| FQ762_RS33580 | 0       | 0.0155 | 0        |
| FQ762_RS33585 | 0       | 0.0408 | 0        |
| FQ762_RS33630 | NA      | NA     | NA       |
| FQ762_RS33645 | NA      | NA     | NA       |
| FQ762_RS33725 | 0.001   | 0.0338 | 0.03007  |
| FQ762_RS33730 | 0.0063  | 0.0123 | 0.50885  |
| FQ762_RS33735 | 0       | 0      | 0        |
| FQ762_RS33740 | NA      | NA     | NA       |
| FQ762_RS33750 | NA      | NA     | NA       |
| FQ762_RS33785 | 0       | 0.0573 | 0        |
| FQ762_RS33795 | NA      | NA     | NA       |
| FQ762_RS33800 | 0.0066  | 0.0652 | 0.10081  |
| FQ762_RS33810 | NA      | NA     | NA       |
| FQ762_RS33835 | NA      | NA     | NA       |
| FQ762_RS33845 | NA      | NA     | NA       |
| FQ762_RS33885 | NA      | NA     | NA       |
| FQ762_RS33895 | 0       | 0      | 0        |
| FQ762_RS33900 | 0.0011  | 0      | NA       |
| FQ762_RS33965 | 0.0027  | 0.0248 | 0.10748  |
| FQ762_RS33970 | 0.0009  | 0.0446 | 0.02009  |
| FQ762_RS34010 | 0.0048  | 0.1018 | 0.04681  |
| FQ762_RS34015 | 0.0096  | 0.0995 | 0.09616  |
| FQ762_RS34045 | NA      | NA     | NA       |
| FQ762_RS34055 | NA      | NA     | NA       |
| FQ762_RS34075 | 0       | 0.0601 | 0        |
| FQ762_RS34085 | NA      | NA     | NA       |
| FQ762_RS34090 | 0       | 0      | 0        |
| FQ762_RS34115 | NA      | NA     | NA       |
| FQ762_RS34180 | NA      | NA     | NA       |
| FQ762_RS34185 | 0       | 0.038  | 0        |
| FQ762_RS34300 | 0.006   | 0.1752 | 0.03403  |
| FQ762_RS34310 | 0.00115 | 0.0192 | 0.068365 |
| FQ762_RS34360 | 0.0051  | 0.03   | 0.16962  |
| FQ762_RS34375 | NA      | NA     | NA       |
| FQ762_RS34395 | NA      | NA     | NA       |
| FQ762_RS34400 | NA      | NA     | NA       |
| FQ762_RS34425 | NA      | NA     | NA       |
| FQ762_RS34440 | NA      | NA     | NA       |
| FQ762_RS34465 | 0       | 0      | 0        |
| FQ762_RS34475 | NA      | NA     | NA       |
| FQ762_RS34485 | NA      | NA     | NA       |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$    | $\omega$ |
|---------------|--------|---------|----------|
| FQ762_RS34510 | NA     | NA      | NA       |
| FQ762_RS34610 | NA     | NA      | NA       |
| FQ762_RS34620 | NA     | NA      | NA       |
| FQ762_RS34660 | NA     | NA      | NA       |
| FQ762_RS34765 | 0.0008 | 0.0103  | 0.07715  |
| FQ762_RS34885 | 0      | 0.0558  | 0        |
| FQ762_RS34890 | 0      | 0.0603  | 0        |
| FQ762_RS34915 | 0      | 0.0844  | 0        |
| FQ762_RS34920 | 0.0011 | 0.0227  | 0.04697  |
| FQ762_RS34940 | 0.0028 | 0.0338  | 0.08344  |
| FQ762_RS34950 | 0.0021 | 0       | NA       |
| FQ762_RS34970 | 0      | 0       | 0        |
| FQ762_RS34985 | NA     | NA      | NA       |
| FQ762_RS34990 | NA     | NA      | NA       |
| FQ762_RS35070 | 0.0056 | 0.0247  | 0.22756  |
| FQ762_RS35075 | 0      | 0       | 0        |
| FQ762_RS35905 | 0.0004 | 0.08045 | 0.01767  |
| FQ762_RS36030 | 0.0011 | 0       | NA       |
| FQ762_RS36040 | 0      | 0.0177  | 0        |
| FQ762_RS36075 | NA     | NA      | NA       |
| FQ762_RS36125 | 0      | 0.0278  | 0        |
| FQ762_RS36140 | NA     | NA      | NA       |
| FQ762_RS36160 | NA     | NA      | NA       |
| FQ762_RS36180 | 0.0026 | 0.0241  | 0.10662  |
| FQ762_RS36235 | NA     | NA      | NA       |
| FQ762_RS36240 | 0.0061 | 0.0114  | 0.5335   |
| FQ762_RS36315 | NA     | NA      | NA       |
| FQ762_RS36320 | 0      | 0.1018  | 0        |
| FQ762_RS36325 | 0.0009 | 0       | NA       |
| FQ762_RS36330 | 0      | 0       | 0        |
| FQ762_RS36335 | 0.001  | 0.0054  | 0.18402  |
| FQ762_RS36430 | 0      | 0.0068  | 0        |
| FQ762_RS36435 | NA     | NA      | NA       |
| FQ762_RS36440 | NA     | NA      | NA       |
| FQ762_RS36490 | 0      | 0.0408  | 0        |
| FQ762_RS36585 | NA     | NA      | NA       |
| FQ762_RS36690 | NA     | NA      | NA       |
| FQ762_RS36725 | NA     | NA      | NA       |
| FQ762_RS36780 | NA     | NA      | NA       |
| FQ762_RS36805 | NA     | NA      | NA       |
| FQ762_RS36880 | 0.0004 | 0.0174  | 0.02418  |
| FQ762_RS36885 | 0      | 0.0231  | 0        |
| FQ762_RS36965 | 0.0053 | 0.0124  | 0.42836  |
| FQ762_RS37075 | 0.0075 | 0.0127  | 0.58784  |
| FQ762_RS37080 | 0.0026 | 0.0319  | 0.08213  |
| FQ762_RS37105 | NA     | NA      | NA       |
| FQ762_RS37110 | NA     | NA      | NA       |

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**Table S3 – continued from previous page**

| <b>Gene</b>   | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|---------------|------------------------|------------------------|----------------------------|
| FQ762_RS37115 | 0.0028                 | 0.0271                 | 0.10196                    |
| FQ762_RS37125 | 0.0022                 | 0.02                   | 0.11024                    |
| FQ762_RS37225 | 0                      | 0.0238                 | 0                          |
| FQ762_RS37230 | NA                     | NA                     | NA                         |
| FQ762_RS37235 | NA                     | NA                     | NA                         |
| FQ762_RS37255 | NA                     | NA                     | NA                         |
| FQ762_RS37260 | 0.0022                 | 0.0112                 | 0.19709                    |
| FQ762_RS37265 | 0.0063                 | 0.0493                 | 0.12805                    |
| FQ762_RS37395 | NA                     | NA                     | NA                         |
| FQ762_RS37400 | 0.0008                 | 0.0046                 | 0.16992                    |
| FQ762_RS37405 | 0.0066                 | 0.0155                 | 0.42436                    |
| FQ762_RS37460 | NA                     | NA                     | NA                         |
| FQ762_RS37475 | 0.0012                 | 0.0105                 | 0.11077                    |
| FQ762_RS37480 | NA                     | NA                     | NA                         |
| FQ762_RS37670 | NA                     | NA                     | NA                         |
| FQ762_RS37675 | 0                      | 0.0326                 | 0                          |
| FQ762_RS37685 | NA                     | NA                     | NA                         |
| FQ762_RS37700 | 0.0026                 | 0.0607                 | 0.04298                    |
| FQ762_RS37710 | NA                     | NA                     | NA                         |
| FQ762_RS37730 | NA                     | NA                     | NA                         |
| FQ762_RS37740 | NA                     | NA                     | NA                         |
| FQ762_RS37780 | NA                     | NA                     | NA                         |
| FQ762_RS37795 | NA                     | NA                     | NA                         |
| FQ762_RS37825 | NA                     | NA                     | NA                         |
| FQ762_RS37855 | NA                     | NA                     | NA                         |
| FQ762_RS37860 | NA                     | NA                     | NA                         |
| FQ762_RS37885 | NA                     | NA                     | NA                         |
| FQ762_RS38060 | NA                     | NA                     | NA                         |
| FQ762_RS38065 | NA                     | NA                     | NA                         |
| FQ762_RS38125 | 0                      | 0.0366                 | 0                          |
| FQ762_RS38170 | NA                     | NA                     | NA                         |
| FQ762_RS38195 | NA                     | NA                     | NA                         |
| FQ762_RS38210 | NA                     | NA                     | NA                         |
| FQ762_RS38220 | NA                     | NA                     | NA                         |
| FQ762_RS38235 | NA                     | NA                     | NA                         |
| FQ762_RS38255 | 0.0143                 | 0.2277                 | 0.06286                    |
| FQ762_RS38275 | NA                     | NA                     | NA                         |
| FQ762_RS38295 | NA                     | NA                     | NA                         |
| FQ762_RS38300 | NA                     | NA                     | NA                         |
| FQ762_RS38305 | NA                     | NA                     | NA                         |
| FQ762_RS38310 | 0                      | 0.0281                 | 0                          |
| FQ762_RS38315 | 0.0026                 | 0.0336                 | 0.077                      |
| FQ762_RS38320 | NA                     | NA                     | NA                         |
| FQ762_RS38325 | 0.0056                 | 0.0367                 | 0.15238                    |
| FQ762_RS38330 | 0                      | 0.0196                 | 0                          |
| FQ762_RS38335 | NA                     | NA                     | NA                         |
| FQ762_RS38355 | 0                      | 0.0503                 | 0                          |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| FQ762_RS38360 | 0      | 0.035  | 0        |
| FQ762_RS38365 | NA     | NA     | NA       |
| FQ762_RS38405 | 0      | 0.0433 | 0        |
| FQ762_RS38415 | 0.0067 | 0.0155 | 0.43157  |
| FQ762_RS38435 | 0      | 0      | 0        |
| FQ762_RS38440 | 0.0019 | 0      | NA       |
| FQ762_RS38450 | NA     | NA     | NA       |
| FQ762_RS38455 | NA     | NA     | NA       |
| FQ762_RS38460 | 0.0033 | 0.0178 | 0.18486  |
| FQ762_RS38480 | 0      | 0      | 0        |
| FQ762_RS38485 | NA     | NA     | NA       |
| FQ762_RS38490 | 0      | 0      | 0        |
| FQ762_RS38495 | NA     | NA     | NA       |
| FQ762_RS38505 | 0      | 0      | 0        |
| FQ762_RS38510 | 0      | 0      | 0        |
| FQ762_RS38515 | 0      | 0      | 0        |
| FQ762_RS38565 | 0      | 0.0242 | 0        |
| FQ762_RS38575 | NA     | NA     | NA       |
| FQ762_RS38605 | NA     | NA     | NA       |
| FQ762_RS38610 | 0.0058 | 0.0386 | 0.15094  |
| FQ762_RS38625 | NA     | NA     | NA       |
| FQ762_RS38635 | NA     | NA     | NA       |
| FQ762_RS38655 | 0.0026 | 0.0359 | 0.07144  |
| FQ762_RS38695 | NA     | NA     | NA       |
| FQ762_RS38705 | 0.0029 | 0.0444 | 0.06604  |
| FQ762_RS38710 | NA     | NA     | NA       |
| FQ762_RS38725 | 0.0026 | 0.0372 | 0.06864  |
| FQ762_RS38730 | 0      | 0.0155 | 0        |
| FQ762_RS38735 | NA     | NA     | NA       |
| FQ762_RS38740 | NA     | NA     | NA       |
| FQ762_RS38745 | NA     | NA     | NA       |
| FQ762_RS38750 | NA     | NA     | NA       |
| FQ762_RS38755 | NA     | NA     | NA       |
| FQ762_RS38760 | NA     | NA     | NA       |
| FQ762_RS38765 | NA     | NA     | NA       |
| FQ762_RS38770 | 0      | 0.024  | 0        |
| FQ762_RS38775 | 0.0063 | 0      | NA       |
| FQ762_RS38780 | 0      | 0.0108 | 0        |
| FQ762_RS38790 | NA     | NA     | NA       |
| FQ762_RS38795 | NA     | NA     | NA       |
| FQ762_RS38800 | NA     | NA     | NA       |
| FQ762_RS38805 | NA     | NA     | NA       |
| FQ762_RS38810 | NA     | NA     | NA       |
| FQ762_RS38815 | 0.0004 | 0.0436 | 0.00975  |
| FQ762_RS38820 | 0      | 0.0923 | 0        |
| FQ762_RS38825 | 0.0005 | 0.0308 | 0.01471  |
| FQ762_RS38835 | NA     | NA     | NA       |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| FQ762_RS38840 | 0.0026 | 0.0662 | 0.03984  |
| FQ762_RS38850 | NA     | NA     | NA       |
| FQ762_RS38860 | NA     | NA     | NA       |
| FQ762_RS38865 | 0      | 0.0215 | 0        |
| FQ762_RS38870 | 0.0012 | 0.014  | 0.042005 |
| FQ762_RS38875 | 0.0038 | 0.1169 | 0.03216  |
| FQ762_RS38880 | 0.001  | 0.0625 | 0.01577  |
| FQ762_RS38885 | NA     | NA     | NA       |
| FQ762_RS38890 | 0      | 0      | 0        |
| FQ762_RS38895 | NA     | NA     | NA       |
| FQ762_RS38900 | NA     | NA     | NA       |
| FQ762_RS38905 | NA     | NA     | NA       |
| FQ762_RS38910 | NA     | NA     | NA       |
| FQ762_RS38915 | 0      | 0.004  | 0        |
| FQ762_RS38920 | 0      | 0.0071 | 0        |
| FQ762_RS38925 | 0      | 0.0912 | 0        |
| FQ762_RS38930 | 0.0011 | 0.044  | 0.02427  |
| FQ762_RS38935 | 0.0014 | 0.0556 | 0.02602  |
| FQ762_RS38940 | 0.0036 | 0.0617 | 0.05817  |
| FQ762_RS38945 | NA     | NA     | NA       |
| FQ762_RS38950 | NA     | NA     | NA       |
| FQ762_RS38960 | NA     | NA     | NA       |
| FQ762_RS38975 | NA     | NA     | NA       |
| FQ762_RS38980 | 0      | 0.0229 | 0        |
| FQ762_RS38985 | 0      | 0.0002 | 0        |
| FQ762_RS38990 | 0      | 0      | 0        |
| FQ762_RS38995 | 0.0007 | 0.028  | 0.02621  |
| FQ762_RS39000 | NA     | NA     | NA       |
| FQ762_RS39005 | NA     | NA     | NA       |
| FQ762_RS39010 | NA     | NA     | NA       |
| FQ762_RS39015 | NA     | NA     | NA       |
| FQ762_RS39020 | 0      | 0.0317 | 0        |
| FQ762_RS39025 | 0.0011 | 0.0106 | 0.10811  |
| FQ762_RS39030 | 0.0012 | 0.026  | 0.0454   |
| FQ762_RS39035 | 0.0013 | 0.0155 | 0.08256  |
| FQ762_RS39040 | 0      | 0      | 0        |
| FQ762_RS39050 | 0.0043 | 0      | NA       |
| FQ762_RS39055 | 0      | 0.0174 | 0        |
| FQ762_RS39060 | 0.0119 | 0.0675 | 0.17677  |
| FQ762_RS39065 | 0.0008 | 0.0227 | 0.03402  |
| FQ762_RS39070 | NA     | NA     | NA       |
| FQ762_RS39080 | NA     | NA     | NA       |
| FQ762_RS39085 | NA     | NA     | NA       |
| FQ762_RS39090 | 0.003  | 0.0402 | 0.07358  |
| FQ762_RS39095 | NA     | NA     | NA       |
| FQ762_RS39100 | 0      | 0.0273 | 0        |
| FQ762_RS39105 | 0.0027 | 0.0267 | 0.10303  |

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Table S3 – continued from previous page

| Gene          | $dN$    | $dS$    | $\omega$ |
|---------------|---------|---------|----------|
| FQ762_RS39110 | NA      | NA      | NA       |
| FQ762_RS39115 | NA      | NA      | NA       |
| FQ762_RS39125 | NA      | NA      | NA       |
| FQ762_RS39130 | NA      | NA      | NA       |
| FQ762_RS39135 | 0       | 0.0056  | 0        |
| FQ762_RS39140 | 0.0027  | 0.0145  | 0.18871  |
| FQ762_RS39145 | NA      | NA      | NA       |
| FQ762_RS39150 | NA      | NA      | NA       |
| FQ762_RS39155 | NA      | NA      | NA       |
| FQ762_RS39160 | NA      | NA      | NA       |
| FQ762_RS39165 | 0       | 0       | 0        |
| FQ762_RS39170 | 0       | 0       | 0        |
| FQ762_RS39175 | 0       | 0.0201  | 0        |
| FQ762_RS39180 | NA      | NA      | NA       |
| FQ762_RS39185 | NA      | NA      | NA       |
| FQ762_RS39190 | NA      | NA      | NA       |
| FQ762_RS39200 | 0.0012  | 0.0296  | 0.04097  |
| FQ762_RS39205 | NA      | NA      | NA       |
| FQ762_RS39210 | NA      | NA      | NA       |
| FQ762_RS39215 | 0       | 0.0215  | 0        |
| FQ762_RS39220 | NA      | NA      | NA       |
| FQ762_RS39225 | 0.0014  | 0.0244  | 0.05617  |
| FQ762_RS39230 | NA      | NA      | NA       |
| FQ762_RS39235 | 0.0053  | 0.0448  | 0.11869  |
| FQ762_RS39240 | NA      | NA      | NA       |
| FQ762_RS39245 | 0       | 0       | 0        |
| FQ762_RS39250 | NA      | NA      | NA       |
| FQ762_RS39255 | 0       | 0.027   | 0        |
| FQ762_RS39260 | 0       | 0.0147  | 0        |
| FQ762_RS39265 | NA      | NA      | NA       |
| FQ762_RS39275 | NA      | NA      | NA       |
| FQ762_RS39280 | 0.00135 | 0.03465 | 0.03604  |
| FQ762_RS39290 | 0       | 0       | 0        |
| FQ762_RS39295 | 0       | 0.0306  | 0        |
| FQ762_RS39300 | 0       | 0       | 0        |
| FQ762_RS39305 | 0       | 0       | 0        |
| FQ762_RS39310 | 0       | 0.0298  | 0        |
| FQ762_RS39315 | NA      | NA      | NA       |
| FQ762_RS39325 | NA      | NA      | NA       |
| FQ762_RS39330 | 0.0011  | 0.0058  | 0.18481  |
| FQ762_RS39335 | NA      | NA      | NA       |
| FQ762_RS39340 | 0.0021  | 0       | NA       |
| FQ762_RS39345 | 0.0019  | 0.0494  | 0.03891  |
| FQ762_RS39350 | 0       | 0.0194  | 0        |
| FQ762_RS39355 | 0       | 0.0294  | 0        |
| FQ762_RS39365 | 0       | 0.0394  | 0        |
| FQ762_RS39370 | NA      | NA      | NA       |

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Table S3 – continued from previous page

| Gene          | $dN$    | $dS$   | $\omega$ |
|---------------|---------|--------|----------|
| FQ762_RS39375 | 0.0025  | 0.022  | 0.11279  |
| FQ762_RS39380 | NA      | NA     | NA       |
| FQ762_RS39390 | NA      | NA     | NA       |
| FQ762_RS39395 | NA      | NA     | NA       |
| FQ762_RS39400 | 0.0028  | 0.0524 | 0.05319  |
| FQ762_RS39405 | NA      | NA     | NA       |
| FQ762_RS39410 | 0.0052  | 0.0191 | 0.27063  |
| FQ762_RS39415 | 0.0065  | 0.0204 | 0.3185   |
| FQ762_RS39425 | NA      | NA     | NA       |
| FQ762_RS39430 | 0.0035  | 0.008  | 0.43459  |
| FQ762_RS39440 | 0.002   | 0.1225 | 0.01639  |
| FQ762_RS39445 | NA      | NA     | NA       |
| FQ762_RS39450 | NA      | NA     | NA       |
| FQ762_RS39460 | NA      | NA     | NA       |
| FQ762_RS39465 | 0       | 0.0176 | 0        |
| FQ762_RS39470 | NA      | NA     | NA       |
| FQ762_RS39475 | 0       | 0      | 0        |
| FQ762_RS39480 | 0       | 0.0511 | 0        |
| FQ762_RS39485 | 0.0051  | 0      | NA       |
| FQ762_RS39490 | 0.0007  | 0.0098 | 0.06648  |
| FQ762_RS39500 | NA      | NA     | NA       |
| FQ762_RS39505 | 0       | 0      | 0        |
| FQ762_RS39510 | 0.0035  | 0.1127 | 0.03117  |
| FQ762_RS39515 | 0.0011  | 0.0078 | 0.14141  |
| FQ762_RS39525 | NA      | NA     | NA       |
| FQ762_RS39535 | 0       | 0      | 0        |
| FQ762_RS39540 | 0       | 0.0375 | 0        |
| FQ762_RS39570 | 0.0062  | 0.0061 | 1.0039   |
| FQ762_RS39575 | 0       | 0      | 0        |
| FQ762_RS39580 | 0       | 0      | 0        |
| FQ762_RS39585 | 0.0028  | 0      | NA       |
| FQ762_RS39595 | 0.0007  | 0.013  | 0.055    |
| FQ762_RS39600 | 0.0024  | 0      | NA       |
| FQ762_RS39605 | 0.0013  | 0      | NA       |
| FQ762_RS39610 | 0.0009  | 0.0105 | 0.08247  |
| FQ762_RS39615 | NA      | NA     | NA       |
| FQ762_RS39630 | 0.0061  | 0.0189 | 0.32373  |
| FQ762_RS39640 | 0.001   | 0.0365 | 0.02825  |
| FQ762_RS39645 | 0.0014  | 0.0358 | 0.03785  |
| FQ762_RS39650 | 0       | 0.0341 | 0        |
| FQ762_RS39655 | 0.0012  | 0.0447 | 0.02731  |
| FQ762_RS39660 | 0.00465 | 0.0493 | NA       |
| FQ762_RS39665 | 0.0008  | 0.0048 | 0.17496  |
| FQ762_RS39675 | NA      | NA     | NA       |
| FQ762_RS39680 | 0.004   | 0      | NA       |
| FQ762_RS39685 | NA      | NA     | NA       |
| FQ762_RS39690 | 0       | 0      | 0        |

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**Table S3 – continued from previous page**

| <b>Gene</b>   | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|---------------|------------------------|------------------------|----------------------------|
| FQ762_RS39695 | 0.0044                 | 0.0069                 | 0.63149                    |
| FQ762_RS39700 | NA                     | NA                     | NA                         |
| FQ762_RS39705 | 0                      | 0                      | 0                          |
| FQ762_RS39710 | 0.0013                 | 0                      | NA                         |
| FQ762_RS39715 | 0.0013                 | 0                      | NA                         |
| FQ762_RS39720 | 0                      | 0                      | 0                          |
| FQ762_RS39725 | 0                      | 0.0275                 | 0                          |
| FQ762_RS39730 | 0.0016                 | 0.0231                 | 0.06998                    |
| FQ762_RS39735 | 0.0028                 | 0.0316                 | 0.08821                    |
| FQ762_RS39740 | NA                     | NA                     | NA                         |
| FQ762_RS39750 | NA                     | NA                     | NA                         |
| FQ762_RS39755 | 0.0054                 | 0.0188                 | 0.2867                     |
| FQ762_RS39760 | 0.0031                 | 0.064                  | 0.04815                    |
| FQ762_RS39765 | 0.0038                 | 0.0105                 | 0.3564                     |
| FQ762_RS39770 | 0.0055                 | 0.0304                 | 0.18264                    |
| FQ762_RS39780 | 0.0025                 | 0.0131                 | 0.19137                    |
| FQ762_RS39785 | 0.0044                 | 0.0088                 | 0.50203                    |
| FQ762_RS39790 | 0                      | 0                      | 0                          |
| FQ762_RS39795 | NA                     | NA                     | NA                         |
| FQ762_RS39800 | NA                     | NA                     | NA                         |
| FQ762_RS39805 | NA                     | NA                     | NA                         |
| FQ762_RS39810 | 0.0011                 | 0.0175                 | 0.06466                    |
| FQ762_RS39815 | 0.0063                 | 0.0275                 | 0.23052                    |
| FQ762_RS39820 | 0.002                  | 0.0639                 | 0.03069                    |
| FQ762_RS39825 | NA                     | NA                     | NA                         |
| FQ762_RS39855 | NA                     | NA                     | NA                         |
| FQ762_RS39865 | 0                      | 0.0062                 | 0                          |
| FQ762_RS39870 | 0.0073                 | 0.0368                 | 0.19721                    |
| FQ762_RS39875 | 0.0022                 | 0.0263                 | 0.08189                    |
| FQ762_RS39885 | 0.0068                 | 0.0234                 | 0.29023                    |
| FQ762_RS39895 | 0.018                  | 0.0125                 | NA                         |
| FQ762_RS39905 | NA                     | NA                     | NA                         |
| FQ762_RS39920 | NA                     | NA                     | NA                         |
| FQ762_RS39925 | NA                     | NA                     | NA                         |
| FQ762_RS39935 | NA                     | NA                     | NA                         |
| FQ762_RS39940 | 0.0118                 | 0.008                  | 1.47127                    |
| FQ762_RS39945 | NA                     | NA                     | NA                         |
| FQ762_RS39960 | 0.0011                 | 0.0178                 | 0.05985                    |
| FQ762_RS39965 | 0                      | 0.0071                 | 0                          |
| FQ762_RS39970 | 0.0022                 | 0.0055                 | 0.40718                    |
| FQ762_RS39975 | 0                      | 0                      | 0                          |
| FQ762_RS39980 | 0                      | 0.0122                 | 0                          |
| FQ762_RS39985 | NA                     | NA                     | NA                         |
| FQ762_RS39990 | NA                     | NA                     | NA                         |
| FQ762_RS39995 | 0                      | 0                      | 0                          |
| FQ762_RS40015 | 0                      | 0.019                  | 0                          |
| FQ762_RS40035 | 0.0072                 | 0.0459                 | 0.15691                    |

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Table S3 – continued from previous page

| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| FQ762_RS40050 | 0.0028 | 0.0287 | 0.0964   |
| FQ762_RS40055 | 0.0066 | 0.0966 | 0.06878  |
| FQ762_RS40060 | NA     | NA     | NA       |
| FQ762_RS40065 | 0.0088 | 0.0222 | 0.39684  |
| FQ762_RS40070 | 0.0016 | 0.0207 | 0.07652  |
| FQ762_RS40075 | 0.0155 | 0      | NA       |
| FQ762_RS40080 | NA     | NA     | NA       |
| FQ762_RS40085 | NA     | NA     | NA       |
| FQ762_RS40095 | 0.006  | 0.0186 | 0.32242  |
| FQ762_RS40100 | 0.0064 | 0.0977 | 0.06512  |
| FQ762_RS40105 | 0.0075 | 0      | NA       |
| FQ762_RS40110 | NA     | NA     | NA       |
| FQ762_RS40115 | 0.0034 | 0.0489 | 0.0695   |
| FQ762_RS40120 | NA     | NA     | NA       |
| FQ762_RS40125 | 0.004  | 0.0276 | 0.14571  |
| FQ762_RS40145 | 0      | 0.0082 | 0        |
| FQ762_RS40150 | 0.004  | 0.057  | 0.07088  |
| FQ762_RS40155 | NA     | NA     | NA       |
| FQ762_RS40165 | NA     | NA     | NA       |
| FQ762_RS40175 | NA     | NA     | NA       |
| FQ762_RS40185 | NA     | NA     | NA       |
| FQ762_RS40190 | NA     | NA     | NA       |
| FQ762_RS40195 | NA     | NA     | NA       |
| FQ762_RS40205 | 0      | 0.0837 | 0        |
| FQ762_RS40265 | NA     | NA     | NA       |
| FQ762_RS40280 | NA     | NA     | NA       |
| FQ762_RS40285 | 0.0121 | 0.0445 | 0.27089  |
| FQ762_RS40300 | 0.0047 | 0.0443 | 0.10526  |
| FQ762_RS40320 | 0.0018 | 0.0418 | 0.04369  |
| FQ762_RS40325 | 0      | 0.0344 | 0        |
| FQ762_RS40330 | NA     | NA     | NA       |
| FQ762_RS40335 | 0      | 0.0462 | 0        |
| FQ762_RS40340 | NA     | NA     | NA       |
| FQ762_RS40350 | 0.0029 | 0.0474 | 0.062    |
| FQ762_RS40360 | NA     | NA     | NA       |
| FQ762_RS40365 | NA     | NA     | NA       |
| FQ762_RS40370 | NA     | NA     | NA       |
| FQ762_RS40385 | NA     | NA     | NA       |
| FQ762_RS40680 | NA     | NA     | NA       |
| FQ762_RS40690 | 0      | 0      | 0        |
| FQ762_RS40770 | NA     | NA     | NA       |
| HCU77_RS25300 | 0      | 0      | 0        |
| HCU77_RS31855 | NA     | NA     | NA       |
| HCU77_RS38335 | 0      | 0      | 0        |
| HCU77_RS38345 | 0      | 0      | 0        |
| HCU77_RS38720 | 0      | 0.0985 | 0        |
| HCU77_RS38840 | 0.0079 | 0.022  | 0.35829  |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SCO7676      | 0                      | 0.0579                 | 0                          |
| SCO7755      | 0                      | 0                      | 0                          |
| SCO7770      | 0.0276                 | 0.0458                 | 0.60251                    |
| SCO7776      | 0.0217                 | 0                      | NA                         |
| SCO7804      | 0                      | 0                      | 0                          |
| SLI_RS22460  | NA                     | NA                     | NA                         |
| SLI_RS24470  | NA                     | NA                     | NA                         |
| SLI_RS25010  | 0.0419                 | 0.2334                 | 0.17937                    |
| SLI_RS25075  | 0                      | 0                      | 0                          |
| SLI_RS26340  | 0                      | 0.025                  | 0                          |
| SLI_RS27290  | 0                      | 0.0892                 | 0                          |
| SLI_RS27385  | 0                      | 0.0258                 | 0                          |
| SLI_RS27510  | 0                      | 0                      | 0                          |
| SLI_RS28805  | NA                     | NA                     | NA                         |
| SLI_RS29155  | NA                     | NA                     | NA                         |
| SLI_RS29895  | NA                     | NA                     | NA                         |
| SLI_RS37740  | NA                     | NA                     | NA                         |
| SLI_RS37795  | NA                     | NA                     | NA                         |
| SLI_RS37870  | 0.0106                 | 0                      | NA                         |
| SLI_RS38265  | 0.004                  | 0                      | NA                         |
| SLI_RS38390  | NA                     | NA                     | NA                         |
| SSPG_RS04305 | NA                     | NA                     | NA                         |
| SSPG_RS04320 | 0.0017                 | 0.0421                 | 0.04112                    |
| SSPG_RS04330 | NA                     | NA                     | NA                         |
| SSPG_RS04335 | NA                     | NA                     | NA                         |
| SSPG_RS04340 | NA                     | NA                     | NA                         |
| SSPG_RS04350 | 0                      | 0.0111                 | 0                          |
| SSPG_RS04360 | NA                     | NA                     | NA                         |
| SSPG_RS04375 | 0                      | 0.0139                 | 0                          |
| SSPG_RS04380 | NA                     | NA                     | NA                         |
| SSPG_RS04385 | NA                     | NA                     | NA                         |
| SSPG_RS04390 | NA                     | NA                     | NA                         |
| SSPG_RS04410 | 0.0028                 | 0.0063                 | 0.44786                    |
| SSPG_RS04415 | 0.0029                 | 0.0118                 | 0.24761                    |
| SSPG_RS04425 | NA                     | NA                     | NA                         |
| SSPG_RS04435 | NA                     | NA                     | NA                         |
| SSPG_RS04440 | NA                     | NA                     | NA                         |
| SSPG_RS04445 | 0                      | 0.0138                 | 0                          |
| SSPG_RS04450 | NA                     | NA                     | NA                         |
| SSPG_RS04455 | 0.0009                 | 0.0128                 | 0.06914                    |
| SSPG_RS04460 | 0.0008                 | 0.1063                 | 0.00786                    |
| SSPG_RS04470 | 0.0027                 | 0.0158                 | 0.17032                    |
| SSPG_RS04480 | NA                     | NA                     | NA                         |
| SSPG_RS04485 | NA                     | NA                     | NA                         |
| SSPG_RS04500 | NA                     | NA                     | NA                         |
| SSPG_RS04505 | NA                     | NA                     | NA                         |
| SSPG_RS04510 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$     | $dS$               | $\omega$           |
|--------------|----------|--------------------|--------------------|
| SSPG_RS04515 | NA       | NA                 | NA                 |
| SSPG_RS04520 | 0        | 0.0144             | 0                  |
| SSPG_RS04525 | NA       | NA                 | NA                 |
| SSPG_RS04530 | 0        | 0.0423             | 0                  |
| SSPG_RS04540 | NA       | NA                 | NA                 |
| SSPG_RS04545 | NA       | NA                 | NA                 |
| SSPG_RS04550 | NA       | NA                 | NA                 |
| SSPG_RS04560 | 0        | 0.0224             | 0                  |
| SSPG_RS04565 | NA       | NA                 | NA                 |
| SSPG_RS04570 | 0.0036   | 0                  | NA                 |
| SSPG_RS04575 | NA       | NA                 | NA                 |
| SSPG_RS04580 | 0        | 0                  | 0                  |
| SSPG_RS04585 | NA       | NA                 | NA                 |
| SSPG_RS04595 | 0.0023   | 0                  | NA                 |
| SSPG_RS04600 | NA       | NA                 | NA                 |
| SSPG_RS04605 | 0.0006   | 0.0333333333333333 | 0.0113866666666667 |
| SSPG_RS04610 | NA       | NA                 | NA                 |
| SSPG_RS04615 | NA       | NA                 | NA                 |
| SSPG_RS04625 | 0        | 0.0276             | 0                  |
| SSPG_RS04635 | NA       | NA                 | NA                 |
| SSPG_RS04645 | NA       | NA                 | NA                 |
| SSPG_RS04655 | NA       | NA                 | NA                 |
| SSPG_RS04670 | 0.0024   | 0                  | NA                 |
| SSPG_RS04675 | NA       | NA                 | NA                 |
| SSPG_RS04680 | NA       | NA                 | NA                 |
| SSPG_RS04685 | NA       | NA                 | NA                 |
| SSPG_RS04690 | NA       | NA                 | NA                 |
| SSPG_RS04725 | NA       | NA                 | NA                 |
| SSPG_RS04730 | NA       | NA                 | NA                 |
| SSPG_RS04735 | NA       | NA                 | NA                 |
| SSPG_RS04740 | NA       | NA                 | NA                 |
| SSPG_RS04745 | NA       | NA                 | NA                 |
| SSPG_RS04750 | NA       | NA                 | NA                 |
| SSPG_RS04755 | 0.0012   | 0.0126             | 0.09937            |
| SSPG_RS04765 | 0        | 0.1756             | 0                  |
| SSPG_RS04775 | NA       | NA                 | NA                 |
| SSPG_RS04780 | NA       | NA                 | NA                 |
| SSPG_RS04945 | 0.0043   | 0.0517             | 0.08287            |
| SSPG_RS04955 | NA       | NA                 | NA                 |
| SSPG_RS04975 | NA       | NA                 | NA                 |
| SSPG_RS05015 | NA       | NA                 | NA                 |
| SSPG_RS05020 | 0.002    | 0.0216             | 0.09074            |
| SSPG_RS05025 | 0.002425 | 0.026              | NA                 |
| SSPG_RS05030 | NA       | NA                 | NA                 |
| SSPG_RS05035 | NA       | NA                 | NA                 |
| SSPG_RS05045 | 0.002    | 0.0252             | 0.07931            |
| SSPG_RS05055 | 0.0014   | 0.0194             | 0.07115            |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$   | $\omega$ |
|--------------|--------|--------|----------|
| SSPG_RS05065 | NA     | NA     | NA       |
| SSPG_RS05075 | 0.001  | 0.008  | 0.12534  |
| SSPG_RS05085 | NA     | NA     | NA       |
| SSPG_RS05090 | NA     | NA     | NA       |
| SSPG_RS05095 | 0      | 0      | 0        |
| SSPG_RS05100 | 0      | 0      | 0        |
| SSPG_RS05105 | 0      | 0      | 0        |
| SSPG_RS05110 | NA     | NA     | NA       |
| SSPG_RS05115 | 0.0009 | 0.0129 | 0.06704  |
| SSPG_RS05120 | 0.0023 | 0.0563 | 0.04125  |
| SSPG_RS05125 | 0.0008 | 0.0517 | 0.02446  |
| SSPG_RS05145 | NA     | NA     | NA       |
| SSPG_RS05150 | NA     | NA     | NA       |
| SSPG_RS05155 | NA     | NA     | NA       |
| SSPG_RS05165 | NA     | NA     | NA       |
| SSPG_RS05170 | 0      | 0.0161 | 0        |
| SSPG_RS05175 | 0.002  | 0.0075 | 0.26156  |
| SSPG_RS05180 | 0.0062 | 0.0943 | 0.06605  |
| SSPG_RS05185 | NA     | NA     | NA       |
| SSPG_RS05195 | NA     | NA     | NA       |
| SSPG_RS05200 | NA     | NA     | NA       |
| SSPG_RS05205 | NA     | NA     | NA       |
| SSPG_RS05220 | NA     | NA     | NA       |
| SSPG_RS05230 | 0      | 0.0207 | 0        |
| SSPG_RS05235 | NA     | NA     | NA       |
| SSPG_RS05240 | NA     | NA     | NA       |
| SSPG_RS05245 | NA     | NA     | NA       |
| SSPG_RS05250 | 0      | 0.0088 | 0        |
| SSPG_RS05255 | NA     | NA     | NA       |
| SSPG_RS05265 | NA     | NA     | NA       |
| SSPG_RS05275 | 0.0018 | 0      | NA       |
| SSPG_RS05280 | NA     | NA     | NA       |
| SSPG_RS05285 | 0      | 0.057  | 0        |
| SSPG_RS05295 | 0      | 0.0285 | 0        |
| SSPG_RS05300 | 0.0013 | 0.0473 | 0.02788  |
| SSPG_RS05305 | NA     | NA     | NA       |
| SSPG_RS05320 | 0      | 0.0164 | 0        |
| SSPG_RS05325 | 0.0035 | 0.0866 | 0.04027  |
| SSPG_RS05330 | 0      | 0.0213 | 0        |
| SSPG_RS05335 | NA     | NA     | NA       |
| SSPG_RS05340 | NA     | NA     | NA       |
| SSPG_RS05350 | 0      | 0.0054 | 0        |
| SSPG_RS05355 | 0.0013 | 0.0247 | 0.05382  |
| SSPG_RS05365 | 0.0032 | 0      | NA       |
| SSPG_RS05370 | 0.0018 | 0      | NA       |
| SSPG_RS05375 | 0.0012 | 0      | NA       |
| SSPG_RS05400 | NA     | NA     | NA       |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS05405 | NA                     | NA                     | NA                         |
| SSPG_RS05415 | 0.0048                 | 0.025                  | 0.19339                    |
| SSPG_RS05425 | NA                     | NA                     | NA                         |
| SSPG_RS05430 | NA                     | NA                     | NA                         |
| SSPG_RS05435 | NA                     | NA                     | NA                         |
| SSPG_RS05440 | NA                     | NA                     | NA                         |
| SSPG_RS05445 | NA                     | NA                     | NA                         |
| SSPG_RS05455 | 0.00235                | 0.02825                | 0.16943                    |
| SSPG_RS05460 | 0.0015                 | 0.0222                 | 0.06677                    |
| SSPG_RS05465 | NA                     | NA                     | NA                         |
| SSPG_RS05470 | NA                     | NA                     | NA                         |
| SSPG_RS05480 | NA                     | NA                     | NA                         |
| SSPG_RS05500 | 0.00155                | 0.0314                 | 0.07219                    |
| SSPG_RS05505 | NA                     | NA                     | NA                         |
| SSPG_RS05515 | 0.0013                 | 0.0446                 | 0.03002                    |
| SSPG_RS05520 | 0.0014                 | 0.0621                 | 0.02174                    |
| SSPG_RS05525 | NA                     | NA                     | NA                         |
| SSPG_RS05530 | NA                     | NA                     | NA                         |
| SSPG_RS05535 | NA                     | NA                     | NA                         |
| SSPG_RS05545 | NA                     | NA                     | NA                         |
| SSPG_RS05550 | NA                     | NA                     | NA                         |
| SSPG_RS05555 | NA                     | NA                     | NA                         |
| SSPG_RS05575 | 0.0023                 | 0.0111                 | 0.20943                    |
| SSPG_RS05580 | 0.0039                 | 0.0223                 | 0.17362                    |
| SSPG_RS05585 | NA                     | NA                     | NA                         |
| SSPG_RS05595 | 0.0008                 | 0.023                  | 0.03436                    |
| SSPG_RS05600 | 0                      | 0                      | 0                          |
| SSPG_RS05610 | 0.0014                 | 0.0572                 | 0.02509                    |
| SSPG_RS05615 | NA                     | NA                     | NA                         |
| SSPG_RS05620 | NA                     | NA                     | NA                         |
| SSPG_RS05625 | NA                     | NA                     | NA                         |
| SSPG_RS05630 | NA                     | NA                     | NA                         |
| SSPG_RS05660 | 0                      | 0.009                  | 0                          |
| SSPG_RS05665 | 0.0068                 | 0.0131                 | 0.51668                    |
| SSPG_RS05675 | 0.0066                 | 0.0169                 | 0.38968                    |
| SSPG_RS05685 | 0.001                  | 0                      | NA                         |
| SSPG_RS05690 | 0.0012                 | 0.0133                 | 0.0867                     |
| SSPG_RS05695 | 0.002                  | 0.0067                 | 0.30354                    |
| SSPG_RS05700 | 0.001                  | 0.0625                 | 0.01605                    |
| SSPG_RS05705 | 0                      | 0.0138                 | 0                          |
| SSPG_RS05715 | NA                     | NA                     | NA                         |
| SSPG_RS05720 | NA                     | NA                     | NA                         |
| SSPG_RS05725 | 0.0016                 | 0.0099                 | 0.15865                    |
| SSPG_RS05730 | NA                     | NA                     | NA                         |
| SSPG_RS05740 | NA                     | NA                     | NA                         |
| SSPG_RS05745 | NA                     | NA                     | NA                         |
| SSPG_RS05750 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$                 | $\omega$ |
|--------------|---------|----------------------|----------|
| SSPG_RS05755 | 0.0026  | 0.0058               | 0.4452   |
| SSPG_RS05760 | 0       | 0.0121               | 0        |
| SSPG_RS05765 | 0.0016  | 0.0092               | 0.1721   |
| SSPG_RS05775 | 0.001   | 0.0188               | 0.127395 |
| SSPG_RS05780 | 0.0044  | 0.0328               | 0.13455  |
| SSPG_RS05790 | NA      | NA                   | NA       |
| SSPG_RS05795 | 0       | 0                    | 0        |
| SSPG_RS05800 | NA      | NA                   | NA       |
| SSPG_RS05805 | 0       | 0.0351               | 0        |
| SSPG_RS05810 | 0       | 0.016                | 0        |
| SSPG_RS05820 | 0       | 0                    | 0        |
| SSPG_RS05830 | 0       | 0                    | 0        |
| SSPG_RS05835 | NA      | NA                   | NA       |
| SSPG_RS05845 | NA      | NA                   | NA       |
| SSPG_RS05855 | NA      | NA                   | NA       |
| SSPG_RS05860 | NA      | NA                   | NA       |
| SSPG_RS05870 | 0       | 0                    | 0        |
| SSPG_RS05875 | NA      | NA                   | NA       |
| SSPG_RS05880 | 0       | 0.009                | 0        |
| SSPG_RS05915 | 0       | 0.078                | 0        |
| SSPG_RS05920 | NA      | NA                   | NA       |
| SSPG_RS05925 | NA      | NA                   | NA       |
| SSPG_RS05930 | NA      | NA                   | NA       |
| SSPG_RS05935 | NA      | NA                   | NA       |
| SSPG_RS05940 | NA      | NA                   | NA       |
| SSPG_RS05945 | 0       | 0.007433333333333333 | 0        |
| SSPG_RS05950 | 0       | 0                    | 0        |
| SSPG_RS05955 | NA      | NA                   | NA       |
| SSPG_RS05965 | 0.0027  | 0                    | NA       |
| SSPG_RS05970 | 0.0008  | 0.0241               | 0.03499  |
| SSPG_RS05980 | 0.0084  | 0.0092               | 0.91312  |
| SSPG_RS05985 | NA      | NA                   | NA       |
| SSPG_RS05990 | 0.0016  | 0.0452               | 0.03526  |
| SSPG_RS05995 | 0       | 0.0169               | 0        |
| SSPG_RS06000 | 0.00035 | 0.0411               | 0.012425 |
| SSPG_RS06005 | 0.0051  | 0                    | NA       |
| SSPG_RS06010 | NA      | NA                   | NA       |
| SSPG_RS06015 | NA      | NA                   | NA       |
| SSPG_RS06025 | 0.0019  | 0.0117               | 0.16244  |
| SSPG_RS06030 | 0       | 0.0311               | 0        |
| SSPG_RS06040 | NA      | NA                   | NA       |
| SSPG_RS06045 | NA      | NA                   | NA       |
| SSPG_RS06055 | NA      | NA                   | NA       |
| SSPG_RS06060 | NA      | NA                   | NA       |
| SSPG_RS06070 | NA      | NA                   | NA       |
| SSPG_RS06075 | NA      | NA                   | NA       |
| SSPG_RS06080 | 0.0057  | 0.0329               | 0.17323  |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS06085 | 0                      | 0.0117                 | 0                          |
| SSPG_RS06090 | 0                      | 0                      | 0                          |
| SSPG_RS06095 | 0                      | 0.0105                 | 0                          |
| SSPG_RS06100 | 0                      | 0.0059                 | 0                          |
| SSPG_RS06110 | NA                     | NA                     | NA                         |
| SSPG_RS06120 | NA                     | NA                     | NA                         |
| SSPG_RS06125 | NA                     | NA                     | NA                         |
| SSPG_RS06130 | NA                     | NA                     | NA                         |
| SSPG_RS06135 | NA                     | NA                     | NA                         |
| SSPG_RS06140 | NA                     | NA                     | NA                         |
| SSPG_RS06145 | NA                     | NA                     | NA                         |
| SSPG_RS06150 | 0.0008                 | 0.0078                 | 0.10283                    |
| SSPG_RS06160 | 0.0014                 | 0                      | NA                         |
| SSPG_RS06170 | 0                      | 0                      | 0                          |
| SSPG_RS06175 | 0.0013                 | 0.0121                 | 0.10849                    |
| SSPG_RS06185 | 0.0028                 | 0.0077                 | 0.35743                    |
| SSPG_RS06190 | NA                     | NA                     | NA                         |
| SSPG_RS06200 | 0.00035                | 0.0206                 | 0.012175                   |
| SSPG_RS06220 | NA                     | NA                     | NA                         |
| SSPG_RS06225 | NA                     | NA                     | NA                         |
| SSPG_RS06230 | NA                     | NA                     | NA                         |
| SSPG_RS06240 | NA                     | NA                     | NA                         |
| SSPG_RS06245 | NA                     | NA                     | NA                         |
| SSPG_RS06250 | NA                     | NA                     | NA                         |
| SSPG_RS06260 | 0.0011                 | 0.0198                 | 0.0558                     |
| SSPG_RS06275 | 0                      | 0.0138                 | 0                          |
| SSPG_RS06280 | NA                     | NA                     | NA                         |
| SSPG_RS06285 | 0                      | 0.0145                 | 0                          |
| SSPG_RS06290 | 0.0036                 | 0.0035                 | 1.03565                    |
| SSPG_RS06295 | NA                     | NA                     | NA                         |
| SSPG_RS06300 | NA                     | NA                     | NA                         |
| SSPG_RS06305 | 0.0011                 | 0.0094                 | 0.11267                    |
| SSPG_RS06320 | NA                     | NA                     | NA                         |
| SSPG_RS06325 | NA                     | NA                     | NA                         |
| SSPG_RS06330 | 0.0007                 | 0.0226                 | 0.03279                    |
| SSPG_RS06335 | NA                     | NA                     | NA                         |
| SSPG_RS06340 | NA                     | NA                     | NA                         |
| SSPG_RS06350 | 0                      | 0.0038                 | 0                          |
| SSPG_RS06355 | NA                     | NA                     | NA                         |
| SSPG_RS06360 | NA                     | NA                     | NA                         |
| SSPG_RS06365 | NA                     | NA                     | NA                         |
| SSPG_RS06370 | 0.006                  | 0.0184                 | 0.3233                     |
| SSPG_RS06405 | NA                     | NA                     | NA                         |
| SSPG_RS06410 | NA                     | NA                     | NA                         |
| SSPG_RS06425 | NA                     | NA                     | NA                         |
| SSPG_RS06435 | NA                     | NA                     | NA                         |
| SSPG_RS06450 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$   | $\omega$ |
|--------------|---------|--------|----------|
| SSPG_RS06455 | NA      | NA     | NA       |
| SSPG_RS06460 | NA      | NA     | NA       |
| SSPG_RS06480 | 0       | 0.0387 | 0        |
| SSPG_RS06485 | 0.0013  | 0      | NA       |
| SSPG_RS06500 | NA      | NA     | NA       |
| SSPG_RS06510 | 0       | 0      | 0        |
| SSPG_RS06530 | 0       | 0.0203 | 0        |
| SSPG_RS06535 | NA      | NA     | NA       |
| SSPG_RS06545 | 0       | 0      | 0        |
| SSPG_RS06550 | NA      | NA     | NA       |
| SSPG_RS06555 | NA      | NA     | NA       |
| SSPG_RS06560 | NA      | NA     | NA       |
| SSPG_RS06565 | NA      | NA     | NA       |
| SSPG_RS06570 | NA      | NA     | NA       |
| SSPG_RS06580 | NA      | NA     | NA       |
| SSPG_RS06590 | NA      | NA     | NA       |
| SSPG_RS06620 | 0       | 0.0121 | 0        |
| SSPG_RS06640 | NA      | NA     | NA       |
| SSPG_RS06645 | NA      | NA     | NA       |
| SSPG_RS06660 | 0.004   | 0.0104 | 0.38559  |
| SSPG_RS06665 | NA      | NA     | NA       |
| SSPG_RS06670 | NA      | NA     | NA       |
| SSPG_RS06680 | NA      | NA     | NA       |
| SSPG_RS06685 | NA      | NA     | NA       |
| SSPG_RS06695 | NA      | NA     | NA       |
| SSPG_RS06705 | NA      | NA     | NA       |
| SSPG_RS06710 | NA      | NA     | NA       |
| SSPG_RS06720 | NA      | NA     | NA       |
| SSPG_RS06725 | NA      | NA     | NA       |
| SSPG_RS06730 | 0.00225 | 0      | NA       |
| SSPG_RS06735 | NA      | NA     | NA       |
| SSPG_RS06740 | NA      | NA     | NA       |
| SSPG_RS06750 | NA      | NA     | NA       |
| SSPG_RS06755 | 0.0027  | 0.0336 | 0.08123  |
| SSPG_RS06765 | 0.0012  | 0.0445 | 0.02746  |
| SSPG_RS06770 | NA      | NA     | NA       |
| SSPG_RS06775 | NA      | NA     | NA       |
| SSPG_RS06780 | NA      | NA     | NA       |
| SSPG_RS06785 | NA      | NA     | NA       |
| SSPG_RS06790 | NA      | NA     | NA       |
| SSPG_RS06795 | NA      | NA     | NA       |
| SSPG_RS06805 | 0.0005  | 0.0161 | 0.03188  |
| SSPG_RS06810 | 0.0058  | 0.0252 | 0.2319   |
| SSPG_RS06820 | NA      | NA     | NA       |
| SSPG_RS06825 | 0       | 0      | 0        |
| SSPG_RS06830 | NA      | NA     | NA       |
| SSPG_RS06840 | 0       | 0.0417 | 0        |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$   | $\omega$ |
|--------------|--------|--------|----------|
| SSPG_RS06845 | NA     | NA     | NA       |
| SSPG_RS06850 | 0      | 0      | 0        |
| SSPG_RS06855 | 0      | 0.0059 | 0        |
| SSPG_RS06860 | NA     | NA     | NA       |
| SSPG_RS06870 | NA     | NA     | NA       |
| SSPG_RS06875 | NA     | NA     | NA       |
| SSPG_RS06880 | NA     | NA     | NA       |
| SSPG_RS06890 | NA     | NA     | NA       |
| SSPG_RS06895 | NA     | NA     | NA       |
| SSPG_RS06900 | NA     | NA     | NA       |
| SSPG_RS06910 | NA     | NA     | NA       |
| SSPG_RS06920 | NA     | NA     | NA       |
| SSPG_RS06925 | NA     | NA     | NA       |
| SSPG_RS06930 | NA     | NA     | NA       |
| SSPG_RS06935 | NA     | NA     | NA       |
| SSPG_RS06940 | NA     | NA     | NA       |
| SSPG_RS06945 | NA     | NA     | NA       |
| SSPG_RS06955 | 0      | 0      | 0        |
| SSPG_RS06960 | NA     | NA     | NA       |
| SSPG_RS06965 | NA     | NA     | NA       |
| SSPG_RS06970 | 0.0021 | 0.0303 | 0.06799  |
| SSPG_RS06990 | NA     | NA     | NA       |
| SSPG_RS06995 | NA     | NA     | NA       |
| SSPG_RS07015 | NA     | NA     | NA       |
| SSPG_RS07030 | NA     | NA     | NA       |
| SSPG_RS07035 | NA     | NA     | NA       |
| SSPG_RS07040 | NA     | NA     | NA       |
| SSPG_RS07060 | NA     | NA     | NA       |
| SSPG_RS07065 | NA     | NA     | NA       |
| SSPG_RS07070 | NA     | NA     | NA       |
| SSPG_RS07075 | NA     | NA     | NA       |
| SSPG_RS07085 | NA     | NA     | NA       |
| SSPG_RS07090 | NA     | NA     | NA       |
| SSPG_RS07095 | NA     | NA     | NA       |
| SSPG_RS07100 | NA     | NA     | NA       |
| SSPG_RS07125 | NA     | NA     | NA       |
| SSPG_RS07140 | NA     | NA     | NA       |
| SSPG_RS07145 | NA     | NA     | NA       |
| SSPG_RS07165 | NA     | NA     | NA       |
| SSPG_RS07170 | NA     | NA     | NA       |
| SSPG_RS07175 | NA     | NA     | NA       |
| SSPG_RS07180 | NA     | NA     | NA       |
| SSPG_RS07190 | 0.0013 | 0.0327 | 0.04067  |
| SSPG_RS07195 | NA     | NA     | NA       |
| SSPG_RS07200 | NA     | NA     | NA       |
| SSPG_RS07215 | NA     | NA     | NA       |
| SSPG_RS07225 | NA     | NA     | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$   | $\omega$ |
|--------------|---------|--------|----------|
| SSPG_RS07240 | NA      | NA     | NA       |
| SSPG_RS07245 | NA      | NA     | NA       |
| SSPG_RS07250 | NA      | NA     | NA       |
| SSPG_RS07255 | 0       | 0      | 0        |
| SSPG_RS07260 | NA      | NA     | NA       |
| SSPG_RS07270 | 0       | 0.0292 | 0        |
| SSPG_RS07275 | NA      | NA     | NA       |
| SSPG_RS07285 | NA      | NA     | NA       |
| SSPG_RS07305 | NA      | NA     | NA       |
| SSPG_RS07330 | NA      | NA     | NA       |
| SSPG_RS07340 | NA      | NA     | NA       |
| SSPG_RS07345 | NA      | NA     | NA       |
| SSPG_RS07350 | 0       | 0.0405 | 0        |
| SSPG_RS07355 | NA      | NA     | NA       |
| SSPG_RS07365 | 0       | 0      | 0        |
| SSPG_RS07375 | NA      | NA     | NA       |
| SSPG_RS07385 | NA      | NA     | NA       |
| SSPG_RS07390 | NA      | NA     | NA       |
| SSPG_RS07395 | NA      | NA     | NA       |
| SSPG_RS07400 | 0       | 0.0259 | 0        |
| SSPG_RS07405 | 0.0015  | 0.0331 | 0.0464   |
| SSPG_RS07410 | 0.0035  | 0.0111 | 0.31422  |
| SSPG_RS07420 | 0.00155 | 0.013  | 0.058865 |
| SSPG_RS07425 | NA      | NA     | NA       |
| SSPG_RS07430 | NA      | NA     | NA       |
| SSPG_RS07435 | NA      | NA     | NA       |
| SSPG_RS07440 | NA      | NA     | NA       |
| SSPG_RS07450 | NA      | NA     | NA       |
| SSPG_RS07460 | NA      | NA     | NA       |
| SSPG_RS07480 | 0.0027  | 0      | NA       |
| SSPG_RS07485 | NA      | NA     | NA       |
| SSPG_RS07505 | 0       | 0      | 0        |
| SSPG_RS07510 | NA      | NA     | NA       |
| SSPG_RS07515 | NA      | NA     | NA       |
| SSPG_RS07530 | NA      | NA     | NA       |
| SSPG_RS07535 | NA      | NA     | NA       |
| SSPG_RS07540 | NA      | NA     | NA       |
| SSPG_RS07545 | NA      | NA     | NA       |
| SSPG_RS07550 | NA      | NA     | NA       |
| SSPG_RS07565 | 0.0035  | 0.0158 | 0.22006  |
| SSPG_RS07570 | NA      | NA     | NA       |
| SSPG_RS07575 | NA      | NA     | NA       |
| SSPG_RS07595 | NA      | NA     | NA       |
| SSPG_RS07600 | NA      | NA     | NA       |
| SSPG_RS07610 | NA      | NA     | NA       |
| SSPG_RS07615 | 0       | 0      | 0        |
| SSPG_RS07630 | NA      | NA     | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$   | $\omega$           |
|--------------|--------|--------|--------------------|
| SSPG_RS07635 | NA     | NA     | NA                 |
| SSPG_RS07645 | NA     | NA     | NA                 |
| SSPG_RS07650 | NA     | NA     | NA                 |
| SSPG_RS07660 | 0.0013 | 0.0197 | 0.06368            |
| SSPG_RS07670 | NA     | NA     | NA                 |
| SSPG_RS07675 | NA     | NA     | NA                 |
| SSPG_RS07680 | NA     | NA     | NA                 |
| SSPG_RS07690 | NA     | NA     | NA                 |
| SSPG_RS07695 | NA     | NA     | NA                 |
| SSPG_RS07700 | NA     | NA     | NA                 |
| SSPG_RS07705 | NA     | NA     | NA                 |
| SSPG_RS07710 | NA     | NA     | NA                 |
| SSPG_RS07720 | NA     | NA     | NA                 |
| SSPG_RS07725 | NA     | NA     | NA                 |
| SSPG_RS07730 | 0      | 0.0473 | 0                  |
| SSPG_RS07735 | NA     | NA     | NA                 |
| SSPG_RS07760 | NA     | NA     | NA                 |
| SSPG_RS07765 | 0      | 0      | 0                  |
| SSPG_RS07770 | NA     | NA     | NA                 |
| SSPG_RS07775 | NA     | NA     | NA                 |
| SSPG_RS07780 | NA     | NA     | NA                 |
| SSPG_RS07790 | 0      | 0      | 0                  |
| SSPG_RS07795 | 0      | 0.0292 | 0                  |
| SSPG_RS07800 | NA     | NA     | NA                 |
| SSPG_RS07810 | NA     | NA     | NA                 |
| SSPG_RS07820 | NA     | NA     | NA                 |
| SSPG_RS07830 | 0      | 0.0229 | 0                  |
| SSPG_RS07845 | 0      | 0      | 0                  |
| SSPG_RS07855 | 0      | 0.0244 | 0                  |
| SSPG_RS07860 | 0.0046 | 0      | NA                 |
| SSPG_RS07865 | NA     | NA     | NA                 |
| SSPG_RS07870 | NA     | NA     | NA                 |
| SSPG_RS07875 | NA     | NA     | NA                 |
| SSPG_RS07880 | 0.0011 | 0.0187 | 0.06086            |
| SSPG_RS07885 | NA     | NA     | NA                 |
| SSPG_RS07895 | 0      | 0      | 0                  |
| SSPG_RS07900 | 0.0021 | 0.0183 | 0.1145             |
| SSPG_RS07910 | 0.0012 | 0.0192 | 0.06494            |
| SSPG_RS07915 | NA     | NA     | NA                 |
| SSPG_RS07925 | NA     | NA     | NA                 |
| SSPG_RS07940 | 0      | 0.0219 | 0                  |
| SSPG_RS07945 | 0.0029 | 0      | NA                 |
| SSPG_RS07950 | 0.0011 | 0.0235 | 0.04479            |
| SSPG_RS07955 | NA     | NA     | NA                 |
| SSPG_RS07960 | NA     | NA     | NA                 |
| SSPG_RS07965 | 0      | 0      | 0                  |
| SSPG_RS07970 | 0.0014 | 0.0895 | 0.0114833333333333 |

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Table S3 – continued from previous page

| Gene         | $dN$                 | $dS$   | $\omega$ |
|--------------|----------------------|--------|----------|
| SSPG_RS07975 | NA                   | NA     | NA       |
| SSPG_RS07980 | NA                   | NA     | NA       |
| SSPG_RS07990 | NA                   | NA     | NA       |
| SSPG_RS08000 | NA                   | NA     | NA       |
| SSPG_RS08005 | NA                   | NA     | NA       |
| SSPG_RS08015 | NA                   | NA     | NA       |
| SSPG_RS08020 | 0.002                | 0.0275 | 0.07224  |
| SSPG_RS08030 | NA                   | NA     | NA       |
| SSPG_RS08040 | NA                   | NA     | NA       |
| SSPG_RS08045 | NA                   | NA     | NA       |
| SSPG_RS08055 | NA                   | NA     | NA       |
| SSPG_RS08060 | NA                   | NA     | NA       |
| SSPG_RS08065 | 0.000366666666666667 | 0.0206 | NA       |
| SSPG_RS08070 | 0.0012               | 0      | NA       |
| SSPG_RS08085 | 0                    | 0.034  | 0        |
| SSPG_RS08090 | NA                   | NA     | NA       |
| SSPG_RS08095 | NA                   | NA     | NA       |
| SSPG_RS08105 | 0.0015               | 0.0146 | 0.09981  |
| SSPG_RS08110 | NA                   | NA     | NA       |
| SSPG_RS08115 | 0                    | 0.0262 | 0        |
| SSPG_RS08120 | NA                   | NA     | NA       |
| SSPG_RS08125 | NA                   | NA     | NA       |
| SSPG_RS08130 | NA                   | NA     | NA       |
| SSPG_RS08135 | NA                   | NA     | NA       |
| SSPG_RS08160 | NA                   | NA     | NA       |
| SSPG_RS08170 | 0.003                | 0.014  | 0.21424  |
| SSPG_RS08175 | NA                   | NA     | NA       |
| SSPG_RS08185 | NA                   | NA     | NA       |
| SSPG_RS08190 | 0                    | 0      | 0        |
| SSPG_RS08200 | NA                   | NA     | NA       |
| SSPG_RS08205 | NA                   | NA     | NA       |
| SSPG_RS08210 | 0                    | 0      | 0        |
| SSPG_RS08215 | 0.0011               | 0.0104 | 0.1044   |
| SSPG_RS08220 | NA                   | NA     | NA       |
| SSPG_RS08235 | 0                    | 0      | 0        |
| SSPG_RS08240 | NA                   | NA     | NA       |
| SSPG_RS08250 | NA                   | NA     | NA       |
| SSPG_RS08255 | NA                   | NA     | NA       |
| SSPG_RS08260 | 0                    | 0      | 0        |
| SSPG_RS08270 | NA                   | NA     | NA       |
| SSPG_RS08275 | NA                   | NA     | NA       |
| SSPG_RS08280 | NA                   | NA     | NA       |
| SSPG_RS08290 | NA                   | NA     | NA       |
| SSPG_RS08305 | NA                   | NA     | NA       |
| SSPG_RS08320 | NA                   | NA     | NA       |
| SSPG_RS08340 | NA                   | NA     | NA       |
| SSPG_RS08370 | 0                    | 0.0261 | 0        |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$               | $\omega$ |
|--------------|---------|--------------------|----------|
| SSPG_RS08395 | NA      | NA                 | NA       |
| SSPG_RS08405 | NA      | NA                 | NA       |
| SSPG_RS08415 | NA      | NA                 | NA       |
| SSPG_RS08420 | NA      | NA                 | NA       |
| SSPG_RS08425 | NA      | NA                 | NA       |
| SSPG_RS08430 | NA      | NA                 | NA       |
| SSPG_RS08435 | NA      | NA                 | NA       |
| SSPG_RS08440 | NA      | NA                 | NA       |
| SSPG_RS08450 | 0.0026  | 0.0255             | 0.10127  |
| SSPG_RS08495 | NA      | NA                 | NA       |
| SSPG_RS08500 | 0       | 0.0315666666666667 | 0        |
| SSPG_RS08515 | NA      | NA                 | NA       |
| SSPG_RS08520 | 0.0015  | 0.0347             | 0.04201  |
| SSPG_RS08525 | NA      | NA                 | NA       |
| SSPG_RS08535 | NA      | NA                 | NA       |
| SSPG_RS08545 | 0       | 0                  | 0        |
| SSPG_RS08565 | 0.0019  | 0.0345             | 0.05559  |
| SSPG_RS08570 | 0       | 0.0084             | 0        |
| SSPG_RS08590 | 0       | 0.0738             | 0        |
| SSPG_RS08595 | NA      | NA                 | NA       |
| SSPG_RS08600 | NA      | NA                 | NA       |
| SSPG_RS08605 | 0.004   | 0                  | NA       |
| SSPG_RS08615 | 0       | 0.0179             | 0        |
| SSPG_RS08635 | 0.0008  | 0.0544             | 0.01563  |
| SSPG_RS08640 | NA      | NA                 | NA       |
| SSPG_RS08645 | NA      | NA                 | NA       |
| SSPG_RS08650 | NA      | NA                 | NA       |
| SSPG_RS08655 | NA      | NA                 | NA       |
| SSPG_RS08660 | 0.0014  | 0.0357             | 0.03821  |
| SSPG_RS08665 | 0.0041  | 0                  | NA       |
| SSPG_RS08675 | 0       | 0.00285            | 0        |
| SSPG_RS08680 | 0.0014  | 0.024              | 0.0599   |
| SSPG_RS08685 | 0.0019  | 0.0614             | 0.03052  |
| SSPG_RS08690 | NA      | NA                 | NA       |
| SSPG_RS08695 | NA      | NA                 | NA       |
| SSPG_RS08700 | NA      | NA                 | NA       |
| SSPG_RS08705 | NA      | NA                 | NA       |
| SSPG_RS08715 | 0       | 0                  | 0        |
| SSPG_RS08720 | NA      | NA                 | NA       |
| SSPG_RS08735 | 0       | 0.0221             | 0        |
| SSPG_RS08745 | 0.0022  | 0.0424             | 0.05287  |
| SSPG_RS08765 | 0.0012  | 0.0205             | 0.06043  |
| SSPG_RS08775 | 0       | 0.0259             | 0        |
| SSPG_RS08785 | 0       | 0.0372             | 0        |
| SSPG_RS08790 | 0.00395 | 0.04535            | 0.19098  |
| SSPG_RS08795 | NA      | NA                 | NA       |
| SSPG_RS08810 | 0.0014  | 0                  | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| SSPG_RS08825 | NA      | NA      | NA       |
| SSPG_RS08830 | NA      | NA      | NA       |
| SSPG_RS08835 | 0       | 0.01    | 0        |
| SSPG_RS08840 | 0       | 0.0552  | 0        |
| SSPG_RS08845 | 0       | 0.0243  | 0        |
| SSPG_RS08850 | 0       | 0.0002  | 0        |
| SSPG_RS08855 | NA      | NA      | NA       |
| SSPG_RS08860 | NA      | NA      | NA       |
| SSPG_RS08880 | NA      | NA      | NA       |
| SSPG_RS08885 | 0       | 0.0076  | 0        |
| SSPG_RS08890 | 0       | 0.0377  | 0        |
| SSPG_RS08895 | 0       | 0.0265  | 0        |
| SSPG_RS08900 | NA      | NA      | NA       |
| SSPG_RS08905 | NA      | NA      | NA       |
| SSPG_RS08915 | NA      | NA      | NA       |
| SSPG_RS08925 | NA      | NA      | NA       |
| SSPG_RS08930 | NA      | NA      | NA       |
| SSPG_RS08935 | NA      | NA      | NA       |
| SSPG_RS08940 | NA      | NA      | NA       |
| SSPG_RS08950 | NA      | NA      | NA       |
| SSPG_RS08965 | NA      | NA      | NA       |
| SSPG_RS08970 | NA      | NA      | NA       |
| SSPG_RS08975 | NA      | NA      | NA       |
| SSPG_RS08980 | NA      | NA      | NA       |
| SSPG_RS08985 | 0       | 0.01095 | 0        |
| SSPG_RS08990 | 0.00075 | 0.00545 | 0.06661  |
| SSPG_RS08995 | 0       | 0.0935  | 0        |
| SSPG_RS09020 | NA      | NA      | NA       |
| SSPG_RS09030 | NA      | NA      | NA       |
| SSPG_RS09035 | 0       | 0       | 0        |
| SSPG_RS09040 | NA      | NA      | NA       |
| SSPG_RS09050 | NA      | NA      | NA       |
| SSPG_RS09055 | NA      | NA      | NA       |
| SSPG_RS09060 | NA      | NA      | NA       |
| SSPG_RS09065 | NA      | NA      | NA       |
| SSPG_RS09070 | NA      | NA      | NA       |
| SSPG_RS09075 | NA      | NA      | NA       |
| SSPG_RS09090 | 0.0012  | 0.0252  | 0.04649  |
| SSPG_RS09095 | NA      | NA      | NA       |
| SSPG_RS09105 | NA      | NA      | NA       |
| SSPG_RS09115 | 0       | 0.0075  | 0        |
| SSPG_RS09125 | 0       | 0       | 0        |
| SSPG_RS09150 | NA      | NA      | NA       |
| SSPG_RS09155 | NA      | NA      | NA       |
| SSPG_RS09165 | NA      | NA      | NA       |
| SSPG_RS09175 | NA      | NA      | NA       |
| SSPG_RS09190 | NA      | NA      | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| SSPG_RS09195 | NA      | NA      | NA       |
| SSPG_RS09200 | NA      | NA      | NA       |
| SSPG_RS09205 | NA      | NA      | NA       |
| SSPG_RS09220 | NA      | NA      | NA       |
| SSPG_RS09225 | 0       | 0.0073  | 0        |
| SSPG_RS09230 | NA      | NA      | NA       |
| SSPG_RS09235 | 0.0014  | 0.0571  | 0.02453  |
| SSPG_RS09245 | NA      | NA      | NA       |
| SSPG_RS09255 | 0       | 0       | 0        |
| SSPG_RS09260 | NA      | NA      | NA       |
| SSPG_RS09265 | NA      | NA      | NA       |
| SSPG_RS09270 | NA      | NA      | NA       |
| SSPG_RS09285 | NA      | NA      | NA       |
| SSPG_RS09295 | NA      | NA      | NA       |
| SSPG_RS09300 | NA      | NA      | NA       |
| SSPG_RS09305 | NA      | NA      | NA       |
| SSPG_RS09310 | 0       | 0       | 0        |
| SSPG_RS09320 | NA      | NA      | NA       |
| SSPG_RS09330 | 0.0015  | 0.0149  | 0.09951  |
| SSPG_RS09340 | NA      | NA      | NA       |
| SSPG_RS09345 | 0       | 0.008   | 0        |
| SSPG_RS09350 | NA      | NA      | NA       |
| SSPG_RS09355 | NA      | NA      | NA       |
| SSPG_RS09360 | NA      | NA      | NA       |
| SSPG_RS09365 | 0.0032  | 0       | NA       |
| SSPG_RS09375 | NA      | NA      | NA       |
| SSPG_RS09380 | NA      | NA      | NA       |
| SSPG_RS09385 | NA      | NA      | NA       |
| SSPG_RS09390 | NA      | NA      | NA       |
| SSPG_RS09395 | NA      | NA      | NA       |
| SSPG_RS09400 | NA      | NA      | NA       |
| SSPG_RS09410 | 0       | 0       | 0        |
| SSPG_RS09435 | NA      | NA      | NA       |
| SSPG_RS09440 | NA      | NA      | NA       |
| SSPG_RS09450 | 0.001   | 0.005   | 0.19506  |
| SSPG_RS09455 | 0       | 0       | 0        |
| SSPG_RS09460 | 0.0021  | 0.0105  | 0.19648  |
| SSPG_RS09465 | 0.00115 | 0.00945 | NA       |
| SSPG_RS09470 | 0.0006  | 0.0041  | 0.15534  |
| SSPG_RS09475 | 0       | 0.0077  | 0        |
| SSPG_RS09480 | 0.00155 | 0.1489  | 0.00793  |
| SSPG_RS09485 | NA      | NA      | NA       |
| SSPG_RS09490 | NA      | NA      | NA       |
| SSPG_RS09500 | 0.0006  | 0.0386  | 0.01556  |
| SSPG_RS09510 | NA      | NA      | NA       |
| SSPG_RS09525 | NA      | NA      | NA       |
| SSPG_RS09530 | NA      | NA      | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| SSPG_RS09540 | NA      | NA      | NA       |
| SSPG_RS09550 | NA      | NA      | NA       |
| SSPG_RS09560 | NA      | NA      | NA       |
| SSPG_RS09565 | 0.0018  | 0.0204  | 0.08761  |
| SSPG_RS09570 | 0.0019  | 0.0289  | 0.0662   |
| SSPG_RS09580 | 0.005   | 0.038   | 0.1314   |
| SSPG_RS09600 | NA      | NA      | NA       |
| SSPG_RS09605 | NA      | NA      | NA       |
| SSPG_RS09610 | NA      | NA      | NA       |
| SSPG_RS09615 | NA      | NA      | NA       |
| SSPG_RS09620 | NA      | NA      | NA       |
| SSPG_RS09625 | NA      | NA      | NA       |
| SSPG_RS09640 | NA      | NA      | NA       |
| SSPG_RS09645 | 0.0019  | 0       | NA       |
| SSPG_RS09650 | NA      | NA      | NA       |
| SSPG_RS09655 | NA      | NA      | NA       |
| SSPG_RS09660 | NA      | NA      | NA       |
| SSPG_RS09665 | NA      | NA      | NA       |
| SSPG_RS09670 | NA      | NA      | NA       |
| SSPG_RS09690 | 0.0014  | 0.0118  | 0.12214  |
| SSPG_RS09700 | 0.0055  | 0.0197  | 0.27935  |
| SSPG_RS09705 | 0.0016  | 0.0189  | 0.08466  |
| SSPG_RS09710 | 0       | 0.0003  | 0        |
| SSPG_RS09715 | NA      | NA      | NA       |
| SSPG_RS09720 | NA      | NA      | NA       |
| SSPG_RS09730 | NA      | NA      | NA       |
| SSPG_RS09745 | 0       | 0       | 0        |
| SSPG_RS09755 | 0.0784  | 0.2524  | 0.31049  |
| SSPG_RS09760 | 0.0039  | 0.0394  | 0.09872  |
| SSPG_RS09765 | 0       | 0.1224  | 0        |
| SSPG_RS09775 | 0.0007  | 0       | NA       |
| SSPG_RS09785 | NA      | NA      | NA       |
| SSPG_RS09795 | NA      | NA      | NA       |
| SSPG_RS09800 | NA      | NA      | NA       |
| SSPG_RS09810 | NA      | NA      | NA       |
| SSPG_RS09825 | NA      | NA      | NA       |
| SSPG_RS09835 | NA      | NA      | NA       |
| SSPG_RS09860 | NA      | NA      | NA       |
| SSPG_RS09865 | 0       | 0.02415 | 0        |
| SSPG_RS09900 | 0.0038  | 0.0195  | 0.19664  |
| SSPG_RS09910 | NA      | NA      | NA       |
| SSPG_RS09915 | NA      | NA      | NA       |
| SSPG_RS09920 | 0.00045 | 0.02715 | 0.00853  |
| SSPG_RS09930 | 0.0005  | 0       | NA       |
| SSPG_RS09935 | NA      | NA      | NA       |
| SSPG_RS09940 | NA      | NA      | NA       |
| SSPG_RS09945 | NA      | NA      | NA       |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS09980 | 0.0014                 | 0.0109                 | 0.13194                    |
| SSPG_RS09995 | NA                     | NA                     | NA                         |
| SSPG_RS10020 | 0.0019                 | 0.0066                 | 0.28341                    |
| SSPG_RS10035 | NA                     | NA                     | NA                         |
| SSPG_RS10045 | NA                     | NA                     | NA                         |
| SSPG_RS10055 | 0                      | 0                      | 0                          |
| SSPG_RS10060 | 0.0017                 | 0.0142                 | 0.11664                    |
| SSPG_RS10065 | 0                      | 0.0086                 | 0                          |
| SSPG_RS10070 | 0.0016                 | 0.0238                 | 0.06804                    |
| SSPG_RS10080 | NA                     | NA                     | NA                         |
| SSPG_RS10090 | NA                     | NA                     | NA                         |
| SSPG_RS10095 | NA                     | NA                     | NA                         |
| SSPG_RS10100 | NA                     | NA                     | NA                         |
| SSPG_RS10105 | NA                     | NA                     | NA                         |
| SSPG_RS10110 | NA                     | NA                     | NA                         |
| SSPG_RS10115 | NA                     | NA                     | NA                         |
| SSPG_RS10120 | NA                     | NA                     | NA                         |
| SSPG_RS10125 | 0                      | 0.0434                 | 0                          |
| SSPG_RS10135 | 0.0019                 | 0.0363                 | 0.0521                     |
| SSPG_RS10145 | NA                     | NA                     | NA                         |
| SSPG_RS10160 | NA                     | NA                     | NA                         |
| SSPG_RS10165 | 0                      | 0.0142                 | 0                          |
| SSPG_RS10175 | NA                     | NA                     | NA                         |
| SSPG_RS10180 | NA                     | NA                     | NA                         |
| SSPG_RS10185 | 0.0022                 | 0.012                  | 0.18564                    |
| SSPG_RS10200 | NA                     | NA                     | NA                         |
| SSPG_RS10210 | 0                      | 0.0241                 | 0                          |
| SSPG_RS10230 | 0                      | 0                      | 0                          |
| SSPG_RS10240 | 0                      | 0.0412                 | 0                          |
| SSPG_RS10250 | 0                      | 0.0493                 | 0                          |
| SSPG_RS10255 | NA                     | NA                     | NA                         |
| SSPG_RS10260 | NA                     | NA                     | NA                         |
| SSPG_RS10300 | 0                      | 0.0361                 | 0                          |
| SSPG_RS10305 | 0                      | 0.033                  | 0                          |
| SSPG_RS10310 | NA                     | NA                     | NA                         |
| SSPG_RS10315 | 0                      | 0.0262                 | 0                          |
| SSPG_RS10320 | 0.0181                 | 0.0639                 | 0.28325                    |
| SSPG_RS10325 | 0.000666666666666667   | 0.0412666666666667     | 0.0245366666666667         |
| SSPG_RS10330 | NA                     | NA                     | NA                         |
| SSPG_RS10335 | 0                      | 0                      | 0                          |
| SSPG_RS10340 | 0.0055                 | 0.04585                | 0.180795                   |
| SSPG_RS10345 | NA                     | NA                     | NA                         |
| SSPG_RS10350 | 0.0011                 | 0.0249                 | 0.04285                    |
| SSPG_RS10355 | 0.0024                 | 0.0539                 | 0.04437                    |
| SSPG_RS10365 | 0.0019                 | 0.0158                 | 0.12277                    |
| SSPG_RS10375 | 0.0018                 | 0                      | NA                         |
| SSPG_RS10395 | NA                     | NA                     | NA                         |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS10410 | 0.0012                 | 0                      | NA                         |
| SSPG_RS10420 | 0.002                  | 0.0376                 | 0.05307                    |
| SSPG_RS10425 | 0                      | 0.0151                 | 0                          |
| SSPG_RS10435 | 0.003                  | 0.0121                 | 0.24804                    |
| SSPG_RS10460 | NA                     | NA                     | NA                         |
| SSPG_RS10465 | NA                     | NA                     | NA                         |
| SSPG_RS10470 | NA                     | NA                     | NA                         |
| SSPG_RS10475 | NA                     | NA                     | NA                         |
| SSPG_RS10480 | 0                      | 0.0236                 | 0                          |
| SSPG_RS10485 | 0.0015                 | 0                      | NA                         |
| SSPG_RS10495 | NA                     | NA                     | NA                         |
| SSPG_RS10500 | 0                      | 0                      | 0                          |
| SSPG_RS10505 | NA                     | NA                     | NA                         |
| SSPG_RS10515 | NA                     | NA                     | NA                         |
| SSPG_RS10520 | 0.0019                 | 0.0215                 | 0.08836                    |
| SSPG_RS10530 | NA                     | NA                     | NA                         |
| SSPG_RS10535 | NA                     | NA                     | NA                         |
| SSPG_RS10550 | 0.0037                 | 0.0169                 | NA                         |
| SSPG_RS10555 | 0.0098                 | 0.035                  | 0.28076                    |
| SSPG_RS10560 | 0                      | 0                      | 0                          |
| SSPG_RS10565 | NA                     | NA                     | NA                         |
| SSPG_RS10570 | NA                     | NA                     | NA                         |
| SSPG_RS10585 | 0                      | 0.0764                 | 0                          |
| SSPG_RS10590 | 0                      | 0                      | 0                          |
| SSPG_RS10620 | 0                      | 0.0185                 | 0                          |
| SSPG_RS10625 | NA                     | NA                     | NA                         |
| SSPG_RS10630 | NA                     | NA                     | NA                         |
| SSPG_RS10640 | 0.0009                 | 0.0278                 | 0.03154                    |
| SSPG_RS10645 | NA                     | NA                     | NA                         |
| SSPG_RS10680 | NA                     | NA                     | NA                         |
| SSPG_RS10700 | NA                     | NA                     | NA                         |
| SSPG_RS10725 | 0.0009                 | 0.0123                 | 0.07021                    |
| SSPG_RS10730 | NA                     | NA                     | NA                         |
| SSPG_RS10735 | NA                     | NA                     | NA                         |
| SSPG_RS10745 | NA                     | NA                     | NA                         |
| SSPG_RS10755 | NA                     | NA                     | NA                         |
| SSPG_RS10760 | NA                     | NA                     | NA                         |
| SSPG_RS10765 | NA                     | NA                     | NA                         |
| SSPG_RS10780 | NA                     | NA                     | NA                         |
| SSPG_RS10785 | NA                     | NA                     | NA                         |
| SSPG_RS10800 | NA                     | NA                     | NA                         |
| SSPG_RS10805 | 0.002                  | 0.0111                 | 0.17697                    |
| SSPG_RS10810 | 0                      | 0.0597                 | 0                          |
| SSPG_RS10830 | 0                      | 0.0195                 | 0                          |
| SSPG_RS10835 | NA                     | NA                     | NA                         |
| SSPG_RS10840 | 0.0013                 | 0.0202                 | 0.06476                    |
| SSPG_RS10845 | 0.0016                 | 0.0396                 | 0.04079                    |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS10850 | 0.003                  | 0.0088                 | 0.34069                    |
| SSPG_RS10855 | 0.0019                 | 0.0328                 | 0.05716                    |
| SSPG_RS10870 | 0                      | 0.0309                 | 0                          |
| SSPG_RS10885 | NA                     | NA                     | NA                         |
| SSPG_RS10890 | NA                     | NA                     | NA                         |
| SSPG_RS10910 | NA                     | NA                     | NA                         |
| SSPG_RS10925 | 0.003                  | 0.0327                 | 0.09195                    |
| SSPG_RS10930 | 0                      | 0.052                  | 0                          |
| SSPG_RS10935 | 0.0437                 | 0.1317                 | 0.33155                    |
| SSPG_RS10945 | NA                     | NA                     | NA                         |
| SSPG_RS10955 | NA                     | NA                     | NA                         |
| SSPG_RS10960 | NA                     | NA                     | NA                         |
| SSPG_RS10965 | 0.0061                 | 0.00955                | NA                         |
| SSPG_RS10970 | NA                     | NA                     | NA                         |
| SSPG_RS10975 | 0.0009                 | 0.0071                 | 0.12888                    |
| SSPG_RS10980 | 0.0043                 | 0.0253                 | 0.16912                    |
| SSPG_RS10985 | 0                      | 0                      | 0                          |
| SSPG_RS10990 | NA                     | NA                     | NA                         |
| SSPG_RS10995 | 0                      | 0.0155                 | 0                          |
| SSPG_RS11000 | NA                     | NA                     | NA                         |
| SSPG_RS11005 | 0                      | 0                      | 0                          |
| SSPG_RS11010 | NA                     | NA                     | NA                         |
| SSPG_RS11025 | 0.0034                 | 0                      | NA                         |
| SSPG_RS11030 | 0.0089                 | 0.0073                 | 1.20836                    |
| SSPG_RS11035 | NA                     | NA                     | NA                         |
| SSPG_RS11040 | NA                     | NA                     | NA                         |
| SSPG_RS11045 | 0                      | 0                      | 0                          |
| SSPG_RS11050 | 0.008                  | 0.0098                 | 0.81301                    |
| SSPG_RS11055 | NA                     | NA                     | NA                         |
| SSPG_RS11060 | 0.0038                 | 0.0311                 | 0.12312                    |
| SSPG_RS11070 | 0.0016                 | 0.0121                 | 0.13341                    |
| SSPG_RS11075 | NA                     | NA                     | NA                         |
| SSPG_RS11080 | NA                     | NA                     | NA                         |
| SSPG_RS11085 | 0                      | 0.0202                 | 0                          |
| SSPG_RS11090 | NA                     | NA                     | NA                         |
| SSPG_RS11095 | NA                     | NA                     | NA                         |
| SSPG_RS11100 | NA                     | NA                     | NA                         |
| SSPG_RS11110 | 0                      | 0                      | 0                          |
| SSPG_RS11115 | NA                     | NA                     | NA                         |
| SSPG_RS11135 | NA                     | NA                     | NA                         |
| SSPG_RS11140 | NA                     | NA                     | NA                         |
| SSPG_RS11145 | NA                     | NA                     | NA                         |
| SSPG_RS11155 | 0                      | 0                      | 0                          |
| SSPG_RS11160 | NA                     | NA                     | NA                         |
| SSPG_RS11165 | 0.0016                 | 0.0162                 | 0.10007                    |
| SSPG_RS11170 | 0.0009                 | 0.0293                 | 0.03114                    |
| SSPG_RS11175 | 0                      | 0.0126                 | 0                          |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS11185 | NA                     | NA                     | NA                         |
| SSPG_RS11205 | NA                     | NA                     | NA                         |
| SSPG_RS11210 | 0.00235                | 0.09965                | 0.043765                   |
| SSPG_RS11220 | 0.0003                 | 0                      | NA                         |
| SSPG_RS11225 | 0.00175                | 0.01475                | 0.059035                   |
| SSPG_RS11230 | 0.0009                 | 0.0443                 | 0.01953                    |
| SSPG_RS11235 | NA                     | NA                     | NA                         |
| SSPG_RS11240 | NA                     | NA                     | NA                         |
| SSPG_RS11245 | NA                     | NA                     | NA                         |
| SSPG_RS11255 | 0                      | 0.022                  | 0                          |
| SSPG_RS11260 | 0.0012                 | 0.0251                 | 0.04745                    |
| SSPG_RS11265 | 0                      | 0.0254                 | 0                          |
| SSPG_RS11295 | NA                     | NA                     | NA                         |
| SSPG_RS11300 | NA                     | NA                     | NA                         |
| SSPG_RS11305 | NA                     | NA                     | NA                         |
| SSPG_RS11310 | NA                     | NA                     | NA                         |
| SSPG_RS11315 | NA                     | NA                     | NA                         |
| SSPG_RS11320 | NA                     | NA                     | NA                         |
| SSPG_RS11325 | NA                     | NA                     | NA                         |
| SSPG_RS11330 | NA                     | NA                     | NA                         |
| SSPG_RS11335 | NA                     | NA                     | NA                         |
| SSPG_RS11340 | NA                     | NA                     | NA                         |
| SSPG_RS11345 | 0.011                  | 0.0696                 | 0.15834                    |
| SSPG_RS11350 | 0.0079                 | 0.0364                 | 0.21819                    |
| SSPG_RS11355 | 0.001                  | 0.0081                 | 0.12873                    |
| SSPG_RS11360 | 0.0011                 | 0.0437                 | 0.02525                    |
| SSPG_RS11365 | NA                     | NA                     | NA                         |
| SSPG_RS11385 | 0.0014                 | 0.0329                 | 0.04161                    |
| SSPG_RS11395 | NA                     | NA                     | NA                         |
| SSPG_RS11410 | 0.0023                 | 0.0219                 | 0.10704                    |
| SSPG_RS11425 | NA                     | NA                     | NA                         |
| SSPG_RS11435 | NA                     | NA                     | NA                         |
| SSPG_RS11445 | 0.001                  | 0.0017                 | NA                         |
| SSPG_RS11450 | NA                     | NA                     | NA                         |
| SSPG_RS11455 | NA                     | NA                     | NA                         |
| SSPG_RS11465 | 0.0112                 | 0.0418                 | 0.26839                    |
| SSPG_RS11470 | 0.0008                 | 0.026                  | 0.0291                     |
| SSPG_RS11495 | NA                     | NA                     | NA                         |
| SSPG_RS11505 | 0.0053                 | 0.041                  | 0.12946                    |
| SSPG_RS11510 | 0                      | 0.0344                 | 0                          |
| SSPG_RS11520 | 0                      | 0.0155                 | 0                          |
| SSPG_RS11555 | 0                      | 0                      | 0                          |
| SSPG_RS11565 | 0                      | 0                      | 0                          |
| SSPG_RS11570 | 0.002                  | 0.0137                 | 0.14696                    |
| SSPG_RS11580 | NA                     | NA                     | NA                         |
| SSPG_RS11585 | NA                     | NA                     | NA                         |
| SSPG_RS11590 | NA                     | NA                     | NA                         |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS11595 | 0.003                  | 0                      | NA                         |
| SSPG_RS11600 | NA                     | NA                     | NA                         |
| SSPG_RS11610 | 0                      | 0.0242                 | 0                          |
| SSPG_RS11615 | 0                      | 0.0384                 | 0                          |
| SSPG_RS11630 | 0                      | 0.0202                 | 0                          |
| SSPG_RS11635 | NA                     | NA                     | NA                         |
| SSPG_RS11645 | 0.0018                 | 0.0288                 | 0.06128                    |
| SSPG_RS11650 | NA                     | NA                     | NA                         |
| SSPG_RS11655 | NA                     | NA                     | NA                         |
| SSPG_RS11660 | NA                     | NA                     | NA                         |
| SSPG_RS11665 | NA                     | NA                     | NA                         |
| SSPG_RS11690 | 0.0021                 | 0.0113                 | 0.18287                    |
| SSPG_RS11700 | 0                      | 0.0057                 | 0                          |
| SSPG_RS11705 | NA                     | NA                     | NA                         |
| SSPG_RS11710 | NA                     | NA                     | NA                         |
| SSPG_RS11715 | NA                     | NA                     | NA                         |
| SSPG_RS11720 | 0.0024                 | 0.0329                 | 0.07344                    |
| SSPG_RS11725 | 0.0032                 | 0.0129                 | 0.25114                    |
| SSPG_RS11730 | 0.0026                 | 0.0582                 | 0.04387                    |
| SSPG_RS11735 | NA                     | NA                     | NA                         |
| SSPG_RS11760 | 0.0012                 | 0.0138                 | 0.08934                    |
| SSPG_RS11770 | 0.00135                | 0                      | NA                         |
| SSPG_RS11775 | 0                      | 0.0382                 | 0                          |
| SSPG_RS11780 | NA                     | NA                     | NA                         |
| SSPG_RS11790 | NA                     | NA                     | NA                         |
| SSPG_RS11800 | NA                     | NA                     | NA                         |
| SSPG_RS11810 | 0.0026                 | 0.0099                 | 0.2598                     |
| SSPG_RS11820 | 0                      | 0                      | 0                          |
| SSPG_RS11835 | 0                      | 0.0298                 | 0                          |
| SSPG_RS11845 | NA                     | NA                     | NA                         |
| SSPG_RS11860 | NA                     | NA                     | NA                         |
| SSPG_RS11865 | 0.0008                 | 0.0585                 | 0.01417                    |
| SSPG_RS11875 | 0.0041                 | 0.0114                 | 0.36149                    |
| SSPG_RS11880 | NA                     | NA                     | NA                         |
| SSPG_RS11885 | 0.0014                 | 0.0975                 | 0.01438                    |
| SSPG_RS11890 | 0.0014                 | 0                      | NA                         |
| SSPG_RS11895 | 0.0027                 | 0.0281                 | 0.09498                    |
| SSPG_RS11910 | NA                     | NA                     | NA                         |
| SSPG_RS11915 | NA                     | NA                     | NA                         |
| SSPG_RS11920 | NA                     | NA                     | NA                         |
| SSPG_RS11925 | NA                     | NA                     | NA                         |
| SSPG_RS11930 | NA                     | NA                     | NA                         |
| SSPG_RS11935 | NA                     | NA                     | NA                         |
| SSPG_RS11940 | NA                     | NA                     | NA                         |
| SSPG_RS11945 | NA                     | NA                     | NA                         |
| SSPG_RS11955 | 0.0006333333333333333  | 0.004                  | NA                         |
| SSPG_RS11960 | 0                      | 0.0068                 | 0                          |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS11965 | 0.001533333333333333   | 0.012366666666666667   | 0.08166                    |
| SSPG_RS11980 | 0                      | 0                      | 0                          |
| SSPG_RS11985 | 0                      | 0.012                  | 0                          |
| SSPG_RS11990 | 0                      | 0.0358                 | 0                          |
| SSPG_RS11995 | NA                     | NA                     | NA                         |
| SSPG_RS12005 | NA                     | NA                     | NA                         |
| SSPG_RS12010 | NA                     | NA                     | NA                         |
| SSPG_RS12015 | 0.0014                 | 0.0135                 | 0.10342                    |
| SSPG_RS12025 | 0.0105                 | 0                      | NA                         |
| SSPG_RS12030 | NA                     | NA                     | NA                         |
| SSPG_RS12040 | NA                     | NA                     | NA                         |
| SSPG_RS12045 | NA                     | NA                     | NA                         |
| SSPG_RS12070 | NA                     | NA                     | NA                         |
| SSPG_RS12075 | NA                     | NA                     | NA                         |
| SSPG_RS12080 | NA                     | NA                     | NA                         |
| SSPG_RS12085 | NA                     | NA                     | NA                         |
| SSPG_RS12100 | 0.0008                 | 0.00465                | 0.084945                   |
| SSPG_RS12110 | NA                     | NA                     | NA                         |
| SSPG_RS12130 | NA                     | NA                     | NA                         |
| SSPG_RS12140 | NA                     | NA                     | NA                         |
| SSPG_RS12145 | 0                      | 0                      | 0                          |
| SSPG_RS12150 | NA                     | NA                     | NA                         |
| SSPG_RS12155 | NA                     | NA                     | NA                         |
| SSPG_RS12175 | NA                     | NA                     | NA                         |
| SSPG_RS12185 | NA                     | NA                     | NA                         |
| SSPG_RS12195 | NA                     | NA                     | NA                         |
| SSPG_RS12210 | 0                      | 0.0385                 | 0                          |
| SSPG_RS12215 | 0                      | 0.0173                 | 0                          |
| SSPG_RS12220 | NA                     | NA                     | NA                         |
| SSPG_RS12225 | NA                     | NA                     | NA                         |
| SSPG_RS12230 | NA                     | NA                     | NA                         |
| SSPG_RS12240 | NA                     | NA                     | NA                         |
| SSPG_RS12245 | NA                     | NA                     | NA                         |
| SSPG_RS12250 | 0.002                  | 0.0611                 | 0.03199                    |
| SSPG_RS12260 | NA                     | NA                     | NA                         |
| SSPG_RS12265 | NA                     | NA                     | NA                         |
| SSPG_RS12280 | NA                     | NA                     | NA                         |
| SSPG_RS12320 | 0.0009                 | 0.0193                 | 0.04791                    |
| SSPG_RS12345 | NA                     | NA                     | NA                         |
| SSPG_RS12355 | NA                     | NA                     | NA                         |
| SSPG_RS12370 | NA                     | NA                     | NA                         |
| SSPG_RS12375 | NA                     | NA                     | NA                         |
| SSPG_RS12380 | NA                     | NA                     | NA                         |
| SSPG_RS12395 | NA                     | NA                     | NA                         |
| SSPG_RS12400 | NA                     | NA                     | NA                         |
| SSPG_RS12410 | NA                     | NA                     | NA                         |
| SSPG_RS12415 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$    | $\omega$ |
|--------------|--------|---------|----------|
| SSPG_RS12425 | NA     | NA      | NA       |
| SSPG_RS12435 | NA     | NA      | NA       |
| SSPG_RS12440 | NA     | NA      | NA       |
| SSPG_RS12445 | NA     | NA      | NA       |
| SSPG_RS12450 | NA     | NA      | NA       |
| SSPG_RS12455 | NA     | NA      | NA       |
| SSPG_RS12460 | NA     | NA      | NA       |
| SSPG_RS12480 | NA     | NA      | NA       |
| SSPG_RS12485 | NA     | NA      | NA       |
| SSPG_RS12525 | 0.0019 | 0.0119  | 0.161    |
| SSPG_RS12535 | NA     | NA      | NA       |
| SSPG_RS12540 | NA     | NA      | NA       |
| SSPG_RS12545 | 0      | 0.0119  | 0        |
| SSPG_RS12550 | NA     | NA      | NA       |
| SSPG_RS12555 | 0      | 0.0357  | 0        |
| SSPG_RS12570 | 0      | 0       | 0        |
| SSPG_RS12580 | 0.0004 | 0.0379  | 0.01168  |
| SSPG_RS12600 | 0.0017 | 0.0428  | 0.04032  |
| SSPG_RS12610 | 0      | 0       | 0        |
| SSPG_RS12615 | NA     | NA      | NA       |
| SSPG_RS12620 | 0.0011 | 0.0311  | 0.0341   |
| SSPG_RS12630 | NA     | NA      | NA       |
| SSPG_RS12640 | 0.0009 | 0.0154  | 0.05575  |
| SSPG_RS12645 | NA     | NA      | NA       |
| SSPG_RS12650 | NA     | NA      | NA       |
| SSPG_RS12660 | 0.0046 | 0       | NA       |
| SSPG_RS12665 | NA     | NA      | NA       |
| SSPG_RS12670 | NA     | NA      | NA       |
| SSPG_RS12680 | NA     | NA      | NA       |
| SSPG_RS12685 | NA     | NA      | NA       |
| SSPG_RS12690 | 0.0022 | 0.0337  | 0.06552  |
| SSPG_RS12700 | NA     | NA      | NA       |
| SSPG_RS12710 | 0.0009 | 0.0323  | 0.02807  |
| SSPG_RS12720 | 0.0016 | 0.0281  | 0.05754  |
| SSPG_RS12730 | 0      | 0.0354  | 0        |
| SSPG_RS12735 | 0.0011 | 0.02085 | 0.071875 |
| SSPG_RS12740 | 0.0061 | 0.034   | 0.18087  |
| SSPG_RS12745 | 0.0017 | 0.0004  | 4.46385  |
| SSPG_RS12755 | 0.0021 | 0.0255  | 0.08154  |
| SSPG_RS12760 | 0.0009 | 0.0306  | 0.02813  |
| SSPG_RS12765 | 0.0021 | 0.0361  | 0.0587   |
| SSPG_RS12780 | 0      | 0.0039  | 0        |
| SSPG_RS12790 | NA     | NA      | NA       |
| SSPG_RS12820 | 0.0011 | 0.0458  | 0.02464  |
| SSPG_RS12825 | NA     | NA      | NA       |
| SSPG_RS12830 | NA     | NA      | NA       |
| SSPG_RS12855 | NA     | NA      | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| SSPG_RS12865 | NA      | NA      | NA       |
| SSPG_RS12900 | NA      | NA      | NA       |
| SSPG_RS12910 | 0       | 0.0248  | 0        |
| SSPG_RS12915 | 0       | 0.0255  | 0        |
| SSPG_RS12925 | 0.0054  | 0.0135  | 0.39767  |
| SSPG_RS12930 | 0.003   | 0.0396  | 0.07699  |
| SSPG_RS12935 | 0.0009  | 0.0416  | 0.025775 |
| SSPG_RS12940 | 0       | 0.0085  | 0        |
| SSPG_RS12950 | 0       | 0.0183  | 0        |
| SSPG_RS12955 | NA      | NA      | NA       |
| SSPG_RS12960 | 0       | 0       | 0        |
| SSPG_RS12965 | NA      | NA      | NA       |
| SSPG_RS12970 | NA      | NA      | NA       |
| SSPG_RS12975 | NA      | NA      | NA       |
| SSPG_RS12980 | NA      | NA      | NA       |
| SSPG_RS12985 | NA      | NA      | NA       |
| SSPG_RS12990 | 0.0036  | 0       | NA       |
| SSPG_RS13015 | 0       | 0.0078  | 0        |
| SSPG_RS13040 | NA      | NA      | NA       |
| SSPG_RS13045 | NA      | NA      | NA       |
| SSPG_RS13055 | NA      | NA      | NA       |
| SSPG_RS13065 | NA      | NA      | NA       |
| SSPG_RS13095 | NA      | NA      | NA       |
| SSPG_RS13100 | 0       | 0.0128  | 0        |
| SSPG_RS13110 | NA      | NA      | NA       |
| SSPG_RS13115 | 0.00285 | 0.01525 | 0.093725 |
| SSPG_RS13130 | NA      | NA      | NA       |
| SSPG_RS13135 | NA      | NA      | NA       |
| SSPG_RS13140 | 0.0024  | 0.016   | 0.14886  |
| SSPG_RS13145 | NA      | NA      | NA       |
| SSPG_RS13160 | NA      | NA      | NA       |
| SSPG_RS13180 | 0       | 0.0051  | 0        |
| SSPG_RS13185 | 0.0008  | 0.0105  | 0.07164  |
| SSPG_RS13195 | 0.0011  | 0.0299  | 0.03825  |
| SSPG_RS13200 | 0.0034  | 0       | NA       |
| SSPG_RS13205 | NA      | NA      | NA       |
| SSPG_RS13210 | NA      | NA      | NA       |
| SSPG_RS13215 | NA      | NA      | NA       |
| SSPG_RS13220 | NA      | NA      | NA       |
| SSPG_RS13225 | NA      | NA      | NA       |
| SSPG_RS13230 | 0.0012  | 0.015   | 0.07688  |
| SSPG_RS13255 | 0.0049  | 0.0328  | 0.14917  |
| SSPG_RS13270 | NA      | NA      | NA       |
| SSPG_RS13285 | NA      | NA      | NA       |
| SSPG_RS13305 | NA      | NA      | NA       |
| SSPG_RS13310 | 0       | 0.04515 | 0        |
| SSPG_RS13325 | NA      | NA      | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$    | $\omega$ |
|--------------|--------|---------|----------|
| SSPG_RS13330 | NA     | NA      | NA       |
| SSPG_RS13335 | NA     | NA      | NA       |
| SSPG_RS13340 | NA     | NA      | NA       |
| SSPG_RS13350 | NA     | NA      | NA       |
| SSPG_RS13360 | NA     | NA      | NA       |
| SSPG_RS13365 | NA     | NA      | NA       |
| SSPG_RS13370 | NA     | NA      | NA       |
| SSPG_RS13375 | NA     | NA      | NA       |
| SSPG_RS13385 | 0.0007 | 0.0256  | 0.02562  |
| SSPG_RS13390 | 0.0011 | 0.0332  | 0.03459  |
| SSPG_RS13395 | 0.0024 | 0.0268  | 0.0904   |
| SSPG_RS13405 | 0      | 0.06555 | 0        |
| SSPG_RS13415 | 0.0027 | 0.0096  | 0.2875   |
| SSPG_RS13425 | 0.0009 | 0.0878  | 0.00975  |
| SSPG_RS13430 | 0.0053 | 0.11945 | 0.022225 |
| SSPG_RS13435 | 0.0042 | 0.0516  | 0.08043  |
| SSPG_RS13440 | NA     | NA      | NA       |
| SSPG_RS13455 | 0      | 0       | 0        |
| SSPG_RS13460 | 0      | 0.2355  | 0        |
| SSPG_RS13465 | NA     | NA      | NA       |
| SSPG_RS13480 | 0      | 0       | 0        |
| SSPG_RS13485 | NA     | NA      | NA       |
| SSPG_RS13490 | 0.0009 | 0.0145  | 0.05912  |
| SSPG_RS13495 | 0.0011 | 0.0116  | 0.09476  |
| SSPG_RS13500 | 0.0006 | 0.01535 | 0.03817  |
| SSPG_RS13505 | NA     | NA      | NA       |
| SSPG_RS13510 | NA     | NA      | NA       |
| SSPG_RS13515 | NA     | NA      | NA       |
| SSPG_RS13520 | NA     | NA      | NA       |
| SSPG_RS13530 | 0.0008 | 0.0398  | 0.02023  |
| SSPG_RS13535 | NA     | NA      | NA       |
| SSPG_RS13565 | 0.0008 | 0.0073  | 0.1135   |
| SSPG_RS13570 | NA     | NA      | NA       |
| SSPG_RS13575 | 0      | 0       | 0        |
| SSPG_RS13580 | 0      | 0       | 0        |
| SSPG_RS13585 | NA     | NA      | NA       |
| SSPG_RS13595 | 0      | 0       | 0        |
| SSPG_RS13600 | 0.001  | 0.018   | 0.05827  |
| SSPG_RS13605 | NA     | NA      | NA       |
| SSPG_RS13615 | NA     | NA      | NA       |
| SSPG_RS13620 | NA     | NA      | NA       |
| SSPG_RS13645 | 0      | 0.0101  | 0        |
| SSPG_RS13650 | 0.0017 | 0.0098  | 0.17238  |
| SSPG_RS13655 | 0      | 0.0234  | 0        |
| SSPG_RS13660 | NA     | NA      | NA       |
| SSPG_RS13665 | 0      | 0.0117  | 0        |
| SSPG_RS13670 | 0      | 0       | 0        |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS13685 | NA                     | NA                     | NA                         |
| SSPG_RS13690 | NA                     | NA                     | NA                         |
| SSPG_RS13710 | 0.0045                 | 0.1951                 | 0.02307                    |
| SSPG_RS13715 | NA                     | NA                     | NA                         |
| SSPG_RS13730 | NA                     | NA                     | NA                         |
| SSPG_RS13735 | 0.0108                 | 0.1907                 | 0.05685                    |
| SSPG_RS13740 | NA                     | NA                     | NA                         |
| SSPG_RS13745 | NA                     | NA                     | NA                         |
| SSPG_RS13750 | 0                      | 0                      | 0                          |
| SSPG_RS13760 | 0.0024                 | 0.0807                 | 0.03                       |
| SSPG_RS13765 | NA                     | NA                     | NA                         |
| SSPG_RS13770 | NA                     | NA                     | NA                         |
| SSPG_RS13775 | NA                     | NA                     | NA                         |
| SSPG_RS13790 | NA                     | NA                     | NA                         |
| SSPG_RS13855 | 0                      | 0.004                  | 0                          |
| SSPG_RS13860 | NA                     | NA                     | NA                         |
| SSPG_RS13865 | NA                     | NA                     | NA                         |
| SSPG_RS13870 | 0.0026                 | 0                      | NA                         |
| SSPG_RS13880 | 0.003                  | 0.0076                 | 0.39818                    |
| SSPG_RS13885 | 0.0024                 | 0.0198                 | 0.12281                    |
| SSPG_RS13905 | 0                      | 0.0069                 | 0                          |
| SSPG_RS13910 | 0                      | 0.0242                 | 0                          |
| SSPG_RS13915 | 0                      | 0.01755                | 0                          |
| SSPG_RS13920 | NA                     | NA                     | NA                         |
| SSPG_RS13925 | NA                     | NA                     | NA                         |
| SSPG_RS13930 | NA                     | NA                     | NA                         |
| SSPG_RS13945 | 0.0008                 | 0.0182                 | 0.04626                    |
| SSPG_RS13950 | NA                     | NA                     | NA                         |
| SSPG_RS13955 | NA                     | NA                     | NA                         |
| SSPG_RS13960 | NA                     | NA                     | NA                         |
| SSPG_RS13970 | 0                      | 0.1456                 | 0                          |
| SSPG_RS13975 | NA                     | NA                     | NA                         |
| SSPG_RS13980 | NA                     | NA                     | NA                         |
| SSPG_RS13985 | NA                     | NA                     | NA                         |
| SSPG_RS13995 | 0                      | 0.0098                 | 0                          |
| SSPG_RS14000 | NA                     | NA                     | NA                         |
| SSPG_RS14005 | NA                     | NA                     | NA                         |
| SSPG_RS14020 | NA                     | NA                     | NA                         |
| SSPG_RS14030 | NA                     | NA                     | NA                         |
| SSPG_RS14035 | 0.0008                 | 0                      | NA                         |
| SSPG_RS14045 | 0                      | 0                      | 0                          |
| SSPG_RS14050 | NA                     | NA                     | NA                         |
| SSPG_RS14080 | 0                      | 0                      | 0                          |
| SSPG_RS14100 | 0.0008                 | 0.0138                 | 0.06093                    |
| SSPG_RS14105 | NA                     | NA                     | NA                         |
| SSPG_RS14115 | NA                     | NA                     | NA                         |
| SSPG_RS14120 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$   | $\omega$ |
|--------------|---------|--------|----------|
| SSPG_RS14125 | 0       | 0.0637 | 0        |
| SSPG_RS14130 | 0       | 0.0239 | 0        |
| SSPG_RS14140 | 0.00055 | 0      | NA       |
| SSPG_RS14145 | NA      | NA     | NA       |
| SSPG_RS14150 | NA      | NA     | NA       |
| SSPG_RS14160 | NA      | NA     | NA       |
| SSPG_RS14165 | NA      | NA     | NA       |
| SSPG_RS14185 | NA      | NA     | NA       |
| SSPG_RS14195 | NA      | NA     | NA       |
| SSPG_RS14200 | NA      | NA     | NA       |
| SSPG_RS14210 | NA      | NA     | NA       |
| SSPG_RS14215 | NA      | NA     | NA       |
| SSPG_RS14220 | NA      | NA     | NA       |
| SSPG_RS14225 | NA      | NA     | NA       |
| SSPG_RS14230 | NA      | NA     | NA       |
| SSPG_RS14245 | NA      | NA     | NA       |
| SSPG_RS14250 | NA      | NA     | NA       |
| SSPG_RS14265 | NA      | NA     | NA       |
| SSPG_RS14270 | NA      | NA     | NA       |
| SSPG_RS14280 | NA      | NA     | NA       |
| SSPG_RS14290 | NA      | NA     | NA       |
| SSPG_RS14325 | 0.001   | 0.0174 | 0.05901  |
| SSPG_RS14330 | NA      | NA     | NA       |
| SSPG_RS14335 | NA      | NA     | NA       |
| SSPG_RS14340 | 0       | 0      | 0        |
| SSPG_RS14375 | 0.0023  | 0.0214 | 0.10692  |
| SSPG_RS14385 | 0       | 0.0487 | 0        |
| SSPG_RS14390 | 0       | 0      | 0        |
| SSPG_RS14400 | 0       | 0.0363 | 0        |
| SSPG_RS14405 | 0       | 0.039  | 0        |
| SSPG_RS14430 | 0.003   | 0.051  | 0.05831  |
| SSPG_RS14435 | 0.0162  | 0.0606 | 0.26741  |
| SSPG_RS14455 | NA      | NA     | NA       |
| SSPG_RS14460 | NA      | NA     | NA       |
| SSPG_RS14465 | NA      | NA     | NA       |
| SSPG_RS14500 | NA      | NA     | NA       |
| SSPG_RS14510 | NA      | NA     | NA       |
| SSPG_RS14525 | NA      | NA     | NA       |
| SSPG_RS14535 | 0.0019  | 0.0375 | 0.04973  |
| SSPG_RS14550 | NA      | NA     | NA       |
| SSPG_RS14555 | NA      | NA     | NA       |
| SSPG_RS14570 | NA      | NA     | NA       |
| SSPG_RS14575 | NA      | NA     | NA       |
| SSPG_RS14580 | NA      | NA     | NA       |
| SSPG_RS14595 | 0.0016  | 0.0627 | 0.02497  |
| SSPG_RS14605 | 0.001   | 0      | NA       |
| SSPG_RS14610 | 0       | 0.0068 | 0        |

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Table S3 – continued from previous page

| Gene         | $dN$                  | $dS$                | $\omega$            |
|--------------|-----------------------|---------------------|---------------------|
| SSPG_RS14625 | 0.0018                | 0.0677              | 0.02592             |
| SSPG_RS14665 | NA                    | NA                  | NA                  |
| SSPG_RS14670 | NA                    | NA                  | NA                  |
| SSPG_RS14675 | NA                    | NA                  | NA                  |
| SSPG_RS14685 | NA                    | NA                  | NA                  |
| SSPG_RS14690 | NA                    | NA                  | NA                  |
| SSPG_RS14705 | NA                    | NA                  | NA                  |
| SSPG_RS14710 | NA                    | NA                  | NA                  |
| SSPG_RS14725 | NA                    | NA                  | NA                  |
| SSPG_RS14775 | 0.0045                | 0                   | NA                  |
| SSPG_RS14785 | 0                     | 0.0226              | 0                   |
| SSPG_RS14795 | 0.0008                | 0.0479              | 0.01738             |
| SSPG_RS14810 | 0.0012                | 0.0077              | 0.15491             |
| SSPG_RS14825 | NA                    | NA                  | NA                  |
| SSPG_RS14840 | NA                    | NA                  | NA                  |
| SSPG_RS14860 | 0                     | 0.0421              | 0                   |
| SSPG_RS14875 | 0.0009666666666666667 | 0.02996666666666667 | 0.02755333333333333 |
| SSPG_RS14885 | 0.0015                | 0.0244              | 0.06147             |
| SSPG_RS14895 | 0                     | 0.0263              | 0                   |
| SSPG_RS14900 | 0                     | 0                   | 0                   |
| SSPG_RS14920 | NA                    | NA                  | NA                  |
| SSPG_RS14945 | NA                    | NA                  | NA                  |
| SSPG_RS14960 | NA                    | NA                  | NA                  |
| SSPG_RS14965 | 0.0035                | 0                   | NA                  |
| SSPG_RS14970 | NA                    | NA                  | NA                  |
| SSPG_RS14980 | NA                    | NA                  | NA                  |
| SSPG_RS14985 | NA                    | NA                  | NA                  |
| SSPG_RS14990 | 0                     | 0.0904              | 0                   |
| SSPG_RS14995 | NA                    | NA                  | NA                  |
| SSPG_RS15010 | NA                    | NA                  | NA                  |
| SSPG_RS15015 | NA                    | NA                  | NA                  |
| SSPG_RS15020 | 0                     | 0.0307              | 0                   |
| SSPG_RS15030 | NA                    | NA                  | NA                  |
| SSPG_RS15045 | NA                    | NA                  | NA                  |
| SSPG_RS15055 | NA                    | NA                  | NA                  |
| SSPG_RS15060 | 0                     | 0.0147              | 0                   |
| SSPG_RS15065 | NA                    | NA                  | NA                  |
| SSPG_RS15070 | 0                     | 0                   | 0                   |
| SSPG_RS15075 | NA                    | NA                  | NA                  |
| SSPG_RS15080 | NA                    | NA                  | NA                  |
| SSPG_RS15100 | 0                     | 0.0261              | 0                   |
| SSPG_RS15115 | NA                    | NA                  | NA                  |
| SSPG_RS15130 | NA                    | NA                  | NA                  |
| SSPG_RS15135 | NA                    | NA                  | NA                  |
| SSPG_RS15140 | NA                    | NA                  | NA                  |
| SSPG_RS15145 | NA                    | NA                  | NA                  |
| SSPG_RS15150 | NA                    | NA                  | NA                  |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$   | $\omega$ |
|--------------|--------|--------|----------|
| SSPG_RS15155 | NA     | NA     | NA       |
| SSPG_RS15160 | NA     | NA     | NA       |
| SSPG_RS15165 | NA     | NA     | NA       |
| SSPG_RS15175 | NA     | NA     | NA       |
| SSPG_RS15210 | NA     | NA     | NA       |
| SSPG_RS15215 | 0.0036 | 0      | NA       |
| SSPG_RS15225 | NA     | NA     | NA       |
| SSPG_RS15240 | NA     | NA     | NA       |
| SSPG_RS15250 | NA     | NA     | NA       |
| SSPG_RS15255 | NA     | NA     | NA       |
| SSPG_RS15295 | NA     | NA     | NA       |
| SSPG_RS15300 | 0.001  | 0      | NA       |
| SSPG_RS15305 | NA     | NA     | NA       |
| SSPG_RS15310 | 0      | 0.0119 | 0        |
| SSPG_RS15315 | 0      | 0      | 0        |
| SSPG_RS15320 | 0      | 0.0105 | 0        |
| SSPG_RS15325 | 0      | 0      | 0        |
| SSPG_RS15340 | NA     | NA     | NA       |
| SSPG_RS15345 | 0      | 0.0514 | 0        |
| SSPG_RS15350 | 0      | 0.02   | 0        |
| SSPG_RS15355 | 0      | 0.0139 | 0        |
| SSPG_RS15360 | NA     | NA     | NA       |
| SSPG_RS15365 | NA     | NA     | NA       |
| SSPG_RS15370 | NA     | NA     | NA       |
| SSPG_RS15375 | NA     | NA     | NA       |
| SSPG_RS15380 | NA     | NA     | NA       |
| SSPG_RS15385 | NA     | NA     | NA       |
| SSPG_RS15390 | 0      | 0.058  | 0        |
| SSPG_RS15395 | NA     | NA     | NA       |
| SSPG_RS15400 | NA     | NA     | NA       |
| SSPG_RS15405 | NA     | NA     | NA       |
| SSPG_RS15415 | NA     | NA     | NA       |
| SSPG_RS15425 | NA     | NA     | NA       |
| SSPG_RS15430 | NA     | NA     | NA       |
| SSPG_RS15435 | NA     | NA     | NA       |
| SSPG_RS15440 | NA     | NA     | NA       |
| SSPG_RS15450 | 0      | 0      | 0        |
| SSPG_RS15455 | 0      | 0.0003 | 0        |
| SSPG_RS15465 | 0.0007 | 0.0264 | 0.02728  |
| SSPG_RS15475 | 0.0021 | 0.0252 | 0.08493  |
| SSPG_RS15480 | 0      | 0      | 0        |
| SSPG_RS15485 | 0      | 0.0069 | 0        |
| SSPG_RS15490 | 0.0019 | 0.0254 | 0.07311  |
| SSPG_RS15495 | NA     | NA     | NA       |
| SSPG_RS15500 | NA     | NA     | NA       |
| SSPG_RS15505 | NA     | NA     | NA       |
| SSPG_RS15510 | NA     | NA     | NA       |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS15515 | NA                     | NA                     | NA                         |
| SSPG_RS15520 | 0.004                  | 0.0441                 | 0.09057                    |
| SSPG_RS15530 | 0.0005                 | 0.017                  | 0.03029                    |
| SSPG_RS15540 | NA                     | NA                     | NA                         |
| SSPG_RS15545 | 0                      | 0.0243                 | 0                          |
| SSPG_RS15555 | 0.0024                 | 0.0183                 | 0.12942                    |
| SSPG_RS15565 | NA                     | NA                     | NA                         |
| SSPG_RS15585 | NA                     | NA                     | NA                         |
| SSPG_RS15590 | NA                     | NA                     | NA                         |
| SSPG_RS15600 | NA                     | NA                     | NA                         |
| SSPG_RS15620 | 0.0058                 | 0.0234                 | 0.24553                    |
| SSPG_RS15625 | NA                     | NA                     | NA                         |
| SSPG_RS15630 | NA                     | NA                     | NA                         |
| SSPG_RS15640 | 0                      | 0.0271                 | 0                          |
| SSPG_RS15660 | 0                      | 0.0626                 | 0                          |
| SSPG_RS15670 | 0.0024                 | 0.039                  | 0.06283                    |
| SSPG_RS15675 | NA                     | NA                     | NA                         |
| SSPG_RS15700 | 0                      | 0.0394                 | 0                          |
| SSPG_RS15720 | NA                     | NA                     | NA                         |
| SSPG_RS15725 | NA                     | NA                     | NA                         |
| SSPG_RS15735 | NA                     | NA                     | NA                         |
| SSPG_RS15745 | NA                     | NA                     | NA                         |
| SSPG_RS15750 | NA                     | NA                     | NA                         |
| SSPG_RS15770 | 0                      | 0.0652                 | 0                          |
| SSPG_RS16235 | NA                     | NA                     | NA                         |
| SSPG_RS16240 | NA                     | NA                     | NA                         |
| SSPG_RS16305 | 0                      | 0                      | 0                          |
| SSPG_RS16315 | 0.0027                 | 0                      | NA                         |
| SSPG_RS16320 | NA                     | NA                     | NA                         |
| SSPG_RS16325 | NA                     | NA                     | NA                         |
| SSPG_RS16330 | 0                      | 0.02                   | 0                          |
| SSPG_RS16335 | 0                      | 0                      | 0                          |
| SSPG_RS16340 | NA                     | NA                     | NA                         |
| SSPG_RS16345 | 0.0022                 | 0.0112                 | 0.1974                     |
| SSPG_RS16385 | NA                     | NA                     | NA                         |
| SSPG_RS16390 | 0                      | 0                      | 0                          |
| SSPG_RS16395 | 0.0025                 | 0.01475                | NA                         |
| SSPG_RS16400 | 0                      | 0                      | 0                          |
| SSPG_RS16420 | NA                     | NA                     | NA                         |
| SSPG_RS16425 | NA                     | NA                     | NA                         |
| SSPG_RS16430 | NA                     | NA                     | NA                         |
| SSPG_RS16435 | NA                     | NA                     | NA                         |
| SSPG_RS16440 | 0.006                  | 0                      | NA                         |
| SSPG_RS16445 | 0                      | 0.0083                 | 0                          |
| SSPG_RS16450 | NA                     | NA                     | NA                         |
| SSPG_RS16460 | 0.00405                | 0.04165                | 0.382645                   |
| SSPG_RS16470 | NA                     | NA                     | NA                         |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS16480 | 0.0024                 | 0.0275                 | 0.0886                     |
| SSPG_RS16485 | 0.0051                 | 0.0236                 | 0.21502                    |
| SSPG_RS16490 | NA                     | NA                     | NA                         |
| SSPG_RS16495 | NA                     | NA                     | NA                         |
| SSPG_RS16510 | 0                      | 0.0791                 | 0                          |
| SSPG_RS16515 | NA                     | NA                     | NA                         |
| SSPG_RS16520 | 0.0026                 | 0                      | NA                         |
| SSPG_RS16525 | NA                     | NA                     | NA                         |
| SSPG_RS16530 | 0                      | 0.0493                 | 0                          |
| SSPG_RS16535 | NA                     | NA                     | NA                         |
| SSPG_RS16550 | NA                     | NA                     | NA                         |
| SSPG_RS16555 | NA                     | NA                     | NA                         |
| SSPG_RS16560 | NA                     | NA                     | NA                         |
| SSPG_RS16565 | NA                     | NA                     | NA                         |
| SSPG_RS16570 | 0.0014                 | 0.0118                 | 0.22843                    |
| SSPG_RS16590 | NA                     | NA                     | NA                         |
| SSPG_RS16605 | NA                     | NA                     | NA                         |
| SSPG_RS16610 | NA                     | NA                     | NA                         |
| SSPG_RS16615 | NA                     | NA                     | NA                         |
| SSPG_RS16620 | NA                     | NA                     | NA                         |
| SSPG_RS16645 | 0                      | 0                      | 0                          |
| SSPG_RS16650 | NA                     | NA                     | NA                         |
| SSPG_RS16655 | 0.0021                 | 0                      | NA                         |
| SSPG_RS16660 | NA                     | NA                     | NA                         |
| SSPG_RS16665 | NA                     | NA                     | NA                         |
| SSPG_RS16670 | NA                     | NA                     | NA                         |
| SSPG_RS16675 | NA                     | NA                     | NA                         |
| SSPG_RS16685 | NA                     | NA                     | NA                         |
| SSPG_RS16700 | 0.0016                 | 0.0312                 | 0.05001                    |
| SSPG_RS16710 | NA                     | NA                     | NA                         |
| SSPG_RS16730 | NA                     | NA                     | NA                         |
| SSPG_RS16735 | 0                      | 0                      | 0                          |
| SSPG_RS16755 | 0.0008                 | 0.016                  | 0.05174                    |
| SSPG_RS16760 | 0                      | 0.005                  | 0                          |
| SSPG_RS16770 | NA                     | NA                     | NA                         |
| SSPG_RS16775 | 0                      | 0.0071                 | 0                          |
| SSPG_RS16780 | NA                     | NA                     | NA                         |
| SSPG_RS16785 | 0.0105                 | 0.08895                | 0.09333                    |
| SSPG_RS16795 | NA                     | NA                     | NA                         |
| SSPG_RS16810 | NA                     | NA                     | NA                         |
| SSPG_RS16820 | NA                     | NA                     | NA                         |
| SSPG_RS16825 | 0.0004                 | 0.0339                 | 0.01304                    |
| SSPG_RS16840 | 0                      | 0.0181                 | 0                          |
| SSPG_RS16850 | 0.0016                 | 0.0291                 | 0.05387                    |
| SSPG_RS16870 | NA                     | NA                     | NA                         |
| SSPG_RS16885 | 0.0048                 | 0                      | NA                         |
| SSPG_RS16890 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$               | $dS$               | $\omega$ |
|--------------|--------------------|--------------------|----------|
| SSPG_RS16895 | NA                 | NA                 | NA       |
| SSPG_RS16910 | NA                 | NA                 | NA       |
| SSPG_RS16915 | NA                 | NA                 | NA       |
| SSPG_RS16925 | NA                 | NA                 | NA       |
| SSPG_RS16940 | NA                 | NA                 | NA       |
| SSPG_RS16950 | 0.001              | 0                  | NA       |
| SSPG_RS16965 | NA                 | NA                 | NA       |
| SSPG_RS16975 | 0.0011             | 0.0168             | 0.06425  |
| SSPG_RS16990 | 0.0018             | 0.0048             | 0.37509  |
| SSPG_RS17000 | NA                 | NA                 | NA       |
| SSPG_RS17005 | NA                 | NA                 | NA       |
| SSPG_RS17010 | 0.0012             | 0.021              | 0.05845  |
| SSPG_RS17025 | 0                  | 0.0504             | 0        |
| SSPG_RS17030 | 0                  | 0.00565            | 0        |
| SSPG_RS17035 | NA                 | NA                 | NA       |
| SSPG_RS17060 | NA                 | NA                 | NA       |
| SSPG_RS17070 | NA                 | NA                 | NA       |
| SSPG_RS17075 | NA                 | NA                 | NA       |
| SSPG_RS17080 | 0                  | 0                  | 0        |
| SSPG_RS17085 | 0                  | 0.0406             | 0        |
| SSPG_RS17095 | NA                 | NA                 | NA       |
| SSPG_RS17100 | NA                 | NA                 | NA       |
| SSPG_RS17105 | NA                 | NA                 | NA       |
| SSPG_RS17110 | 0.0007             | 0.0187             | 0.021735 |
| SSPG_RS17130 | NA                 | NA                 | NA       |
| SSPG_RS17135 | 0                  | 0                  | 0        |
| SSPG_RS17145 | NA                 | NA                 | NA       |
| SSPG_RS17150 | NA                 | NA                 | NA       |
| SSPG_RS17160 | 0.0014             | 0                  | NA       |
| SSPG_RS17165 | 0.0042             | 0.0247             | 0.17049  |
| SSPG_RS17170 | 0.006              | 0.0102             | 0.58779  |
| SSPG_RS17620 | 0.0224             | 0.2384             | 0.09408  |
| SSPG_RS17625 | NA                 | NA                 | NA       |
| SSPG_RS17630 | 0.0158             | 0.2222             | 0.07097  |
| SSPG_RS17635 | 0.0219             | 0.2105             | 0.105385 |
| SSPG_RS17650 | 0.0108             | 0.21145            | 0.050555 |
| SSPG_RS17655 | 0.0284             | 0.188              | 0.15086  |
| SSPG_RS17670 | 0.024              | 0.0628             | 0.38179  |
| SSPG_RS17680 | 0.01               | 0.0921             | 0.10895  |
| SSPG_RS17690 | 0.0405             | 0.2373333333333333 | 0.16621  |
| SSPG_RS17700 | 0.02               | 0.2694             | 0.07426  |
| SSPG_RS17705 | 0.0473666666666667 | 0.2771333333333333 | 0.18508  |
| SSPG_RS17710 | 0.0521             | 0.211              | 0.24705  |
| SSPG_RS17755 | NA                 | NA                 | NA       |
| SSPG_RS17765 | NA                 | NA                 | NA       |
| SSPG_RS17770 | NA                 | NA                 | NA       |
| SSPG_RS17775 | NA                 | NA                 | NA       |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS17785 | NA                     | NA                     | NA                         |
| SSPG_RS17795 | NA                     | NA                     | NA                         |
| SSPG_RS17815 | NA                     | NA                     | NA                         |
| SSPG_RS17825 | NA                     | NA                     | NA                         |
| SSPG_RS17835 | NA                     | NA                     | NA                         |
| SSPG_RS17850 | 0                      | 0.0319                 | 0                          |
| SSPG_RS17855 | 0.0004                 | 0.01425                | 0.02389                    |
| SSPG_RS17860 | 0.0024                 | 0.0082                 | 0.29228                    |
| SSPG_RS17870 | NA                     | NA                     | NA                         |
| SSPG_RS17875 | NA                     | NA                     | NA                         |
| SSPG_RS17885 | NA                     | NA                     | NA                         |
| SSPG_RS17890 | NA                     | NA                     | NA                         |
| SSPG_RS17900 | NA                     | NA                     | NA                         |
| SSPG_RS17905 | 0.0011                 | 0                      | NA                         |
| SSPG_RS17910 | 0.0016                 | 0.0245                 | 0.06487                    |
| SSPG_RS17915 | NA                     | NA                     | NA                         |
| SSPG_RS17930 | 0.0014                 | 0.0355                 | 0.04005                    |
| SSPG_RS17945 | NA                     | NA                     | NA                         |
| SSPG_RS17950 | NA                     | NA                     | NA                         |
| SSPG_RS17955 | NA                     | NA                     | NA                         |
| SSPG_RS17965 | NA                     | NA                     | NA                         |
| SSPG_RS18000 | NA                     | NA                     | NA                         |
| SSPG_RS18005 | NA                     | NA                     | NA                         |
| SSPG_RS18015 | 0                      | 0.05035                | 0                          |
| SSPG_RS18020 | NA                     | NA                     | NA                         |
| SSPG_RS18030 | NA                     | NA                     | NA                         |
| SSPG_RS18040 | 0                      | 0.0286                 | 0                          |
| SSPG_RS18050 | NA                     | NA                     | NA                         |
| SSPG_RS18055 | NA                     | NA                     | NA                         |
| SSPG_RS18090 | 0.0013                 | 0.052                  | 0.02546                    |
| SSPG_RS18095 | NA                     | NA                     | NA                         |
| SSPG_RS18100 | NA                     | NA                     | NA                         |
| SSPG_RS18115 | NA                     | NA                     | NA                         |
| SSPG_RS18120 | NA                     | NA                     | NA                         |
| SSPG_RS18125 | 0                      | 0                      | 0                          |
| SSPG_RS18140 | 0.0008                 | 0.0659                 | 0.0119                     |
| SSPG_RS18150 | 0                      | 0.0214                 | 0                          |
| SSPG_RS18155 | 0                      | 0                      | 0                          |
| SSPG_RS18160 | NA                     | NA                     | NA                         |
| SSPG_RS18165 | NA                     | NA                     | NA                         |
| SSPG_RS18170 | NA                     | NA                     | NA                         |
| SSPG_RS18175 | 0.0026                 | 0                      | NA                         |
| SSPG_RS18180 | NA                     | NA                     | NA                         |
| SSPG_RS18190 | 0.001                  | 0.01835                | 0.116815                   |
| SSPG_RS18200 | NA                     | NA                     | NA                         |
| SSPG_RS18205 | 0.0058                 | 0                      | NA                         |
| SSPG_RS18210 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$               | $\omega$          |
|--------------|--------|--------------------|-------------------|
| SSPG_RS18215 | NA     | NA                 | NA                |
| SSPG_RS18220 | NA     | NA                 | NA                |
| SSPG_RS18230 | NA     | NA                 | NA                |
| SSPG_RS18245 | NA     | NA                 | NA                |
| SSPG_RS18260 | NA     | NA                 | NA                |
| SSPG_RS18270 | NA     | NA                 | NA                |
| SSPG_RS18275 | NA     | NA                 | NA                |
| SSPG_RS18280 | NA     | NA                 | NA                |
| SSPG_RS18285 | NA     | NA                 | NA                |
| SSPG_RS18300 | NA     | NA                 | NA                |
| SSPG_RS18305 | NA     | NA                 | NA                |
| SSPG_RS18310 | NA     | NA                 | NA                |
| SSPG_RS18320 | NA     | NA                 | NA                |
| SSPG_RS18325 | NA     | NA                 | NA                |
| SSPG_RS18330 | 0.0009 | 0.0528             | 0.01716           |
| SSPG_RS18335 | NA     | NA                 | NA                |
| SSPG_RS18355 | NA     | NA                 | NA                |
| SSPG_RS18370 | NA     | NA                 | NA                |
| SSPG_RS18380 | 0.0048 | 0.0322             | 0.14897           |
| SSPG_RS18400 | NA     | NA                 | NA                |
| SSPG_RS18405 | NA     | NA                 | NA                |
| SSPG_RS18430 | 0.0017 | 0.017              | 0.10035           |
| SSPG_RS18440 | 0      | 0.0507             | 0                 |
| SSPG_RS18455 | NA     | NA                 | NA                |
| SSPG_RS18465 | 0.0007 | 0.0076             | 0.09061           |
| SSPG_RS18475 | NA     | NA                 | NA                |
| SSPG_RS18480 | NA     | NA                 | NA                |
| SSPG_RS18485 | 0      | 0                  | 0                 |
| SSPG_RS18490 | 0.0017 | 0.0105333333333333 | 0.106343333333333 |
| SSPG_RS18495 | 0      | 0.0148             | 0                 |
| SSPG_RS18505 | 0.0009 | 0.0282             | 0.03205           |
| SSPG_RS18510 | 0.0046 | 0.0001             | NA                |
| SSPG_RS18515 | NA     | NA                 | NA                |
| SSPG_RS18525 | 0      | 0                  | 0                 |
| SSPG_RS18530 | NA     | NA                 | NA                |
| SSPG_RS18535 | 0.0018 | 0.0106             | 0.17361           |
| SSPG_RS18540 | 0.0007 | 0.0266             | 0.017305          |
| SSPG_RS18545 | 0      | 0.0385             | 0                 |
| SSPG_RS18550 | 0.002  | 0.0199             | 0.09885           |
| SSPG_RS18555 | NA     | NA                 | NA                |
| SSPG_RS18560 | NA     | NA                 | NA                |
| SSPG_RS18575 | 0.0044 | 0.03955            | 0.13651           |
| SSPG_RS18600 | NA     | NA                 | NA                |
| SSPG_RS18605 | NA     | NA                 | NA                |
| SSPG_RS18610 | NA     | NA                 | NA                |
| SSPG_RS18615 | NA     | NA                 | NA                |
| SSPG_RS18620 | NA     | NA                 | NA                |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS18635 | 0                      | 0                      | 0                          |
| SSPG_RS18640 | 0.0007                 | 0.0184                 | 0.0367                     |
| SSPG_RS18645 | NA                     | NA                     | NA                         |
| SSPG_RS18650 | NA                     | NA                     | NA                         |
| SSPG_RS18655 | NA                     | NA                     | NA                         |
| SSPG_RS18665 | NA                     | NA                     | NA                         |
| SSPG_RS18705 | NA                     | NA                     | NA                         |
| SSPG_RS18710 | NA                     | NA                     | NA                         |
| SSPG_RS18720 | 0.004                  | 0                      | NA                         |
| SSPG_RS18725 | 0.0015                 | 0.092                  | 0.01625                    |
| SSPG_RS18765 | NA                     | NA                     | NA                         |
| SSPG_RS18770 | NA                     | NA                     | NA                         |
| SSPG_RS18775 | NA                     | NA                     | NA                         |
| SSPG_RS18780 | NA                     | NA                     | NA                         |
| SSPG_RS18785 | NA                     | NA                     | NA                         |
| SSPG_RS18795 | NA                     | NA                     | NA                         |
| SSPG_RS18800 | NA                     | NA                     | NA                         |
| SSPG_RS18810 | 0.0018                 | 0.0449                 | 0.19622                    |
| SSPG_RS18815 | NA                     | NA                     | NA                         |
| SSPG_RS18820 | NA                     | NA                     | NA                         |
| SSPG_RS18830 | 0.0012                 | 0.1345                 | 0.009                      |
| SSPG_RS18835 | NA                     | NA                     | NA                         |
| SSPG_RS18840 | 0                      | 0                      | 0                          |
| SSPG_RS18850 | 0                      | 0                      | 0                          |
| SSPG_RS18855 | 0.0009                 | 0.0131                 | 0.06697                    |
| SSPG_RS18860 | 0.0013                 | 0                      | NA                         |
| SSPG_RS18895 | NA                     | NA                     | NA                         |
| SSPG_RS18900 | 0                      | 0                      | 0                          |
| SSPG_RS18905 | 0.003                  | 0.0311                 | 0.09618                    |
| SSPG_RS18910 | 0.0034                 | 0.023                  | 0.14898                    |
| SSPG_RS18920 | NA                     | NA                     | NA                         |
| SSPG_RS18975 | 0                      | 0.0397                 | 0                          |
| SSPG_RS18980 | 0                      | 0                      | 0                          |
| SSPG_RS18990 | NA                     | NA                     | NA                         |
| SSPG_RS19010 | 0                      | 0.0828                 | 0                          |
| SSPG_RS19015 | 0                      | 0.0252                 | 0                          |
| SSPG_RS19020 | 0.0058                 | 0.0199                 | 0.28923                    |
| SSPG_RS19045 | NA                     | NA                     | NA                         |
| SSPG_RS19055 | 0.00085                | 0.0273                 | 0.015345                   |
| SSPG_RS19060 | NA                     | NA                     | NA                         |
| SSPG_RS19065 | 0.0007                 | 0.0206                 | 0.03329                    |
| SSPG_RS19070 | NA                     | NA                     | NA                         |
| SSPG_RS19080 | NA                     | NA                     | NA                         |
| SSPG_RS19090 | 0                      | 0.0739                 | 0                          |
| SSPG_RS19095 | NA                     | NA                     | NA                         |
| SSPG_RS19115 | NA                     | NA                     | NA                         |
| SSPG_RS19120 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| SSPG_RS19125 | NA      | NA      | NA       |
| SSPG_RS19130 | NA      | NA      | NA       |
| SSPG_RS19135 | NA      | NA      | NA       |
| SSPG_RS19145 | 0.0006  | 0.1817  | 0.0034   |
| SSPG_RS19150 | NA      | NA      | NA       |
| SSPG_RS19160 | NA      | NA      | NA       |
| SSPG_RS19165 | NA      | NA      | NA       |
| SSPG_RS19170 | NA      | NA      | NA       |
| SSPG_RS19180 | 0.0013  | 0       | NA       |
| SSPG_RS19200 | 0.0388  | 1.081   | 0.10453  |
| SSPG_RS19205 | 0.0022  | 0.0691  | NA       |
| SSPG_RS19215 | 0.0016  | 0.0479  | 0.03446  |
| SSPG_RS19220 | NA      | NA      | NA       |
| SSPG_RS19225 | NA      | NA      | NA       |
| SSPG_RS19240 | NA      | NA      | NA       |
| SSPG_RS19245 | NA      | NA      | NA       |
| SSPG_RS19250 | NA      | NA      | NA       |
| SSPG_RS19265 | 0       | 0       | 0        |
| SSPG_RS19285 | NA      | NA      | NA       |
| SSPG_RS19295 | 0       | 0       | 0        |
| SSPG_RS19305 | NA      | NA      | NA       |
| SSPG_RS19330 | NA      | NA      | NA       |
| SSPG_RS19335 | 0       | 0       | 0        |
| SSPG_RS19340 | NA      | NA      | NA       |
| SSPG_RS19365 | NA      | NA      | NA       |
| SSPG_RS19370 | NA      | NA      | NA       |
| SSPG_RS19390 | 0.00385 | 0       | NA       |
| SSPG_RS19395 | 0.0009  | 0.0307  | 0.02801  |
| SSPG_RS19400 | 0.0046  | 0.035   | 0.13157  |
| SSPG_RS19405 | 0       | 0.0301  | 0        |
| SSPG_RS19415 | 0       | 0.02615 | 0        |
| SSPG_RS19420 | 0       | 0       | 0        |
| SSPG_RS19430 | NA      | NA      | NA       |
| SSPG_RS19435 | NA      | NA      | NA       |
| SSPG_RS19440 | NA      | NA      | NA       |
| SSPG_RS19455 | NA      | NA      | NA       |
| SSPG_RS19460 | NA      | NA      | NA       |
| SSPG_RS19470 | 0       | 0.0305  | 0        |
| SSPG_RS19480 | NA      | NA      | NA       |
| SSPG_RS19490 | NA      | NA      | NA       |
| SSPG_RS19505 | 0       | 0.0201  | 0        |
| SSPG_RS19510 | 0.0008  | 0.0294  | 0.02652  |
| SSPG_RS19515 | NA      | NA      | NA       |
| SSPG_RS19525 | NA      | NA      | NA       |
| SSPG_RS19530 | 0       | 0       | 0        |
| SSPG_RS19535 | 0       | 0.0142  | 0        |
| SSPG_RS19540 | NA      | NA      | NA       |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS19545 | 0                      | 0.0492                 | 0                          |
| SSPG_RS19555 | 0                      | 0.0076                 | 0                          |
| SSPG_RS19590 | 0.005                  | 0.01465                | NA                         |
| SSPG_RS19610 | NA                     | NA                     | NA                         |
| SSPG_RS19705 | NA                     | NA                     | NA                         |
| SSPG_RS19710 | NA                     | NA                     | NA                         |
| SSPG_RS19715 | NA                     | NA                     | NA                         |
| SSPG_RS19720 | NA                     | NA                     | NA                         |
| SSPG_RS19725 | 0.001                  | 0.0499                 | 0.0204                     |
| SSPG_RS19735 | 0                      | 0.0347                 | 0                          |
| SSPG_RS19745 | 0.0023                 | 0.0428                 | 0.05347                    |
| SSPG_RS19750 | 0.002                  | 0.0303                 | 0.06538                    |
| SSPG_RS19765 | 0.0014                 | 0.0313                 | 0.04429                    |
| SSPG_RS19770 | 0.0021                 | 0.0497                 | 0.0424                     |
| SSPG_RS19780 | NA                     | NA                     | NA                         |
| SSPG_RS19785 | NA                     | NA                     | NA                         |
| SSPG_RS19790 | NA                     | NA                     | NA                         |
| SSPG_RS19800 | NA                     | NA                     | NA                         |
| SSPG_RS19805 | NA                     | NA                     | NA                         |
| SSPG_RS19810 | 0                      | 0                      | 0                          |
| SSPG_RS19830 | 0                      | 0                      | 0                          |
| SSPG_RS19835 | NA                     | NA                     | NA                         |
| SSPG_RS19840 | NA                     | NA                     | NA                         |
| SSPG_RS19850 | NA                     | NA                     | NA                         |
| SSPG_RS19865 | NA                     | NA                     | NA                         |
| SSPG_RS19875 | NA                     | NA                     | NA                         |
| SSPG_RS19880 | NA                     | NA                     | NA                         |
| SSPG_RS19885 | NA                     | NA                     | NA                         |
| SSPG_RS19895 | NA                     | NA                     | NA                         |
| SSPG_RS19910 | NA                     | NA                     | NA                         |
| SSPG_RS19920 | 0                      | 0.0149                 | 0                          |
| SSPG_RS19925 | NA                     | NA                     | NA                         |
| SSPG_RS19940 | NA                     | NA                     | NA                         |
| SSPG_RS19955 | 0                      | 0.0316                 | 0                          |
| SSPG_RS20005 | NA                     | NA                     | NA                         |
| SSPG_RS20015 | NA                     | NA                     | NA                         |
| SSPG_RS20020 | 0.0012                 | 0.0467                 | 0.01264                    |
| SSPG_RS20025 | 0.0013                 | 0.0103                 | 0.12415                    |
| SSPG_RS20040 | NA                     | NA                     | NA                         |
| SSPG_RS20045 | NA                     | NA                     | NA                         |
| SSPG_RS20060 | 0                      | 0                      | 0                          |
| SSPG_RS20065 | NA                     | NA                     | NA                         |
| SSPG_RS20070 | 0                      | 0.0536                 | 0                          |
| SSPG_RS20075 | NA                     | NA                     | NA                         |
| SSPG_RS20085 | 0.0025                 | 0.0223                 | 0.11122                    |
| SSPG_RS20090 | NA                     | NA                     | NA                         |
| SSPG_RS20095 | 0.00075                | 0                      | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$ |
|--------------|----------------------|--------------------|----------|
| SSPG_RS20100 | 0.0008               | 0.0101             | 0.08236  |
| SSPG_RS20110 | 0.0009               | 0.0064             | 0.13226  |
| SSPG_RS20125 | 0.0043               | 0.0068             | 0.63843  |
| SSPG_RS20135 | NA                   | NA                 | NA       |
| SSPG_RS20140 | NA                   | NA                 | NA       |
| SSPG_RS20150 | 0.00235              | 0.01345            | 0.216205 |
| SSPG_RS20155 | NA                   | NA                 | NA       |
| SSPG_RS20165 | NA                   | NA                 | NA       |
| SSPG_RS20175 | NA                   | NA                 | NA       |
| SSPG_RS20180 | NA                   | NA                 | NA       |
| SSPG_RS20190 | NA                   | NA                 | NA       |
| SSPG_RS20195 | NA                   | NA                 | NA       |
| SSPG_RS20200 | NA                   | NA                 | NA       |
| SSPG_RS20205 | NA                   | NA                 | NA       |
| SSPG_RS20210 | 0                    | 0.0336             | 0        |
| SSPG_RS20220 | NA                   | NA                 | NA       |
| SSPG_RS20225 | NA                   | NA                 | NA       |
| SSPG_RS20245 | 0                    | 0                  | 0        |
| SSPG_RS20250 | 0                    | 0                  | 0        |
| SSPG_RS20260 | 0.0092               | 0.0612             | 0.15068  |
| SSPG_RS20265 | 0.0054               | 0.0361             | 0.14995  |
| SSPG_RS20270 | NA                   | NA                 | NA       |
| SSPG_RS20275 | 0.0011               | 0.0361             | NA       |
| SSPG_RS20325 | 0.00495              | 0.03955            | 0.14234  |
| SSPG_RS20330 | 0.02705              | 0.04275            | 0.575525 |
| SSPG_RS20340 | 0                    | 0.0514             | 0        |
| SSPG_RS20345 | 0                    | 0                  | 0        |
| SSPG_RS20350 | NA                   | NA                 | NA       |
| SSPG_RS20355 | NA                   | NA                 | NA       |
| SSPG_RS20360 | NA                   | NA                 | NA       |
| SSPG_RS20365 | NA                   | NA                 | NA       |
| SSPG_RS20375 | NA                   | NA                 | NA       |
| SSPG_RS20380 | 0                    | 0.0447             | 0        |
| SSPG_RS20400 | NA                   | NA                 | NA       |
| SSPG_RS20405 | 0.0025               | 0.0652             | 0.03877  |
| SSPG_RS20415 | 0                    | 0                  | 0        |
| SSPG_RS20425 | 0                    | 0                  | 0        |
| SSPG_RS20430 | 0                    | 0                  | 0        |
| SSPG_RS20445 | NA                   | NA                 | NA       |
| SSPG_RS20450 | 0                    | 0.036              | 0        |
| SSPG_RS20455 | 0                    | 0                  | 0        |
| SSPG_RS20485 | NA                   | NA                 | NA       |
| SSPG_RS20490 | 0.001                | 0.03305            | 0.02552  |
| SSPG_RS20495 | 0                    | 0.0177             | 0        |
| SSPG_RS20500 | NA                   | NA                 | NA       |
| SSPG_RS20505 | 0.001066666666666667 | 0.0183333333333333 | NA       |
| SSPG_RS20510 | NA                   | NA                 | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| SSPG_RS20520 | NA      | NA      | NA       |
| SSPG_RS20525 | 0.001   | 0.0202  | 0.04829  |
| SSPG_RS20530 | 0       | 0.0086  | 0        |
| SSPG_RS20540 | 0.0011  | 0.0096  | 0.11362  |
| SSPG_RS20550 | 0.0011  | 0.0348  | 0.03278  |
| SSPG_RS20570 | NA      | NA      | NA       |
| SSPG_RS20575 | NA      | NA      | NA       |
| SSPG_RS20580 | 0.0005  | 0.0257  | 0.02087  |
| SSPG_RS20600 | NA      | NA      | NA       |
| SSPG_RS20620 | 0       | 0.0128  | 0        |
| SSPG_RS20670 | NA      | NA      | NA       |
| SSPG_RS20675 | 0.0022  | 0       | NA       |
| SSPG_RS20700 | NA      | NA      | NA       |
| SSPG_RS20705 | NA      | NA      | NA       |
| SSPG_RS20715 | NA      | NA      | NA       |
| SSPG_RS20720 | NA      | NA      | NA       |
| SSPG_RS20725 | NA      | NA      | NA       |
| SSPG_RS20740 | NA      | NA      | NA       |
| SSPG_RS20755 | NA      | NA      | NA       |
| SSPG_RS20765 | NA      | NA      | NA       |
| SSPG_RS20770 | NA      | NA      | NA       |
| SSPG_RS20775 | NA      | NA      | NA       |
| SSPG_RS20780 | NA      | NA      | NA       |
| SSPG_RS20785 | NA      | NA      | NA       |
| SSPG_RS20820 | 0       | 0.0316  | 0        |
| SSPG_RS20825 | 0.0007  | 0.0369  | 0.02024  |
| SSPG_RS20830 | NA      | NA      | NA       |
| SSPG_RS20835 | 0.0006  | 0.0351  | 0.01655  |
| SSPG_RS20855 | NA      | NA      | NA       |
| SSPG_RS20865 | NA      | NA      | NA       |
| SSPG_RS20870 | NA      | NA      | NA       |
| SSPG_RS20880 | 0       | 0.02605 | 0        |
| SSPG_RS20885 | 0.00215 | 0.0458  | 0.21089  |
| SSPG_RS20895 | NA      | NA      | NA       |
| SSPG_RS20900 | 0.0015  | 0.0463  | 0.03201  |
| SSPG_RS20905 | 0.0028  | 0.021   | 0.13458  |
| SSPG_RS20915 | 0.0014  | 0.0156  | 0.08959  |
| SSPG_RS20930 | 0.0028  | 0.0378  | 0.07469  |
| SSPG_RS20935 | NA      | NA      | NA       |
| SSPG_RS20940 | NA      | NA      | NA       |
| SSPG_RS20945 | 0       | 0.03382 | 0        |
| SSPG_RS20950 | NA      | NA      | NA       |
| SSPG_RS20955 | 0       | 0.0289  | 0        |
| SSPG_RS20960 | NA      | NA      | NA       |
| SSPG_RS20965 | NA      | NA      | NA       |
| SSPG_RS20975 | 0.0012  | 0.0179  | 0.06875  |
| SSPG_RS20980 | 0.0019  | 0.0118  | 0.15936  |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$   | $\omega$ |
|--------------|--------|--------|----------|
| SSPG_RS20995 | NA     | NA     | NA       |
| SSPG_RS21005 | 0      | 0.0352 | 0        |
| SSPG_RS21010 | 0      | 0.021  | 0        |
| SSPG_RS21015 | 0      | 0.016  | 0        |
| SSPG_RS21020 | NA     | NA     | NA       |
| SSPG_RS21025 | NA     | NA     | NA       |
| SSPG_RS21030 | NA     | NA     | NA       |
| SSPG_RS21045 | 0      | 0.0463 | 0        |
| SSPG_RS21050 | NA     | NA     | NA       |
| SSPG_RS21055 | NA     | NA     | NA       |
| SSPG_RS21060 | 0      | 0.0114 | 0        |
| SSPG_RS21085 | NA     | NA     | NA       |
| SSPG_RS21090 | NA     | NA     | NA       |
| SSPG_RS21100 | 0.0063 | 0.0607 | 0.10351  |
| SSPG_RS21105 | NA     | NA     | NA       |
| SSPG_RS21115 | NA     | NA     | NA       |
| SSPG_RS21120 | NA     | NA     | NA       |
| SSPG_RS21125 | 0      | 0.0236 | 0        |
| SSPG_RS21135 | NA     | NA     | NA       |
| SSPG_RS21170 | NA     | NA     | NA       |
| SSPG_RS21180 | NA     | NA     | NA       |
| SSPG_RS21195 | NA     | NA     | NA       |
| SSPG_RS21200 | NA     | NA     | NA       |
| SSPG_RS21205 | NA     | NA     | NA       |
| SSPG_RS21210 | NA     | NA     | NA       |
| SSPG_RS21215 | NA     | NA     | NA       |
| SSPG_RS21225 | NA     | NA     | NA       |
| SSPG_RS21230 | NA     | NA     | NA       |
| SSPG_RS21245 | NA     | NA     | NA       |
| SSPG_RS21255 | NA     | NA     | NA       |
| SSPG_RS21275 | 0.0017 | 0.0081 | 0.20762  |
| SSPG_RS21305 | NA     | NA     | NA       |
| SSPG_RS21325 | NA     | NA     | NA       |
| SSPG_RS21330 | NA     | NA     | NA       |
| SSPG_RS21340 | NA     | NA     | NA       |
| SSPG_RS21345 | NA     | NA     | NA       |
| SSPG_RS21350 | 0      | 0      | 0        |
| SSPG_RS21355 | NA     | NA     | NA       |
| SSPG_RS21360 | NA     | NA     | NA       |
| SSPG_RS21365 | 0      | 0      | 0        |
| SSPG_RS21375 | NA     | NA     | NA       |
| SSPG_RS21385 | NA     | NA     | NA       |
| SSPG_RS21400 | NA     | NA     | NA       |
| SSPG_RS21420 | 0.0012 | 0.0519 | 0.02395  |
| SSPG_RS21435 | NA     | NA     | NA       |
| SSPG_RS21445 | 0.0017 | 0.0444 | 0.03893  |
| SSPG_RS21455 | 0      | 0.1429 | 0        |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$     | $\omega$  |
|--------------|---------|----------|-----------|
| SSPG_RS21475 | 0       | 0.0187   | 0         |
| SSPG_RS21480 | 0       | 0.0276   | 0         |
| SSPG_RS21485 | 0.0036  | 0.033    | 0.1094    |
| SSPG_RS21490 | NA      | NA       | NA        |
| SSPG_RS21495 | 0.0031  | 0.018    | 0.17154   |
| SSPG_RS21500 | NA      | NA       | NA        |
| SSPG_RS21505 | NA      | NA       | NA        |
| SSPG_RS21515 | NA      | NA       | NA        |
| SSPG_RS21520 | 0       | 0        | 0         |
| SSPG_RS21525 | NA      | NA       | NA        |
| SSPG_RS21530 | 0       | 0.03235  | 0         |
| SSPG_RS21535 | 0.0018  | 0.0322   | 0.0559    |
| SSPG_RS21540 | NA      | NA       | NA        |
| SSPG_RS21545 | 0       | 0        | 0         |
| SSPG_RS21550 | NA      | NA       | NA        |
| SSPG_RS21560 | NA      | NA       | NA        |
| SSPG_RS21565 | NA      | NA       | NA        |
| SSPG_RS21575 | 0.0038  | 0.044725 | 0.0496125 |
| SSPG_RS21580 | NA      | NA       | NA        |
| SSPG_RS21585 | NA      | NA       | NA        |
| SSPG_RS21590 | 0.0032  | 0.0144   | 0.21947   |
| SSPG_RS21595 | 0.0033  | 0.0059   | 0.55467   |
| SSPG_RS21605 | 0.00165 | 0.02595  | 0.045165  |
| SSPG_RS21640 | NA      | NA       | NA        |
| SSPG_RS21645 | NA      | NA       | NA        |
| SSPG_RS21650 | NA      | NA       | NA        |
| SSPG_RS21655 | 0       | 0.0188   | 0         |
| SSPG_RS21675 | 0.0029  | 0.0461   | 0.06338   |
| SSPG_RS21690 | 0.0012  | 0.0617   | 0.01909   |
| SSPG_RS21695 | 0.0009  | 0.0246   | 0.03861   |
| SSPG_RS21710 | 0       | 0.0229   | 0         |
| SSPG_RS21715 | 0.0019  | 0.0383   | NA        |
| SSPG_RS21720 | NA      | NA       | NA        |
| SSPG_RS21725 | 0.001   | 0.0493   | 0.01934   |
| SSPG_RS21730 | 0.0014  | 0        | NA        |
| SSPG_RS21735 | 0.0009  | 0.0075   | 0.11823   |
| SSPG_RS21740 | NA      | NA       | NA        |
| SSPG_RS21745 | NA      | NA       | NA        |
| SSPG_RS21755 | 0.0013  | 0.0285   | 0.0441    |
| SSPG_RS21760 | NA      | NA       | NA        |
| SSPG_RS21765 | NA      | NA       | NA        |
| SSPG_RS21780 | 0.0103  | 0.0338   | 0.30414   |
| SSPG_RS21800 | 0       | 0.032    | 0         |
| SSPG_RS21805 | NA      | NA       | NA        |
| SSPG_RS21810 | 0       | 0.0086   | 0         |
| SSPG_RS21815 | NA      | NA       | NA        |
| SSPG_RS21820 | NA      | NA       | NA        |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$               | $\omega$ |
|--------------|---------|--------------------|----------|
| SSPG_RS21830 | 0       | 0                  | 0        |
| SSPG_RS21835 | 0       | 0.0132             | 0        |
| SSPG_RS21840 | NA      | NA                 | NA       |
| SSPG_RS21850 | 0.00315 | 0.01505            | NA       |
| SSPG_RS21860 | NA      | NA                 | NA       |
| SSPG_RS21870 | NA      | NA                 | NA       |
| SSPG_RS21875 | NA      | NA                 | NA       |
| SSPG_RS21880 | 0.0015  | 0.0518             | 0.02856  |
| SSPG_RS21890 | NA      | NA                 | NA       |
| SSPG_RS21900 | NA      | NA                 | NA       |
| SSPG_RS21905 | NA      | NA                 | NA       |
| SSPG_RS21920 | 0.0012  | 0.0063             | 0.19757  |
| SSPG_RS21930 | 0       | 0                  | 0        |
| SSPG_RS21935 | NA      | NA                 | NA       |
| SSPG_RS21945 | 0.0024  | 0.0168             | 0.14318  |
| SSPG_RS21950 | 0       | 0                  | 0        |
| SSPG_RS21955 | NA      | NA                 | NA       |
| SSPG_RS21960 | NA      | NA                 | NA       |
| SSPG_RS21975 | NA      | NA                 | NA       |
| SSPG_RS21985 | 0.0017  | 0.0059             | 0.28924  |
| SSPG_RS21990 | 0.0013  | 0.0187             | 0.06824  |
| SSPG_RS21995 | NA      | NA                 | NA       |
| SSPG_RS22000 | NA      | NA                 | NA       |
| SSPG_RS22005 | 0       | 0.061              | 0        |
| SSPG_RS22020 | 0.00195 | 0.0394             | NA       |
| SSPG_RS22030 | NA      | NA                 | NA       |
| SSPG_RS22035 | NA      | NA                 | NA       |
| SSPG_RS22045 | 0.0105  | 0.1147             | 0.09163  |
| SSPG_RS22060 | NA      | NA                 | NA       |
| SSPG_RS22065 | NA      | NA                 | NA       |
| SSPG_RS22070 | NA      | NA                 | NA       |
| SSPG_RS22075 | 0.0066  | 0.0302             | 0.21929  |
| SSPG_RS22080 | NA      | NA                 | NA       |
| SSPG_RS22090 | 0.0022  | 0.0084             | 0.26455  |
| SSPG_RS22105 | 0       | 0.0132             | 0        |
| SSPG_RS22110 | 0       | 0                  | 0        |
| SSPG_RS22120 | 0.0013  | 0.036              | 0.03661  |
| SSPG_RS22130 | 0       | 0.0606             | 0        |
| SSPG_RS22135 | NA      | NA                 | NA       |
| SSPG_RS22150 | NA      | NA                 | NA       |
| SSPG_RS22165 | NA      | NA                 | NA       |
| SSPG_RS22170 | 0       | 0.00575            | 0        |
| SSPG_RS22180 | NA      | NA                 | NA       |
| SSPG_RS22185 | 0       | 0.0185             | 0        |
| SSPG_RS22195 | 0.0027  | 0                  | NA       |
| SSPG_RS22200 | 0       | 0.0382666666666667 | 0        |
| SSPG_RS22205 | 0       | 0.0197             | 0        |

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Table S3 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$          |
|--------------|----------------------|--------------------|-------------------|
| SSPG_RS22210 | 0.0022               | 0                  | NA                |
| SSPG_RS22215 | 0                    | 0.03               | 0                 |
| SSPG_RS22220 | 0                    | 0.0465             | 0                 |
| SSPG_RS22225 | NA                   | NA                 | NA                |
| SSPG_RS22230 | NA                   | NA                 | NA                |
| SSPG_RS22245 | 0.0017               | 0.0563             | 0.02965           |
| SSPG_RS22255 | NA                   | NA                 | NA                |
| SSPG_RS22260 | 0                    | 0                  | 0                 |
| SSPG_RS22270 | NA                   | NA                 | NA                |
| SSPG_RS22290 | 0                    | 0                  | 0                 |
| SSPG_RS22305 | NA                   | NA                 | NA                |
| SSPG_RS22310 | NA                   | NA                 | NA                |
| SSPG_RS22320 | NA                   | NA                 | NA                |
| SSPG_RS22325 | NA                   | NA                 | NA                |
| SSPG_RS22330 | NA                   | NA                 | NA                |
| SSPG_RS22335 | NA                   | NA                 | NA                |
| SSPG_RS22340 | NA                   | NA                 | NA                |
| SSPG_RS22350 | 0.0128               | 0.0302             | 0.42209           |
| SSPG_RS22360 | 0.0009               | 0.0166             | 0.05173           |
| SSPG_RS22365 | 0                    | 0.0191             | 0                 |
| SSPG_RS22370 | 0                    | 0.02645            | 0                 |
| SSPG_RS22375 | 0                    | 0.06445            | 0                 |
| SSPG_RS22405 | NA                   | NA                 | NA                |
| SSPG_RS22415 | NA                   | NA                 | NA                |
| SSPG_RS22420 | NA                   | NA                 | NA                |
| SSPG_RS22425 | 0.0116               | 0.1619             | 0.0718            |
| SSPG_RS22430 | 0.0018               | 0.0279             | 0.06492           |
| SSPG_RS22435 | 0                    | 0.00945            | 0                 |
| SSPG_RS22440 | 0                    | 0.0117             | 0                 |
| SSPG_RS22465 | 0.002933333333333333 | 0.3079666666666667 | 1.813416666666667 |
| SSPG_RS22470 | NA                   | NA                 | NA                |
| SSPG_RS22475 | 0                    | 0.0094             | 0                 |
| SSPG_RS22480 | 0                    | 0.014              | 0                 |
| SSPG_RS22490 | NA                   | NA                 | NA                |
| SSPG_RS22495 | NA                   | NA                 | NA                |
| SSPG_RS22500 | NA                   | NA                 | NA                |
| SSPG_RS22505 | 0                    | 0.0065             | 0                 |
| SSPG_RS22510 | 0.00115              | 0.03275            | 0.065485          |
| SSPG_RS22515 | 0                    | 0                  | 0                 |
| SSPG_RS22525 | 0.0013               | 0.0215             | 0.06153           |
| SSPG_RS22535 | 0                    | 0.0632             | 0                 |
| SSPG_RS22540 | 0.0013               | 0.0244             | 0.02644           |
| SSPG_RS22545 | 0                    | 0                  | 0                 |
| SSPG_RS22550 | 0                    | 0.0151             | 0                 |
| SSPG_RS22570 | 0                    | 0.0326             | 0                 |
| SSPG_RS22585 | NA                   | NA                 | NA                |
| SSPG_RS22590 | 0                    | 0.0317             | 0                 |

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Table S3 – continued from previous page

| Gene         | $dN$                 | $dS$    | $\omega$ |
|--------------|----------------------|---------|----------|
| SSPG_RS22600 | NA                   | NA      | NA       |
| SSPG_RS22605 | 0                    | 0.0274  | 0        |
| SSPG_RS22610 | 0                    | 0.0779  | 0        |
| SSPG_RS22615 | 0                    | 0.0247  | 0        |
| SSPG_RS22625 | NA                   | NA      | NA       |
| SSPG_RS22630 | 0                    | 0.0089  | 0        |
| SSPG_RS22650 | NA                   | NA      | NA       |
| SSPG_RS22655 | NA                   | NA      | NA       |
| SSPG_RS22660 | NA                   | NA      | NA       |
| SSPG_RS22665 | NA                   | NA      | NA       |
| SSPG_RS22670 | NA                   | NA      | NA       |
| SSPG_RS22675 | 0                    | 0.03665 | 0        |
| SSPG_RS22685 | 0.0012               | 0.0554  | 0.02082  |
| SSPG_RS22690 | 0.000933333333333333 | 0.0604  | 0.00791  |
| SSPG_RS22695 | 0.0017               | 0.0498  | 0.03435  |
| SSPG_RS22705 | 0.0014               | 0.012   | 0.1168   |
| SSPG_RS22720 | NA                   | NA      | NA       |
| SSPG_RS22725 | 0.0043               | 0.0645  | 0.06737  |
| SSPG_RS22805 | 0.0056               | 0.0936  | 0.0595   |
| SSPG_RS22815 | 0.05685              | 0.2144  | 0.286775 |
| SSPG_RS22820 | NA                   | NA      | NA       |
| SSPG_RS22825 | 0.001766666666666667 | 0.0091  | NA       |
| SSPG_RS22830 | NA                   | NA      | NA       |
| SSPG_RS22835 | 0.0042               | 0.02575 | 0.16598  |
| SSPG_RS22840 | 0.0011               | 0.0277  | 0.03859  |
| SSPG_RS22845 | NA                   | NA      | NA       |
| SSPG_RS22850 | NA                   | NA      | NA       |
| SSPG_RS22855 | 0                    | 0       | 0        |
| SSPG_RS22860 | 0                    | 0       | 0        |
| SSPG_RS22880 | 0.0003               | 0.0144  | 0.02197  |
| SSPG_RS22925 | 0                    | 0       | 0        |
| SSPG_RS22930 | NA                   | NA      | NA       |
| SSPG_RS22945 | NA                   | NA      | NA       |
| SSPG_RS22950 | 0                    | 0.0274  | 0        |
| SSPG_RS22955 | 0.002                | 0.0077  | 0.25882  |
| SSPG_RS22960 | NA                   | NA      | NA       |
| SSPG_RS22970 | NA                   | NA      | NA       |
| SSPG_RS22975 | NA                   | NA      | NA       |
| SSPG_RS22980 | NA                   | NA      | NA       |
| SSPG_RS22990 | NA                   | NA      | NA       |
| SSPG_RS22995 | 0.00225              | 0.00975 | 0.114235 |
| SSPG_RS23005 | 0                    | 0.0247  | 0        |
| SSPG_RS23010 | 0                    | 0.0455  | 0        |
| SSPG_RS23020 | 0.0033               | 0.0526  | 0.031545 |
| SSPG_RS23025 | NA                   | NA      | NA       |
| SSPG_RS23040 | 0                    | 0.0174  | 0        |
| SSPG_RS23070 | 0.0009               | 0       | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$                 | $\omega$ |
|--------------|---------|----------------------|----------|
| SSPG_RS23075 | 0       | 0                    | 0        |
| SSPG_RS23080 | 0       | 0.0083               | 0        |
| SSPG_RS23085 | 0       | 0                    | 0        |
| SSPG_RS23090 | 0       | 0                    | 0        |
| SSPG_RS23095 | 0       | 0                    | 0        |
| SSPG_RS23100 | 0       | 0                    | 0        |
| SSPG_RS23105 | 0       | 0                    | 0        |
| SSPG_RS23110 | 0       | 0.002333333333333333 | 0        |
| SSPG_RS23115 | 0       | 0                    | 0        |
| SSPG_RS23120 | 0       | 0.0077               | 0        |
| SSPG_RS23135 | 0       | 0                    | 0        |
| SSPG_RS23145 | 0       | 0                    | 0        |
| SSPG_RS23150 | 0       | 0.0067               | 0        |
| SSPG_RS23160 | NA      | NA                   | NA       |
| SSPG_RS23170 | 0       | 0                    | 0        |
| SSPG_RS23175 | 0       | 0.0359               | 0        |
| SSPG_RS23190 | NA      | NA                   | NA       |
| SSPG_RS23200 | 0.0042  | 0                    | NA       |
| SSPG_RS23205 | 0       | 0.0382               | 0        |
| SSPG_RS23220 | NA      | NA                   | NA       |
| SSPG_RS23225 | 0       | 0                    | 0        |
| SSPG_RS23230 | NA      | NA                   | NA       |
| SSPG_RS23260 | NA      | NA                   | NA       |
| SSPG_RS23270 | 0       | 0.0337               | 0        |
| SSPG_RS23275 | 0.0138  | 0                    | NA       |
| SSPG_RS23280 | 0.001   | 0.034                | 0.0303   |
| SSPG_RS23285 | 0.0034  | 0.0226               | 0.14899  |
| SSPG_RS23290 | 0.0018  | 0.0251               | 0.07047  |
| SSPG_RS23295 | NA      | NA                   | NA       |
| SSPG_RS23300 | 0.005   | 0.0336               | 0.14986  |
| SSPG_RS23310 | 0.0028  | 0.0653               | 0.04341  |
| SSPG_RS23320 | 0       | 0                    | 0        |
| SSPG_RS23325 | NA      | NA                   | NA       |
| SSPG_RS23335 | NA      | NA                   | NA       |
| SSPG_RS23345 | 0       | 0.0532               | 0        |
| SSPG_RS23350 | 0       | 0.0341               | 0        |
| SSPG_RS23380 | NA      | NA                   | NA       |
| SSPG_RS23390 | 0       | 0.029                | 0        |
| SSPG_RS23450 | 0.0012  | 0.0072               | 0.17137  |
| SSPG_RS23460 | 0.0006  | 0.0632               | 0.01013  |
| SSPG_RS23470 | 0.0042  | 0.0974               | 0.04322  |
| SSPG_RS23485 | NA      | NA                   | NA       |
| SSPG_RS23500 | 0       | 0.0245               | 0        |
| SSPG_RS23505 | NA      | NA                   | NA       |
| SSPG_RS23510 | 0       | 0                    | 0        |
| SSPG_RS23515 | 0.00045 | 0                    | NA       |
| SSPG_RS23520 | NA      | NA                   | NA       |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS23530 | 0.0015                 | 0.1435                 | 0.01018                    |
| SSPG_RS23535 | NA                     | NA                     | NA                         |
| SSPG_RS23540 | 0                      | 0                      | 0                          |
| SSPG_RS23550 | NA                     | NA                     | NA                         |
| SSPG_RS23555 | NA                     | NA                     | NA                         |
| SSPG_RS23570 | 0.0009                 | 0.0345                 | 0.02482                    |
| SSPG_RS23585 | NA                     | NA                     | NA                         |
| SSPG_RS23590 | NA                     | NA                     | NA                         |
| SSPG_RS23595 | 0                      | 0                      | 0                          |
| SSPG_RS23625 | 0.0039                 | 0.01875                | 0.21639                    |
| SSPG_RS23645 | 0                      | 0                      | 0                          |
| SSPG_RS23650 | NA                     | NA                     | NA                         |
| SSPG_RS23665 | NA                     | NA                     | NA                         |
| SSPG_RS23670 | 0                      | 0                      | 0                          |
| SSPG_RS23675 | 0.0014                 | 0.0067                 | 0.21377                    |
| SSPG_RS23685 | NA                     | NA                     | NA                         |
| SSPG_RS23700 | NA                     | NA                     | NA                         |
| SSPG_RS23710 | NA                     | NA                     | NA                         |
| SSPG_RS23715 | NA                     | NA                     | NA                         |
| SSPG_RS23720 | NA                     | NA                     | NA                         |
| SSPG_RS23725 | 0.0013                 | 0.0224                 | 0.05977                    |
| SSPG_RS23730 | 0                      | 0                      | 0                          |
| SSPG_RS23735 | 0.0094                 | 0.0065                 | 1.4508                     |
| SSPG_RS23740 | 0                      | 0.1082                 | 0                          |
| SSPG_RS23750 | 0.0008                 | 0.0266                 | 0.02826                    |
| SSPG_RS23765 | 0.0019                 | 0.0101                 | 0.19248                    |
| SSPG_RS23770 | 0.0022                 | 0.0838                 | 0.02674                    |
| SSPG_RS23780 | 0.0011                 | 0.0546                 | 0.02054                    |
| SSPG_RS23785 | NA                     | NA                     | NA                         |
| SSPG_RS23795 | 0                      | 0                      | 0                          |
| SSPG_RS23800 | NA                     | NA                     | NA                         |
| SSPG_RS23805 | 0                      | 0.0006                 | 0                          |
| SSPG_RS23810 | NA                     | NA                     | NA                         |
| SSPG_RS23815 | NA                     | NA                     | NA                         |
| SSPG_RS23820 | 0                      | 0.0096                 | 0                          |
| SSPG_RS23825 | 0                      | 0.0296                 | 0                          |
| SSPG_RS23830 | NA                     | NA                     | NA                         |
| SSPG_RS23835 | 0.0013                 | 0.01025                | 0.0644                     |
| SSPG_RS23845 | NA                     | NA                     | NA                         |
| SSPG_RS23850 | NA                     | NA                     | NA                         |
| SSPG_RS23855 | NA                     | NA                     | NA                         |
| SSPG_RS23860 | NA                     | NA                     | NA                         |
| SSPG_RS23865 | NA                     | NA                     | NA                         |
| SSPG_RS23870 | NA                     | NA                     | NA                         |
| SSPG_RS23880 | 0.0017                 | 0.08135                | 0.039965                   |
| SSPG_RS23900 | NA                     | NA                     | NA                         |
| SSPG_RS23910 | 0.0029                 | 0.0165                 | 0.17621                    |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS23915 | NA                     | NA                     | NA                         |
| SSPG_RS23925 | NA                     | NA                     | NA                         |
| SSPG_RS23950 | 0                      | 0                      | 0                          |
| SSPG_RS23955 | NA                     | NA                     | NA                         |
| SSPG_RS23960 | NA                     | NA                     | NA                         |
| SSPG_RS23970 | 0.0017                 | 0.041                  | 0.04159                    |
| SSPG_RS23975 | 0.00085                | 0.0527                 | 0.02013                    |
| SSPG_RS23980 | 0                      | 0.0601                 | 0                          |
| SSPG_RS23985 | 0.0009                 | 0.0464                 | 0.01891                    |
| SSPG_RS24010 | 0                      | 0                      | 0                          |
| SSPG_RS24025 | 0                      | 0.07395                | 0                          |
| SSPG_RS24030 | 0.00045                | 0.01085                | 0.01985                    |
| SSPG_RS24035 | 0.0026                 | 0.0299                 | 0.08638                    |
| SSPG_RS24040 | NA                     | NA                     | NA                         |
| SSPG_RS24045 | 0                      | 0.0044                 | 0                          |
| SSPG_RS24050 | NA                     | NA                     | NA                         |
| SSPG_RS24055 | NA                     | NA                     | NA                         |
| SSPG_RS24060 | NA                     | NA                     | NA                         |
| SSPG_RS24070 | 0.0012                 | 0.023                  | 0.05357                    |
| SSPG_RS24075 | NA                     | NA                     | NA                         |
| SSPG_RS24080 | NA                     | NA                     | NA                         |
| SSPG_RS24085 | 0.0029                 | 0.02005                | NA                         |
| SSPG_RS24090 | NA                     | NA                     | NA                         |
| SSPG_RS24095 | NA                     | NA                     | NA                         |
| SSPG_RS24100 | NA                     | NA                     | NA                         |
| SSPG_RS24105 | 0.00255                | 0.01345                | NA                         |
| SSPG_RS24110 | 0.0045                 | 0.0337                 | 0.13439                    |
| SSPG_RS24125 | NA                     | NA                     | NA                         |
| SSPG_RS24130 | NA                     | NA                     | NA                         |
| SSPG_RS24135 | 0                      | 0.0515                 | 0                          |
| SSPG_RS24140 | NA                     | NA                     | NA                         |
| SSPG_RS24160 | 0.0008                 | 0.0238                 | 0.03383                    |
| SSPG_RS24165 | NA                     | NA                     | NA                         |
| SSPG_RS24170 | 0.0049                 | 0.0256                 | 0.19117                    |
| SSPG_RS24175 | NA                     | NA                     | NA                         |
| SSPG_RS24190 | 0.0063                 | 0.1215                 | 0.05196                    |
| SSPG_RS24200 | 0.0042                 | 0.1656                 | 0.02556                    |
| SSPG_RS24215 | 0.0028                 | 0.0787                 | 0.03528                    |
| SSPG_RS24220 | 0.001                  | 0.0557                 | 0.01732                    |
| SSPG_RS24230 | 0                      | 0.0159                 | 0                          |
| SSPG_RS24240 | 0.00045                | 0.0281                 | 0.01326                    |
| SSPG_RS24245 | 0.0022                 | 0.1116                 | 0.01964                    |
| SSPG_RS24250 | NA                     | NA                     | NA                         |
| SSPG_RS24255 | 0.0012                 | 0.0565                 | 0.02165                    |
| SSPG_RS24260 | NA                     | NA                     | NA                         |
| SSPG_RS24265 | 0                      | 0                      | 0                          |
| SSPG_RS24270 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$                  | $dS$                 | $\omega$            |
|--------------|-----------------------|----------------------|---------------------|
| SSPG_RS24280 | NA                    | NA                   | NA                  |
| SSPG_RS24285 | 0                     | 0.0073               | 0                   |
| SSPG_RS24290 | 0                     | 0.0035               | 0                   |
| SSPG_RS24305 | 0                     | 0                    | 0                   |
| SSPG_RS24315 | NA                    | NA                   | NA                  |
| SSPG_RS24320 | NA                    | NA                   | NA                  |
| SSPG_RS24330 | NA                    | NA                   | NA                  |
| SSPG_RS24335 | 0                     | 0.0279               | 0                   |
| SSPG_RS24365 | 0                     | 0                    | 0                   |
| SSPG_RS24370 | NA                    | NA                   | NA                  |
| SSPG_RS24390 | 0.0022                | 0.0442               | 0.05075             |
| SSPG_RS24395 | 0                     | 0.0364               | 0                   |
| SSPG_RS24400 | 0.0013                | 0.0442               | 0.03016             |
| SSPG_RS24405 | 0                     | 0.0219               | 0                   |
| SSPG_RS24410 | 0.001                 | 0.0096               | 0.10902             |
| SSPG_RS24415 | NA                    | NA                   | NA                  |
| SSPG_RS24420 | NA                    | NA                   | NA                  |
| SSPG_RS24425 | NA                    | NA                   | NA                  |
| SSPG_RS24430 | 0                     | 0.0536               | 0                   |
| SSPG_RS24435 | NA                    | NA                   | NA                  |
| SSPG_RS24440 | NA                    | NA                   | NA                  |
| SSPG_RS24445 | NA                    | NA                   | NA                  |
| SSPG_RS24455 | NA                    | NA                   | NA                  |
| SSPG_RS24470 | NA                    | NA                   | NA                  |
| SSPG_RS24475 | NA                    | NA                   | NA                  |
| SSPG_RS24485 | 0.0021                | 0.0352               | 0.05955             |
| SSPG_RS24490 | 0                     | 0.0173               | 0                   |
| SSPG_RS24495 | 0                     | 0.0226               | 0                   |
| SSPG_RS24505 | 0.0005666666666666667 | 0.003333333333333333 | 0.05525666666666667 |
| SSPG_RS24515 | NA                    | NA                   | NA                  |
| SSPG_RS24520 | NA                    | NA                   | NA                  |
| SSPG_RS24540 | NA                    | NA                   | NA                  |
| SSPG_RS24545 | 0.0025                | 0.0174               | 0.14107             |
| SSPG_RS24550 | 0.000725              | 0.0456               | 0.0109175           |
| SSPG_RS24555 | 0                     | 0.0062               | 0                   |
| SSPG_RS24565 | 0.0036                | 0.024                | 0.14864             |
| SSPG_RS24575 | 0.0021                | 0.0246               | 0.08604             |
| SSPG_RS24585 | 0.0023                | 0.0281               | 0.08068             |
| SSPG_RS24590 | NA                    | NA                   | NA                  |
| SSPG_RS24595 | 0.0097                | 0                    | NA                  |
| SSPG_RS24600 | 0.0021                | 0                    | NA                  |
| SSPG_RS24605 | 0                     | 0                    | 0                   |
| SSPG_RS24610 | 0                     | 0                    | 0                   |
| SSPG_RS24625 | 0.00075               | 0.00695              | 0.05523             |
| SSPG_RS24630 | NA                    | NA                   | NA                  |
| SSPG_RS24640 | 0                     | 0.013                | 0                   |
| SSPG_RS24655 | NA                    | NA                   | NA                  |

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Table S3 – continued from previous page

| Gene         | $dN$     | $dS$     | $\omega$ |
|--------------|----------|----------|----------|
| SSPG_RS24670 | NA       | NA       | NA       |
| SSPG_RS24675 | NA       | NA       | NA       |
| SSPG_RS24680 | NA       | NA       | NA       |
| SSPG_RS24685 | NA       | NA       | NA       |
| SSPG_RS24690 | 0        | 0.0043   | 0        |
| SSPG_RS24705 | NA       | NA       | NA       |
| SSPG_RS24710 | NA       | NA       | NA       |
| SSPG_RS24715 | NA       | NA       | NA       |
| SSPG_RS24725 | NA       | NA       | NA       |
| SSPG_RS24730 | 0.0032   | 0.0184   | 0.17307  |
| SSPG_RS24735 | NA       | NA       | NA       |
| SSPG_RS24745 | 0        | 0.0128   | 0        |
| SSPG_RS24765 | NA       | NA       | NA       |
| SSPG_RS24770 | NA       | NA       | NA       |
| SSPG_RS24775 | 0        | 0.0523   | 0        |
| SSPG_RS24780 | NA       | NA       | NA       |
| SSPG_RS24785 | NA       | NA       | NA       |
| SSPG_RS24790 | NA       | NA       | NA       |
| SSPG_RS24795 | NA       | NA       | NA       |
| SSPG_RS24800 | NA       | NA       | NA       |
| SSPG_RS24805 | NA       | NA       | NA       |
| SSPG_RS24810 | 0        | 0.0242   | 0        |
| SSPG_RS24915 | NA       | NA       | NA       |
| SSPG_RS24925 | 0.0014   | 0.0126   | 0.1076   |
| SSPG_RS24935 | 0        | 0        | 0        |
| SSPG_RS24940 | 0.002525 | 0.019525 | NA       |
| SSPG_RS24945 | 0.0008   | 0.031    | 0.02697  |
| SSPG_RS24950 | 0.0059   | 0.0317   | 0.18495  |
| SSPG_RS24955 | NA       | NA       | NA       |
| SSPG_RS24970 | NA       | NA       | NA       |
| SSPG_RS24975 | NA       | NA       | NA       |
| SSPG_RS24980 | 0.0034   | 0.0638   | 0.05379  |
| SSPG_RS24985 | 0        | 0.0706   | 0        |
| SSPG_RS24995 | 0        | 0.0177   | 0        |
| SSPG_RS25000 | 0        | 0        | 0        |
| SSPG_RS25015 | 0        | 0        | 0        |
| SSPG_RS25020 | 0        | 0.007    | 0        |
| SSPG_RS25035 | 0        | 0.035    | 0        |
| SSPG_RS25040 | 0        | 0.0485   | 0        |
| SSPG_RS25045 | 0.0006   | 0.1235   | 0.00374  |
| SSPG_RS25050 | 0.002    | 0.0133   | 0.15352  |
| SSPG_RS25060 | NA       | NA       | NA       |
| SSPG_RS25070 | NA       | NA       | NA       |
| SSPG_RS25080 | 0.00285  | 0.05795  | 0.07863  |
| SSPG_RS25095 | 0        | 0        | 0        |
| SSPG_RS25105 | 0        | 0        | 0        |
| SSPG_RS25110 | NA       | NA       | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$    | $\omega$ |
|--------------|--------|---------|----------|
| SSPG_RS25115 | NA     | NA      | NA       |
| SSPG_RS25120 | NA     | NA      | NA       |
| SSPG_RS25125 | 0      | 0       | 0        |
| SSPG_RS25130 | NA     | NA      | NA       |
| SSPG_RS25135 | NA     | NA      | NA       |
| SSPG_RS25140 | 0.001  | 0       | NA       |
| SSPG_RS25145 | 0.0017 | 0.03485 | NA       |
| SSPG_RS25150 | NA     | NA      | NA       |
| SSPG_RS25155 | NA     | NA      | NA       |
| SSPG_RS25160 | NA     | NA      | NA       |
| SSPG_RS25165 | 0      | 0       | 0        |
| SSPG_RS25170 | 0.0025 | 0.0264  | 0.09654  |
| SSPG_RS25185 | 0.0041 | 0.0649  | 0.06363  |
| SSPG_RS25195 | 0      | 0.0626  | 0        |
| SSPG_RS25200 | 0      | 0       | 0        |
| SSPG_RS25215 | NA     | NA      | NA       |
| SSPG_RS25220 | NA     | NA      | NA       |
| SSPG_RS25225 | 0      | 0.0347  | 0        |
| SSPG_RS25230 | NA     | NA      | NA       |
| SSPG_RS25240 | NA     | NA      | NA       |
| SSPG_RS25245 | 0      | 0       | 0        |
| SSPG_RS25260 | NA     | NA      | NA       |
| SSPG_RS25280 | NA     | NA      | NA       |
| SSPG_RS25285 | 0.0007 | 0.0039  | 0.18232  |
| SSPG_RS25290 | 0.0007 | 0       | NA       |
| SSPG_RS25310 | 0      | 0.0098  | 0        |
| SSPG_RS25315 | 0      | 0       | 0        |
| SSPG_RS25320 | NA     | NA      | NA       |
| SSPG_RS25325 | NA     | NA      | NA       |
| SSPG_RS25335 | NA     | NA      | NA       |
| SSPG_RS25345 | 0.003  | 0       | NA       |
| SSPG_RS25355 | 0.0023 | 0.0308  | 0.07477  |
| SSPG_RS25365 | 0.0006 | 0.0144  | 0.0398   |
| SSPG_RS25390 | 0      | 0       | 0        |
| SSPG_RS25395 | NA     | NA      | NA       |
| SSPG_RS25400 | 0.0005 | 0       | NA       |
| SSPG_RS25410 | 0      | 0       | 0        |
| SSPG_RS25415 | NA     | NA      | NA       |
| SSPG_RS25420 | 0      | 0       | 0        |
| SSPG_RS25435 | NA     | NA      | NA       |
| SSPG_RS25440 | NA     | NA      | NA       |
| SSPG_RS25445 | 0      | 0.00365 | 0        |
| SSPG_RS25475 | NA     | NA      | NA       |
| SSPG_RS25495 | 0      | 0       | 0        |
| SSPG_RS25505 | NA     | NA      | NA       |
| SSPG_RS25510 | NA     | NA      | NA       |
| SSPG_RS25515 | 0.0021 | 0.0166  | 0.12447  |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$               | $\omega$ |
|--------------|--------|--------------------|----------|
| SSPG_RS25520 | NA     | NA                 | NA       |
| SSPG_RS25530 | 0      | 0.0002             | 0        |
| SSPG_RS25535 | 0      | 0.0091             | 0        |
| SSPG_RS25540 | 0.0009 | 0.0211             | 0.04035  |
| SSPG_RS25545 | 0.0003 | 0.0396333333333333 | 0.01576  |
| SSPG_RS25560 | NA     | NA                 | NA       |
| SSPG_RS25565 | NA     | NA                 | NA       |
| SSPG_RS25585 | NA     | NA                 | NA       |
| SSPG_RS25590 | NA     | NA                 | NA       |
| SSPG_RS25595 | NA     | NA                 | NA       |
| SSPG_RS25600 | 0      | 0.0303             | 0        |
| SSPG_RS25610 | 0      | 0.08315            | 0        |
| SSPG_RS25625 | NA     | NA                 | NA       |
| SSPG_RS25630 | NA     | NA                 | NA       |
| SSPG_RS25635 | NA     | NA                 | NA       |
| SSPG_RS25640 | NA     | NA                 | NA       |
| SSPG_RS25645 | NA     | NA                 | NA       |
| SSPG_RS25650 | NA     | NA                 | NA       |
| SSPG_RS25655 | 0      | 0.0335             | 0        |
| SSPG_RS25660 | NA     | NA                 | NA       |
| SSPG_RS25670 | 0.0045 | 0.0795             | 0.03147  |
| SSPG_RS25680 | 0      | 0.0498             | 0        |
| SSPG_RS25685 | NA     | NA                 | NA       |
| SSPG_RS25690 | NA     | NA                 | NA       |
| SSPG_RS25695 | 0.0027 | 0.0232             | 0.11564  |
| SSPG_RS25700 | NA     | NA                 | NA       |
| SSPG_RS25705 | NA     | NA                 | NA       |
| SSPG_RS25710 | NA     | NA                 | NA       |
| SSPG_RS25715 | 0      | 0.0277             | 0        |
| SSPG_RS25730 | 0      | 0.0295             | 0        |
| SSPG_RS25740 | NA     | NA                 | NA       |
| SSPG_RS25745 | NA     | NA                 | NA       |
| SSPG_RS25750 | 0      | 0                  | 0        |
| SSPG_RS25760 | 0.0022 | 0.0313             | 0.0697   |
| SSPG_RS25785 | 0.001  | 0.054              | 0.01823  |
| SSPG_RS25790 | 0      | 0                  | 0        |
| SSPG_RS25795 | 0.0022 | 0.0108             | 0.2086   |
| SSPG_RS25810 | 0.0004 | 0.0289             | 0.01325  |
| SSPG_RS25815 | 0.0028 | 0                  | NA       |
| SSPG_RS25820 | 0      | 0.0085             | 0        |
| SSPG_RS25850 | 0.0007 | 0.0217             | 0.0306   |
| SSPG_RS25890 | NA     | NA                 | NA       |
| SSPG_RS25895 | NA     | NA                 | NA       |
| SSPG_RS25900 | NA     | NA                 | NA       |
| SSPG_RS25905 | 0.0009 | 0.0254             | 0.03622  |
| SSPG_RS25910 | NA     | NA                 | NA       |
| SSPG_RS25930 | 0.0018 | 0.0214             | 0.08609  |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$   | $\omega$ |
|--------------|--------|--------|----------|
| SSPG_RS25940 | 0      | 0.012  | 0        |
| SSPG_RS25945 | 0      | 0.0112 | 0        |
| SSPG_RS25955 | NA     | NA     | NA       |
| SSPG_RS25960 | NA     | NA     | NA       |
| SSPG_RS25970 | NA     | NA     | NA       |
| SSPG_RS25985 | NA     | NA     | NA       |
| SSPG_RS26015 | NA     | NA     | NA       |
| SSPG_RS26020 | 0.0014 | 0.0189 | 0.07649  |
| SSPG_RS26025 | NA     | NA     | NA       |
| SSPG_RS26035 | NA     | NA     | NA       |
| SSPG_RS26040 | NA     | NA     | NA       |
| SSPG_RS26045 | NA     | NA     | NA       |
| SSPG_RS26050 | NA     | NA     | NA       |
| SSPG_RS26055 | NA     | NA     | NA       |
| SSPG_RS26065 | NA     | NA     | NA       |
| SSPG_RS26070 | NA     | NA     | NA       |
| SSPG_RS26090 | 0.0006 | 0.0222 | 0.02818  |
| SSPG_RS26095 | NA     | NA     | NA       |
| SSPG_RS26190 | 0.0126 | 0.033  | 0.38007  |
| SSPG_RS26195 | 0.0043 | 0.0499 | 0.08596  |
| SSPG_RS26200 | 0.0016 | 0.0155 | 0.10365  |
| SSPG_RS26210 | 0.0009 | 0.0407 | 0.02174  |
| SSPG_RS26215 | 0      | 0.0237 | 0        |
| SSPG_RS26220 | 0.0012 | 0.0267 | 0.04656  |
| SSPG_RS26225 | 0      | 0.0577 | 0        |
| SSPG_RS26235 | 0      | 0.0825 | 0        |
| SSPG_RS26245 | 0      | 0      | 0        |
| SSPG_RS26250 | 0      | 0.0093 | 0        |
| SSPG_RS26255 | 0      | 0.033  | 0        |
| SSPG_RS26260 | 0      | 0.0376 | 0        |
| SSPG_RS26265 | 0      | 0.0092 | 0        |
| SSPG_RS26270 | 0      | 0      | 0        |
| SSPG_RS26275 | 0      | 0.0059 | 0        |
| SSPG_RS26280 | 0      | 0.0145 | 0        |
| SSPG_RS26285 | 0      | 0.0068 | 0        |
| SSPG_RS26295 | 0      | 0.0103 | 0        |
| SSPG_RS26305 | 0      | 0      | 0        |
| SSPG_RS26310 | 0      | 0.0175 | 0        |
| SSPG_RS26315 | NA     | NA     | NA       |
| SSPG_RS26325 | NA     | NA     | NA       |
| SSPG_RS26330 | NA     | NA     | NA       |
| SSPG_RS26335 | 0.002  | 0.0124 | 0.16485  |
| SSPG_RS26345 | NA     | NA     | NA       |
| SSPG_RS26350 | 0      | 0.0206 | 0        |
| SSPG_RS26355 | 0.0025 | 0.1352 | 0.01877  |
| SSPG_RS26375 | 0.0027 | 0.0364 | 0.07319  |
| SSPG_RS26380 | NA     | NA     | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$   | $\omega$ |
|--------------|--------|--------|----------|
| SSPG_RS26385 | NA     | NA     | NA       |
| SSPG_RS26390 | NA     | NA     | NA       |
| SSPG_RS26400 | NA     | NA     | NA       |
| SSPG_RS26415 | NA     | NA     | NA       |
| SSPG_RS26440 | NA     | NA     | NA       |
| SSPG_RS26445 | 0      | 0      | 0        |
| SSPG_RS26465 | 0      | 0.0248 | 0        |
| SSPG_RS26470 | NA     | NA     | NA       |
| SSPG_RS26475 | NA     | NA     | NA       |
| SSPG_RS26485 | NA     | NA     | NA       |
| SSPG_RS26505 | 0      | 0.0239 | 0        |
| SSPG_RS26520 | NA     | NA     | NA       |
| SSPG_RS26525 | 0      | 0.0681 | 0        |
| SSPG_RS26535 | 0.0114 | 0.0336 | 0.33815  |
| SSPG_RS26540 | 0.0071 | 0.0996 | 0.07155  |
| SSPG_RS26545 | NA     | NA     | NA       |
| SSPG_RS26560 | NA     | NA     | NA       |
| SSPG_RS26570 | NA     | NA     | NA       |
| SSPG_RS26575 | 0      | 0.0323 | 0        |
| SSPG_RS26585 | NA     | NA     | NA       |
| SSPG_RS26590 | NA     | NA     | NA       |
| SSPG_RS26595 | NA     | NA     | NA       |
| SSPG_RS26600 | NA     | NA     | NA       |
| SSPG_RS26610 | NA     | NA     | NA       |
| SSPG_RS26625 | NA     | NA     | NA       |
| SSPG_RS26635 | NA     | NA     | NA       |
| SSPG_RS26645 | 0      | 0.0781 | 0        |
| SSPG_RS26650 | 0      | 0.0102 | 0        |
| SSPG_RS26670 | NA     | NA     | NA       |
| SSPG_RS26675 | NA     | NA     | NA       |
| SSPG_RS26680 | NA     | NA     | NA       |
| SSPG_RS26690 | NA     | NA     | NA       |
| SSPG_RS26705 | NA     | NA     | NA       |
| SSPG_RS26715 | NA     | NA     | NA       |
| SSPG_RS26725 | NA     | NA     | NA       |
| SSPG_RS26730 | NA     | NA     | NA       |
| SSPG_RS26740 | NA     | NA     | NA       |
| SSPG_RS26750 | 0      | 0      | 0        |
| SSPG_RS26760 | 0      | 0.0256 | 0        |
| SSPG_RS26765 | 0.0009 | 0.0214 | 0.04098  |
| SSPG_RS26795 | 0.0035 | 0.0572 | 0.06077  |
| SSPG_RS26800 | 0.0009 | 0.0248 | 0.0364   |
| SSPG_RS26805 | 0.0029 | 0.0136 | 0.21487  |
| SSPG_RS26815 | 0      | 0      | 0        |
| SSPG_RS26825 | 0.0013 | 0.0219 | 0.05958  |
| SSPG_RS26835 | NA     | NA     | NA       |
| SSPG_RS26845 | 0.0015 | 0.0457 | 0.03252  |

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Table S3 – continued from previous page

| Gene         | $dN$                 | $dS$    | $\omega$            |
|--------------|----------------------|---------|---------------------|
| SSPG_RS26850 | NA                   | NA      | NA                  |
| SSPG_RS26860 | NA                   | NA      | NA                  |
| SSPG_RS26865 | NA                   | NA      | NA                  |
| SSPG_RS26875 | 0.00085              | 0.0367  | 0.016575            |
| SSPG_RS26880 | 0.0016               | 0       | NA                  |
| SSPG_RS26885 | 0                    | 0       | 0                   |
| SSPG_RS26895 | 0                    | 0.02135 | 0                   |
| SSPG_RS26910 | NA                   | NA      | NA                  |
| SSPG_RS26925 | NA                   | NA      | NA                  |
| SSPG_RS26940 | 0                    | 0       | 0                   |
| SSPG_RS26960 | 0.0005               | 0.0351  | 0.01411             |
| SSPG_RS26985 | 0.001066666666666667 | 0.03    | 0.05106666666666667 |
| SSPG_RS26995 | 0.00275              | 0       | NA                  |
| SSPG_RS27000 | 0.0005               | 0.0471  | 0.01025             |
| SSPG_RS27010 | 0.0021               | 0.0248  | 0.156895            |
| SSPG_RS27030 | NA                   | NA      | NA                  |
| SSPG_RS27035 | NA                   | NA      | NA                  |
| SSPG_RS27040 | 0.0012               | 0.0187  | 0.06508             |
| SSPG_RS27070 | 0                    | 0.0239  | 0                   |
| SSPG_RS27075 | 0                    | 0.0098  | 0                   |
| SSPG_RS27080 | 0                    | 0.0485  | 0                   |
| SSPG_RS27095 | 0                    | 0       | 0                   |
| SSPG_RS27105 | 0                    | 0       | 0                   |
| SSPG_RS27115 | 0                    | 0       | 0                   |
| SSPG_RS27130 | 0.0021               | 0.0469  | 0.04383             |
| SSPG_RS27135 | 0.001                | 0       | NA                  |
| SSPG_RS27140 | NA                   | NA      | NA                  |
| SSPG_RS27145 | 0.0017               | 0.0102  | 0.17049             |
| SSPG_RS27150 | 0.0006               | 0.0551  | 0.01143             |
| SSPG_RS27155 | 0                    | 0.0412  | 0                   |
| SSPG_RS27170 | 0.0021               | 0.0295  | 0.06994             |
| SSPG_RS27180 | 0                    | 0.024   | 0                   |
| SSPG_RS27190 | 0                    | 0.0265  | 0                   |
| SSPG_RS27195 | NA                   | NA      | NA                  |
| SSPG_RS27205 | 0.0005               | 0.0202  | 0.02284             |
| SSPG_RS27215 | 0                    | 0       | 0                   |
| SSPG_RS27220 | 0                    | 0       | 0                   |
| SSPG_RS27225 | NA                   | NA      | NA                  |
| SSPG_RS27230 | NA                   | NA      | NA                  |
| SSPG_RS27235 | NA                   | NA      | NA                  |
| SSPG_RS27240 | NA                   | NA      | NA                  |
| SSPG_RS27265 | 0                    | 0.0344  | 0                   |
| SSPG_RS27270 | 0                    | 0       | 0                   |
| SSPG_RS27280 | 0                    | 0.1131  | 0                   |
| SSPG_RS27285 | NA                   | NA      | NA                  |
| SSPG_RS27295 | NA                   | NA      | NA                  |
| SSPG_RS27305 | 0                    | 0.0308  | 0                   |

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Table S3 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$           |
|--------------|----------------------|--------------------|--------------------|
| SSPG_RS27310 | 0.0006               | 0.0082             | 0.02488            |
| SSPG_RS27315 | NA                   | NA                 | NA                 |
| SSPG_RS27320 | 0                    | 0                  | 0                  |
| SSPG_RS27330 | NA                   | NA                 | NA                 |
| SSPG_RS27335 | NA                   | NA                 | NA                 |
| SSPG_RS27350 | 0                    | 0                  | 0                  |
| SSPG_RS27360 | 0.001333333333333333 | 0.0183333333333333 | 0.0497033333333333 |
| SSPG_RS27365 | 0                    | 0                  | 0                  |
| SSPG_RS27370 | 0                    | 0.0404             | 0                  |
| SSPG_RS27375 | NA                   | NA                 | NA                 |
| SSPG_RS27380 | 0                    | 0                  | 0                  |
| SSPG_RS27390 | 0                    | 0.0209             | 0                  |
| SSPG_RS27405 | 0                    | 0.0138             | 0                  |
| SSPG_RS27415 | NA                   | NA                 | NA                 |
| SSPG_RS27425 | 0.0009               | 0.0219             | 0.04114            |
| SSPG_RS27430 | NA                   | NA                 | NA                 |
| SSPG_RS27435 | 0                    | 0.1312             | 0                  |
| SSPG_RS27455 | 0                    | 0.0404             | 0                  |
| SSPG_RS27465 | 0.0017               | 0.0418             | 0.03984            |
| SSPG_RS27470 | NA                   | NA                 | NA                 |
| SSPG_RS27485 | 0.0009               | 0.0396666666666667 | 0.03396            |
| SSPG_RS27490 | 0                    | 0.0289             | 0                  |
| SSPG_RS27500 | 0.0017               | 0                  | NA                 |
| SSPG_RS27505 | 0.00165              | 0.03175            | 0.08949            |
| SSPG_RS27510 | 0.0007               | 0.0207             | 0.03527            |
| SSPG_RS27520 | 0                    | 0                  | 0                  |
| SSPG_RS27600 | 0                    | 0.02895            | 0                  |
| SSPG_RS27615 | NA                   | NA                 | NA                 |
| SSPG_RS27620 | 0                    | 0.0292             | 0                  |
| SSPG_RS27630 | 0                    | 0                  | 0                  |
| SSPG_RS27635 | 0                    | 0.0107             | 0                  |
| SSPG_RS27640 | 0                    | 0                  | 0                  |
| SSPG_RS27645 | 0                    | 0.0044             | 0                  |
| SSPG_RS27655 | NA                   | NA                 | NA                 |
| SSPG_RS27695 | 0                    | 0.0375             | 0                  |
| SSPG_RS27700 | 0.0021               | 0.0252             | 0.08531            |
| SSPG_RS27710 | 0                    | 0.0408             | 0                  |
| SSPG_RS27715 | 0.0044               | 0.0291             | 0.15267            |
| SSPG_RS27725 | NA                   | NA                 | NA                 |
| SSPG_RS27735 | NA                   | NA                 | NA                 |
| SSPG_RS27740 | NA                   | NA                 | NA                 |
| SSPG_RS27745 | 0.0007               | 0                  | NA                 |
| SSPG_RS27755 | 0.0027               | 0.0998             | 0.02697            |
| SSPG_RS27760 | 0.0021               | 0.0597             | 0.03587            |
| SSPG_RS27765 | NA                   | NA                 | NA                 |
| SSPG_RS27770 | NA                   | NA                 | NA                 |
| SSPG_RS27780 | NA                   | NA                 | NA                 |

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Table S3 – continued from previous page

| Gene         | $dN$   | $dS$                 | $\omega$ |
|--------------|--------|----------------------|----------|
| SSPG_RS27790 | 0.0014 | 0.0538               | 0.02534  |
| SSPG_RS27800 | 0      | 0.0365               | 0        |
| SSPG_RS27805 | 0.0005 | 0.003666666666666667 | NA       |
| SSPG_RS27810 | 0.0026 | 0                    | NA       |
| SSPG_RS27815 | 0      | 0.0208               | 0        |
| SSPG_RS27840 | 0.0022 | 0.0271               | 0.0801   |
| SSPG_RS27845 | 0.0036 | 0.0188               | 0.19049  |
| SSPG_RS27865 | NA     | NA                   | NA       |
| SSPG_RS27870 | NA     | NA                   | NA       |
| SSPG_RS27885 | 0      | 0.0351               | 0        |
| SSPG_RS27895 | 0.0015 | 0                    | NA       |
| SSPG_RS27915 | 0.0006 | 0.0756               | 0.00829  |
| SSPG_RS27930 | 0.0011 | 0.0548               | 0.01961  |
| SSPG_RS27935 | 0.0013 | 0.0191               | 0.06598  |
| SSPG_RS27945 | 0.0016 | 0.0086               | 0.19077  |
| SSPG_RS27955 | 0.0027 | 0.0165               | 0.16325  |
| SSPG_RS27960 | 0      | 0                    | 0        |
| SSPG_RS27965 | NA     | NA                   | NA       |
| SSPG_RS27975 | 0.0005 | 0.027                | 0.0201   |
| SSPG_RS27990 | 0      | 0.0002               | 0        |
| SSPG_RS27995 | 0.0009 | 0.0112               | 0.08131  |
| SSPG_RS28000 | 0      | 0.1299               | 0        |
| SSPG_RS28010 | 0      | 0.0053               | 0        |
| SSPG_RS28020 | NA     | NA                   | NA       |
| SSPG_RS28035 | 0.0011 | 0.0204               | 0.05379  |
| SSPG_RS28040 | 0.0004 | 0.0052               | 0.07798  |
| SSPG_RS28045 | 0      | 0.03275              | 0        |
| SSPG_RS28050 | 0.0012 | 0.0554               | 0.02112  |
| SSPG_RS28070 | 0      | 0.0312               | 0        |
| SSPG_RS28075 | NA     | NA                   | NA       |
| SSPG_RS28085 | NA     | NA                   | NA       |
| SSPG_RS28120 | NA     | NA                   | NA       |
| SSPG_RS28125 | NA     | NA                   | NA       |
| SSPG_RS28140 | 0.0753 | 21.7852              | 0.00346  |
| SSPG_RS28195 | NA     | NA                   | NA       |
| SSPG_RS28200 | NA     | NA                   | NA       |
| SSPG_RS28205 | NA     | NA                   | NA       |
| SSPG_RS28215 | 0.2174 | 5.9071               | 0.03681  |
| SSPG_RS28220 | 0      | 0                    | 0        |
| SSPG_RS28230 | 0      | 0.0127               | 0        |
| SSPG_RS28245 | 0      | 0.125                | 0        |
| SSPG_RS28250 | 0.0015 | 0.0262               | 0.05686  |
| SSPG_RS28260 | 0      | 0.0974               | 0        |
| SSPG_RS28265 | NA     | NA                   | NA       |
| SSPG_RS28280 | 0.0014 | 0                    | NA       |
| SSPG_RS28285 | 0      | 0.0303               | 0        |
| SSPG_RS28320 | NA     | NA                   | NA       |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS28340 | 0.0006                 | 0.0618                 | 0.00986                    |
| SSPG_RS28355 | 0.0017                 | 0.0121                 | 0.14082                    |
| SSPG_RS28380 | 0                      | 0                      | 0                          |
| SSPG_RS28385 | 0                      | 0.0143                 | 0                          |
| SSPG_RS28390 | 0.00125                | 0.02135                | 0.16583                    |
| SSPG_RS28395 | 0                      | 0                      | 0                          |
| SSPG_RS28400 | 0                      | 0                      | 0                          |
| SSPG_RS28405 | 0                      | 0                      | 0                          |
| SSPG_RS28410 | NA                     | NA                     | NA                         |
| SSPG_RS28430 | 0.0013                 | 0.0288                 | 0.0461                     |
| SSPG_RS28435 | 0                      | 0.024                  | 0                          |
| SSPG_RS28440 | 0                      | 0                      | 0                          |
| SSPG_RS28445 | NA                     | NA                     | NA                         |
| SSPG_RS28450 | 0.00145                | 0                      | NA                         |
| SSPG_RS28460 | 0.001                  | 0.0092                 | 0.10804                    |
| SSPG_RS28465 | NA                     | NA                     | NA                         |
| SSPG_RS28470 | NA                     | NA                     | NA                         |
| SSPG_RS28480 | NA                     | NA                     | NA                         |
| SSPG_RS28485 | NA                     | NA                     | NA                         |
| SSPG_RS28490 | NA                     | NA                     | NA                         |
| SSPG_RS28495 | NA                     | NA                     | NA                         |
| SSPG_RS28500 | NA                     | NA                     | NA                         |
| SSPG_RS28505 | 0                      | 0                      | 0                          |
| SSPG_RS28510 | 0.0008                 | 0.0361                 | 0.02232                    |
| SSPG_RS28515 | NA                     | NA                     | NA                         |
| SSPG_RS28520 | 0.0027                 | 0                      | NA                         |
| SSPG_RS28530 | 0                      | 0                      | 0                          |
| SSPG_RS28545 | 0.0014                 | 0.0934                 | 0.01483                    |
| SSPG_RS28550 | 0.0049                 | 0.0359                 | 0.13542                    |
| SSPG_RS28560 | NA                     | NA                     | NA                         |
| SSPG_RS28565 | 0.00185                | 0.0079                 | NA                         |
| SSPG_RS28570 | 0.0026                 | 0.0275                 | 0.093                      |
| SSPG_RS28575 | 0                      | 0                      | 0                          |
| SSPG_RS28580 | 0.0008                 | 0.00235                | NA                         |
| SSPG_RS28585 | NA                     | NA                     | NA                         |
| SSPG_RS28620 | 0                      | 0.0335                 | 0                          |
| SSPG_RS28630 | NA                     | NA                     | NA                         |
| SSPG_RS28655 | 0.0004                 | 0.0278                 | 0.01327                    |
| SSPG_RS28675 | NA                     | NA                     | NA                         |
| SSPG_RS28680 | 0                      | 0.0168                 | 0                          |
| SSPG_RS28685 | 0                      | 0.00455                | 0                          |
| SSPG_RS28695 | NA                     | NA                     | NA                         |
| SSPG_RS28705 | 0.0018                 | 0.0144                 | 0.12514                    |
| SSPG_RS28715 | NA                     | NA                     | NA                         |
| SSPG_RS28725 | 0.0005                 | 0.025                  | 0.02157                    |
| SSPG_RS28730 | 0.00095                | 0.0163                 | 0.108745                   |
| SSPG_RS28740 | 0                      | 0                      | 0                          |

Continued on next page

**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS28750 | 0.0159                 | 0.03605                | 0.608705                   |
| SSPG_RS28755 | 0.0022                 | 0.01865                | 0.151145                   |
| SSPG_RS28760 | 0                      | 0.0275                 | 0                          |
| SSPG_RS28770 | 0                      | 0.0079                 | 0                          |
| SSPG_RS28780 | 0                      | 0.0174                 | 0                          |
| SSPG_RS28795 | 0.0022                 | 0.0301                 | 0.07255                    |
| SSPG_RS28800 | 0.001                  | 0.0125                 | 0.08128                    |
| SSPG_RS28805 | 0.00195                | 0.0496                 | 0.040915                   |
| SSPG_RS28810 | NA                     | NA                     | NA                         |
| SSPG_RS28815 | NA                     | NA                     | NA                         |
| SSPG_RS28820 | NA                     | NA                     | NA                         |
| SSPG_RS28830 | NA                     | NA                     | NA                         |
| SSPG_RS28835 | NA                     | NA                     | NA                         |
| SSPG_RS28845 | 0.0006                 | 0.01705                | NA                         |
| SSPG_RS28855 | NA                     | NA                     | NA                         |
| SSPG_RS28875 | 0.0033                 | 0                      | NA                         |
| SSPG_RS28890 | 0.0009                 | 0.02995                | 0.015085                   |
| SSPG_RS28900 | NA                     | NA                     | NA                         |
| SSPG_RS28905 | 0                      | 0.0439                 | 0                          |
| SSPG_RS28910 | 0                      | 0.0066                 | 0                          |
| SSPG_RS28920 | 0.001                  | 0.0203                 | 0.04959                    |
| SSPG_RS28925 | 0.0012                 | 0.0199                 | 0.06079                    |
| SSPG_RS28935 | 0                      | 0.0123                 | 0                          |
| SSPG_RS28940 | 0.0013                 | 0.0248                 | 0.05334                    |
| SSPG_RS28945 | NA                     | NA                     | NA                         |
| SSPG_RS28950 | NA                     | NA                     | NA                         |
| SSPG_RS28960 | NA                     | NA                     | NA                         |
| SSPG_RS28965 | NA                     | NA                     | NA                         |
| SSPG_RS28970 | 0.0028                 | 0.03415                | 0.062955                   |
| SSPG_RS28980 | 0.00095                | 0.00245                | NA                         |
| SSPG_RS28985 | 0.0016                 | 0                      | NA                         |
| SSPG_RS28990 | NA                     | NA                     | NA                         |
| SSPG_RS29000 | 0                      | 0.0178                 | 0                          |
| SSPG_RS29010 | 0                      | 0.0328                 | 0                          |
| SSPG_RS29020 | 0                      | 0.0441                 | 0                          |
| SSPG_RS29025 | 0                      | 0                      | 0                          |
| SSPG_RS29030 | 0                      | 0.0402                 | 0                          |
| SSPG_RS29035 | NA                     | NA                     | NA                         |
| SSPG_RS29040 | NA                     | NA                     | NA                         |
| SSPG_RS29045 | 0                      | 0.0186                 | 0                          |
| SSPG_RS29185 | 0.0019                 | 0.0105                 | 0.17689                    |
| SSPG_RS29190 | 0.0016                 | 0                      | NA                         |
| SSPG_RS29200 | 0                      | 0.0147                 | 0                          |
| SSPG_RS29215 | 0                      | 0.003                  | 0                          |
| SSPG_RS29225 | 0.0017                 | 0.0414                 | 0.04139                    |
| SSPG_RS29235 | NA                     | NA                     | NA                         |
| SSPG_RS29240 | NA                     | NA                     | NA                         |

Continued on next page

**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS29255 | 0.0043                 | 0.0082                 | 0.52591                    |
| SSPG_RS29260 | 0                      | 0                      | 0                          |
| SSPG_RS29270 | NA                     | NA                     | NA                         |
| SSPG_RS29280 | 0.0021                 | 0.0095                 | 0.22263                    |
| SSPG_RS29290 | 0.015                  | 0.2131                 | 0.07032                    |
| SSPG_RS29295 | NA                     | NA                     | NA                         |
| SSPG_RS29305 | 0                      | 0                      | 0                          |
| SSPG_RS29315 | NA                     | NA                     | NA                         |
| SSPG_RS29325 | NA                     | NA                     | NA                         |
| SSPG_RS29330 | NA                     | NA                     | NA                         |
| SSPG_RS29335 | NA                     | NA                     | NA                         |
| SSPG_RS29345 | NA                     | NA                     | NA                         |
| SSPG_RS29355 | NA                     | NA                     | NA                         |
| SSPG_RS29365 | NA                     | NA                     | NA                         |
| SSPG_RS29385 | NA                     | NA                     | NA                         |
| SSPG_RS29390 | 0.0008                 | 0.034                  | 0.02421                    |
| SSPG_RS29395 | NA                     | NA                     | NA                         |
| SSPG_RS29400 | 0                      | 0                      | 0                          |
| SSPG_RS29405 | 0                      | 0.0146                 | 0                          |
| SSPG_RS29410 | NA                     | NA                     | NA                         |
| SSPG_RS29420 | 0                      | 0.0138                 | 0                          |
| SSPG_RS29425 | 0.001                  | 0.023                  | 0.04322                    |
| SSPG_RS29430 | 0.0018                 | 0.0222                 | 0.07967                    |
| SSPG_RS29435 | 0                      | 0                      | 0                          |
| SSPG_RS29440 | 0                      | 0.011                  | 0                          |
| SSPG_RS29445 | 0                      | 0.0058                 | 0                          |
| SSPG_RS29450 | 0.0047                 | 0.0503                 | 0.09423                    |
| SSPG_RS29455 | 0                      | 0                      | 0                          |
| SSPG_RS29460 | 0.0019                 | 0                      | NA                         |
| SSPG_RS29470 | 0                      | 0                      | 0                          |
| SSPG_RS29480 | NA                     | NA                     | NA                         |
| SSPG_RS29495 | 0.0016                 | 0.0193                 | 0.08083                    |
| SSPG_RS29505 | 0.003                  | 0.0078                 | 0.38952                    |
| SSPG_RS29520 | NA                     | NA                     | NA                         |
| SSPG_RS29530 | 0.0007                 | 0.0606                 | 0.01132                    |
| SSPG_RS29545 | NA                     | NA                     | NA                         |
| SSPG_RS29550 | NA                     | NA                     | NA                         |
| SSPG_RS29555 | NA                     | NA                     | NA                         |
| SSPG_RS29560 | 0                      | 0.0461                 | 0                          |
| SSPG_RS29575 | 0                      | 0.02676                | 0                          |
| SSPG_RS29580 | 0                      | 0                      | 0                          |
| SSPG_RS29585 | 0.0014                 | 0.0316                 | 0.04552                    |
| SSPG_RS29595 | 0.0013                 | 0.0228                 | 0.05658                    |
| SSPG_RS29600 | NA                     | NA                     | NA                         |
| SSPG_RS29615 | 0.001                  | 0.0433                 | 0.02383                    |
| SSPG_RS29620 | 0                      | 0                      | 0                          |
| SSPG_RS29625 | 0                      | 0                      | 0                          |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS29635 | 0.0005                 | 0.0381                 | 0.01186                    |
| SSPG_RS29645 | NA                     | NA                     | NA                         |
| SSPG_RS29650 | NA                     | NA                     | NA                         |
| SSPG_RS29655 | NA                     | NA                     | NA                         |
| SSPG_RS29660 | 0                      | 0.114                  | 0                          |
| SSPG_RS29665 | 0                      | 0.0079                 | 0                          |
| SSPG_RS29675 | 0                      | 0                      | 0                          |
| SSPG_RS29680 | NA                     | NA                     | NA                         |
| SSPG_RS29685 | 0.0033                 | 0.0131                 | 0.25067                    |
| SSPG_RS29695 | 0.0051                 | 0                      | NA                         |
| SSPG_RS29700 | 0.0043                 | 0                      | NA                         |
| SSPG_RS29705 | 0.0093                 | 0.0235                 | 0.39654                    |
| SSPG_RS29710 | 0.0549                 | 0.061                  | 0.89881                    |
| SSPG_RS29715 | 0                      | 0                      | 0                          |
| SSPG_RS29730 | NA                     | NA                     | NA                         |
| SSPG_RS29740 | 0                      | 0.0437                 | 0                          |
| SSPG_RS29750 | 0                      | 0                      | 0                          |
| SSPG_RS29755 | NA                     | NA                     | NA                         |
| SSPG_RS29760 | NA                     | NA                     | NA                         |
| SSPG_RS29775 | 0                      | 0                      | 0                          |
| SSPG_RS29780 | 0.001                  | 0.0117                 | 0.08906                    |
| SSPG_RS29785 | 0.0013                 | 0                      | NA                         |
| SSPG_RS29790 | 0                      | 0                      | 0                          |
| SSPG_RS29795 | 0                      | 0.0002                 | 0                          |
| SSPG_RS29810 | 0                      | 0                      | 0                          |
| SSPG_RS29820 | NA                     | NA                     | NA                         |
| SSPG_RS29830 | 0                      | 0.0244                 | 0                          |
| SSPG_RS29835 | NA                     | NA                     | NA                         |
| SSPG_RS29860 | NA                     | NA                     | NA                         |
| SSPG_RS29870 | 0                      | 0.0206                 | 0                          |
| SSPG_RS29875 | 0.0003                 | 0.0198                 | 0.00887                    |
| SSPG_RS29895 | 0.0023                 | 0.0211                 | 0.11133                    |
| SSPG_RS29910 | NA                     | NA                     | NA                         |
| SSPG_RS29915 | NA                     | NA                     | NA                         |
| SSPG_RS29930 | NA                     | NA                     | NA                         |
| SSPG_RS29940 | 0                      | 0.0601                 | 0                          |
| SSPG_RS29955 | 0.001                  | 0.0415                 | 0.02384                    |
| SSPG_RS29960 | 0.0009                 | 0.015                  | 0.05798                    |
| SSPG_RS30010 | 0                      | 0                      | 0                          |
| SSPG_RS30025 | NA                     | NA                     | NA                         |
| SSPG_RS30035 | NA                     | NA                     | NA                         |
| SSPG_RS30050 | NA                     | NA                     | NA                         |
| SSPG_RS30060 | NA                     | NA                     | NA                         |
| SSPG_RS30070 | NA                     | NA                     | NA                         |
| SSPG_RS30085 | 0.0066                 | 0.0173                 | 0.37951                    |
| SSPG_RS30090 | 0                      | 0.0476                 | 0                          |
| SSPG_RS30110 | 0                      | 0                      | 0                          |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| SSPG_RS30140 | 0       | 0.0907  | 0        |
| SSPG_RS30145 | NA      | NA      | NA       |
| SSPG_RS30150 | NA      | NA      | NA       |
| SSPG_RS30190 | 0.0017  | 0.0231  | 0.0726   |
| SSPG_RS30195 | 0.0027  | 0.0498  | 0.05375  |
| SSPG_RS30205 | 0.0026  | 0.0169  | 0.15203  |
| SSPG_RS30215 | 0.0019  | 0.0592  | 0.03277  |
| SSPG_RS30235 | NA      | NA      | NA       |
| SSPG_RS30240 | 0.00215 | 0.02425 | 0.048945 |
| SSPG_RS30250 | NA      | NA      | NA       |
| SSPG_RS30255 | NA      | NA      | NA       |
| SSPG_RS30265 | 0       | 0.0178  | 0        |
| SSPG_RS30270 | 0.0032  | 0.0105  | 0.30282  |
| SSPG_RS30275 | NA      | NA      | NA       |
| SSPG_RS30280 | 0.0012  | 0.0282  | 0.04292  |
| SSPG_RS30285 | 0.0029  | 0.0083  | 0.34604  |
| SSPG_RS30295 | 0.0026  | 0.0328  | 0.07789  |
| SSPG_RS30305 | 0.0029  | 0.014   | 0.20546  |
| SSPG_RS30315 | NA      | NA      | NA       |
| SSPG_RS30320 | 0.0043  | 0       | NA       |
| SSPG_RS30330 | NA      | NA      | NA       |
| SSPG_RS30340 | NA      | NA      | NA       |
| SSPG_RS30345 | NA      | NA      | NA       |
| SSPG_RS30350 | NA      | NA      | NA       |
| SSPG_RS30360 | NA      | NA      | NA       |
| SSPG_RS30365 | NA      | NA      | NA       |
| SSPG_RS30370 | NA      | NA      | NA       |
| SSPG_RS30385 | NA      | NA      | NA       |
| SSPG_RS30395 | 0.0007  | 0.0292  | 0.0249   |
| SSPG_RS30400 | 0.0007  | 0.0178  | 0.03983  |
| SSPG_RS30415 | NA      | NA      | NA       |
| SSPG_RS30420 | NA      | NA      | NA       |
| SSPG_RS30425 | NA      | NA      | NA       |
| SSPG_RS30430 | NA      | NA      | NA       |
| SSPG_RS30445 | 0       | 0.0045  | 0        |
| SSPG_RS30455 | 0.0014  | 0.0102  | 0.13656  |
| SSPG_RS30460 | 0.0045  | 0.0753  | 0.06038  |
| SSPG_RS30480 | NA      | NA      | NA       |
| SSPG_RS30485 | 0       | 0.0042  | 0        |
| SSPG_RS30500 | 0       | 0.0161  | 0        |
| SSPG_RS30510 | NA      | NA      | NA       |
| SSPG_RS30515 | NA      | NA      | NA       |
| SSPG_RS30520 | NA      | NA      | NA       |
| SSPG_RS30525 | NA      | NA      | NA       |
| SSPG_RS30530 | 0       | 0.0239  | 0        |
| SSPG_RS30535 | 0       | 0.0172  | 0        |
| SSPG_RS30540 | NA      | NA      | NA       |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS30545 | NA                     | NA                     | NA                         |
| SSPG_RS30550 | 0                      | 0                      | 0                          |
| SSPG_RS30555 | NA                     | NA                     | NA                         |
| SSPG_RS30560 | 0.00045                | 0.0495                 | 0.009195                   |
| SSPG_RS30570 | 0.0011                 | 0.0219                 | 0.04814                    |
| SSPG_RS30585 | NA                     | NA                     | NA                         |
| SSPG_RS30590 | NA                     | NA                     | NA                         |
| SSPG_RS30615 | 0.0031                 | 0.0428                 | 0.07186                    |
| SSPG_RS30635 | NA                     | NA                     | NA                         |
| SSPG_RS30645 | NA                     | NA                     | NA                         |
| SSPG_RS30650 | 0                      | 0.0595                 | 0                          |
| SSPG_RS30655 | 0                      | 0                      | 0                          |
| SSPG_RS30660 | 0                      | 0.0057                 | 0                          |
| SSPG_RS30665 | NA                     | NA                     | NA                         |
| SSPG_RS30670 | NA                     | NA                     | NA                         |
| SSPG_RS30680 | 0.00225                | 0                      | NA                         |
| SSPG_RS30685 | 0                      | 0.115                  | 0                          |
| SSPG_RS30695 | 0.0026                 | 0.0514                 | 0.05144                    |
| SSPG_RS30705 | 0.0008                 | 0.0197                 | 0.03905                    |
| SSPG_RS30715 | 0.0025                 | 0.0231                 | 0.10848                    |
| SSPG_RS30720 | NA                     | NA                     | NA                         |
| SSPG_RS30725 | NA                     | NA                     | NA                         |
| SSPG_RS30750 | 0.0022                 | 0.0347                 | 0.06381                    |
| SSPG_RS30760 | 0.0018                 | 0.0097                 | 0.18814                    |
| SSPG_RS30780 | 0                      | 0                      | 0                          |
| SSPG_RS30785 | 0.0012                 | 0.0161                 | 0.07376                    |
| SSPG_RS30790 | 0.0013                 | 0.0231                 | 0.05419                    |
| SSPG_RS30820 | 0.002                  | 0.0136                 | 0.1463                     |
| SSPG_RS30830 | 0.0013                 | 0.0395                 | 0.03316                    |
| SSPG_RS30835 | NA                     | NA                     | NA                         |
| SSPG_RS30860 | 0.0018                 | 0.0271                 | 0.06803                    |
| SSPG_RS30865 | NA                     | NA                     | NA                         |
| SSPG_RS30870 | NA                     | NA                     | NA                         |
| SSPG_RS30875 | NA                     | NA                     | NA                         |
| SSPG_RS30880 | 0                      | 0.0507                 | 0                          |
| SSPG_RS30890 | 0                      | 0.041                  | 0                          |
| SSPG_RS30905 | 0                      | 0                      | 0                          |
| SSPG_RS30910 | NA                     | NA                     | NA                         |
| SSPG_RS30955 | NA                     | NA                     | NA                         |
| SSPG_RS30960 | NA                     | NA                     | NA                         |
| SSPG_RS30970 | NA                     | NA                     | NA                         |
| SSPG_RS30980 | 0.003                  | 0.0335                 | 0.0886                     |
| SSPG_RS30990 | NA                     | NA                     | NA                         |
| SSPG_RS30995 | NA                     | NA                     | NA                         |
| SSPG_RS31005 | 0.0046                 | 0.046                  | 0.09953                    |
| SSPG_RS31015 | 0                      | 0.0584                 | 0                          |
| SSPG_RS31025 | NA                     | NA                     | NA                         |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS31030 | 0.01485                | 0.08445                | 0.149475                   |
| SSPG_RS31035 | NA                     | NA                     | NA                         |
| SSPG_RS31050 | 0                      | 0.0241                 | 0                          |
| SSPG_RS31055 | NA                     | NA                     | NA                         |
| SSPG_RS31065 | NA                     | NA                     | NA                         |
| SSPG_RS31075 | NA                     | NA                     | NA                         |
| SSPG_RS31090 | 0.0029                 | 0.0488                 | 0.05953                    |
| SSPG_RS31095 | NA                     | NA                     | NA                         |
| SSPG_RS31100 | NA                     | NA                     | NA                         |
| SSPG_RS31105 | 0.0019                 | 0.005                  | 0.38315                    |
| SSPG_RS31110 | 0.0032                 | 0.0733                 | 0.04392                    |
| SSPG_RS31120 | NA                     | NA                     | NA                         |
| SSPG_RS31125 | 0.0033                 | 0.0309                 | 0.10569                    |
| SSPG_RS31150 | 0.0005                 | 0.0287                 | 0.01773                    |
| SSPG_RS31170 | 0.0019                 | 0.0048                 | 0.40201                    |
| SSPG_RS31175 | 0                      | 0.0139                 | 0                          |
| SSPG_RS31180 | NA                     | NA                     | NA                         |
| SSPG_RS31190 | 0.0014                 | 0.018                  | 0.07555                    |
| SSPG_RS31200 | NA                     | NA                     | NA                         |
| SSPG_RS31450 | 0.0015                 | 0.00505                | NA                         |
| SSPG_RS31455 | 0.002                  | 0.0451                 | 0.04431                    |
| SSPG_RS31460 | 0.0043                 | 0.014                  | NA                         |
| SSPG_RS31465 | 0.0011                 | 0.0334                 | 0.10792                    |
| SSPG_RS31475 | NA                     | NA                     | NA                         |
| SSPG_RS31480 | 0.0012                 | 0.0121                 | 0.10201                    |
| SSPG_RS31485 | NA                     | NA                     | NA                         |
| SSPG_RS31490 | NA                     | NA                     | NA                         |
| SSPG_RS31495 | NA                     | NA                     | NA                         |
| SSPG_RS31500 | NA                     | NA                     | NA                         |
| SSPG_RS31520 | NA                     | NA                     | NA                         |
| SSPG_RS31525 | NA                     | NA                     | NA                         |
| SSPG_RS31535 | NA                     | NA                     | NA                         |
| SSPG_RS31540 | NA                     | NA                     | NA                         |
| SSPG_RS31555 | 0                      | 0.0249                 | 0                          |
| SSPG_RS31560 | 0                      | 0.0417                 | 0                          |
| SSPG_RS31565 | NA                     | NA                     | NA                         |
| SSPG_RS31585 | NA                     | NA                     | NA                         |
| SSPG_RS31630 | 0.0393                 | 0.1668                 | 0.23562                    |
| SSPG_RS31645 | NA                     | NA                     | NA                         |
| SSPG_RS31655 | 0.0272333333333333     | 0.4109                 | 0.0660566666666667         |
| SSPG_RS31660 | NA                     | NA                     | NA                         |
| SSPG_RS31670 | NA                     | NA                     | NA                         |
| SSPG_RS31675 | NA                     | NA                     | NA                         |
| SSPG_RS31680 | NA                     | NA                     | NA                         |
| SSPG_RS31685 | NA                     | NA                     | NA                         |
| SSPG_RS31720 | 0.0014                 | 0.0174                 | 0.08091                    |
| SSPG_RS31725 | 0                      | 0.0202                 | 0                          |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS31750 | 0.00535                | 0.09075                | 0.06551                    |
| SSPG_RS31760 | 0.0019                 | 0.0142                 | 0.13573                    |
| SSPG_RS31770 | NA                     | NA                     | NA                         |
| SSPG_RS31785 | NA                     | NA                     | NA                         |
| SSPG_RS31790 | 0                      | 0.0618                 | 0                          |
| SSPG_RS32050 | 0.0006                 | 0.0678                 | 0.0086                     |
| SSPG_RS32065 | NA                     | NA                     | NA                         |
| SSPG_RS32075 | 0                      | 0.0431                 | 0                          |
| SSPG_RS32080 | 0.0008                 | 0                      | NA                         |
| SSPG_RS32085 | 0                      | 0.03885                | 0                          |
| SSPG_RS32090 | 0                      | 0.0305                 | 0                          |
| SSPG_RS32095 | 0.0016                 | 0.0101                 | 0.15321                    |
| SSPG_RS32100 | 0.0009                 | 0.0414                 | 0.02154                    |
| SSPG_RS32115 | NA                     | NA                     | NA                         |
| SSPG_RS32120 | NA                     | NA                     | NA                         |
| SSPG_RS32130 | 0                      | 0.0109                 | 0                          |
| SSPG_RS32135 | NA                     | NA                     | NA                         |
| SSPG_RS32145 | 0                      | 0.0503                 | 0                          |
| SSPG_RS32150 | 0.0105                 | 0.0819                 | 0.12837                    |
| SSPG_RS32160 | 0.0017                 | 0.0405                 | 0.04288                    |
| SSPG_RS32170 | NA                     | NA                     | NA                         |
| SSPG_RS32180 | NA                     | NA                     | NA                         |
| SSPG_RS32200 | 0.0027                 | 0.0086                 | 0.30997                    |
| SSPG_RS32215 | 0.0017                 | 0.0367                 | 0.04729                    |
| SSPG_RS32245 | 0.0026                 | 0                      | NA                         |
| SSPG_RS32250 | 0.0012                 | 0.00455                | 0.1333                     |
| SSPG_RS32255 | 0.0029                 | 0.0161                 | 0.18133                    |
| SSPG_RS32265 | 0.0009                 | 0.0219                 | 0.04252                    |
| SSPG_RS32275 | NA                     | NA                     | NA                         |
| SSPG_RS32280 | 0.0017                 | 0.0047                 | 0.3559                     |
| SSPG_RS32290 | 0.0012                 | 0                      | NA                         |
| SSPG_RS32295 | 0.0007                 | 0.0209                 | 0.03259                    |
| SSPG_RS32305 | 0                      | 0                      | 0                          |
| SSPG_RS32310 | 0.0014                 | 0                      | NA                         |
| SSPG_RS32315 | NA                     | NA                     | NA                         |
| SSPG_RS32325 | 0.0049                 | 0.0189                 | 0.25753                    |
| SSPG_RS32330 | 0.0008                 | 0.0324                 | 0.02395                    |
| SSPG_RS32335 | 0.0052                 | 0.1191                 | 0.04343                    |
| SSPG_RS32345 | 0.002                  | 0.0537                 | 0.03739                    |
| SSPG_RS32350 | 0.0076                 | 0.0891                 | 0.08563                    |
| SSPG_RS32355 | 0.0089                 | 0.1308                 | 0.06841                    |
| SSPG_RS32370 | NA                     | NA                     | NA                         |
| SSPG_RS32375 | NA                     | NA                     | NA                         |
| SSPG_RS32380 | 0.0016                 | 0.0263                 | 0.06224                    |
| SSPG_RS32395 | NA                     | NA                     | NA                         |
| SSPG_RS32410 | 0.0034                 | 0.0231                 | 0.14919                    |
| SSPG_RS32415 | 0                      | 0.0261                 | 0                          |

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Table S3 – continued from previous page

| Gene         | $dN$                 | $dS$                | $\omega$           |
|--------------|----------------------|---------------------|--------------------|
| SSPG_RS32420 | 0.0045               | 0                   | NA                 |
| SSPG_RS32425 | 0.0014               | 0.008               | 0.17042            |
| SSPG_RS32430 | NA                   | NA                  | NA                 |
| SSPG_RS32435 | NA                   | NA                  | NA                 |
| SSPG_RS32440 | 0.0031               | 0.0198              | 0.1557             |
| SSPG_RS32460 | NA                   | NA                  | NA                 |
| SSPG_RS32465 | NA                   | NA                  | NA                 |
| SSPG_RS32475 | NA                   | NA                  | NA                 |
| SSPG_RS32490 | NA                   | NA                  | NA                 |
| SSPG_RS32495 | NA                   | NA                  | NA                 |
| SSPG_RS32505 | NA                   | NA                  | NA                 |
| SSPG_RS32510 | 0.002                | 0.0458              | 0.04409            |
| SSPG_RS32515 | NA                   | NA                  | NA                 |
| SSPG_RS32535 | NA                   | NA                  | NA                 |
| SSPG_RS32540 | 0                    | 0.0945              | 0                  |
| SSPG_RS32550 | 0.0004               | 0.0239              | 0.0186             |
| SSPG_RS32570 | 0.0031               | 0.0664              | 0.04631            |
| SSPG_RS32575 | 0.00105              | 0.0385              | 0.030225           |
| SSPG_RS32580 | 0                    | 0.0287              | 0                  |
| SSPG_RS32605 | NA                   | NA                  | NA                 |
| SSPG_RS32610 | 0.004                | 0.0195              | 0.20337            |
| SSPG_RS32615 | NA                   | NA                  | NA                 |
| SSPG_RS32620 | NA                   | NA                  | NA                 |
| SSPG_RS32625 | 0                    | 0.0583              | 0                  |
| SSPG_RS32630 | 0.0018               | 0.0307              | 0.060545           |
| SSPG_RS32635 | 0.0038               | 0.0298              | 0.12673            |
| SSPG_RS32645 | 0.002566666666666667 | 0.02123333333333333 | 0.1395633333333333 |
| SSPG_RS32650 | 0.0021               | 0                   | NA                 |
| SSPG_RS32655 | 0                    | 0.0121              | 0                  |
| SSPG_RS32660 | NA                   | NA                  | NA                 |
| SSPG_RS32665 | NA                   | NA                  | NA                 |
| SSPG_RS32670 | 0.0021               | 0.0139              | 0.14761            |
| SSPG_RS32685 | NA                   | NA                  | NA                 |
| SSPG_RS32690 | NA                   | NA                  | NA                 |
| SSPG_RS32695 | 0.0023               | 0.0266              | 0.08479            |
| SSPG_RS32705 | 0.0024               | 0.0164              | 0.14726            |
| SSPG_RS32710 | 0.0007               | 0.021               | 0.01648            |
| SSPG_RS32730 | NA                   | NA                  | NA                 |
| SSPG_RS32735 | 0                    | 0.0477              | 0                  |
| SSPG_RS32740 | 0.0015               | 0.0379              | 0.04058            |
| SSPG_RS32785 | NA                   | NA                  | NA                 |
| SSPG_RS32805 | NA                   | NA                  | NA                 |
| SSPG_RS32810 | NA                   | NA                  | NA                 |
| SSPG_RS32815 | NA                   | NA                  | NA                 |
| SSPG_RS32820 | 0                    | 0                   | 0                  |
| SSPG_RS32830 | 0.0011               | 0.0844              | 0.01301            |
| SSPG_RS32880 | 0                    | 0.0341              | 0                  |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$               | $\omega$ |
|--------------|---------|--------------------|----------|
| SSPG_RS32885 | 0       | 0                  | 0        |
| SSPG_RS32895 | NA      | NA                 | NA       |
| SSPG_RS32915 | NA      | NA                 | NA       |
| SSPG_RS32920 | NA      | NA                 | NA       |
| SSPG_RS32925 | NA      | NA                 | NA       |
| SSPG_RS32955 | NA      | NA                 | NA       |
| SSPG_RS32970 | 0       | 0.0364             | 0        |
| SSPG_RS32980 | 0       | 0.0532             | 0        |
| SSPG_RS32985 | 0       | 0.0231             | 0        |
| SSPG_RS32990 | 0       | 0.0361             | 0        |
| SSPG_RS33000 | 0       | 0.0425             | 0        |
| SSPG_RS33005 | 0       | 0.038              | 0        |
| SSPG_RS33055 | 0.0008  | 0.0123             | 0.06738  |
| SSPG_RS33060 | NA      | NA                 | NA       |
| SSPG_RS33070 | NA      | NA                 | NA       |
| SSPG_RS33080 | NA      | NA                 | NA       |
| SSPG_RS33090 | NA      | NA                 | NA       |
| SSPG_RS33095 | 0.0039  | 0.0197             | 0.19566  |
| SSPG_RS33110 | NA      | NA                 | NA       |
| SSPG_RS33120 | 0.0016  | 0.0036             | 0.44712  |
| SSPG_RS33125 | 0.0048  | 0                  | NA       |
| SSPG_RS33130 | NA      | NA                 | NA       |
| SSPG_RS33165 | 0.0041  | 0.0106             | 0.38946  |
| SSPG_RS33175 | 0.0018  | 0.0107             | 0.1678   |
| SSPG_RS33215 | 0.0011  | 0.0357             | 0.03012  |
| SSPG_RS33220 | 0       | 0.0072             | 0        |
| SSPG_RS33230 | 0       | 0.0117             | 0        |
| SSPG_RS33245 | 0.0057  | 0.0555             | 0.10296  |
| SSPG_RS33250 | 0.0043  | 0.0269             | 0.16182  |
| SSPG_RS33255 | 0.0044  | 0.0269             | 0.16461  |
| SSPG_RS33260 | NA      | NA                 | NA       |
| SSPG_RS33265 | 0.00205 | 0.01975            | 0.05242  |
| SSPG_RS33270 | 0       | 0                  | 0        |
| SSPG_RS33275 | NA      | NA                 | NA       |
| SSPG_RS33280 | NA      | NA                 | NA       |
| SSPG_RS33295 | 0.0036  | 0.0361             | 0.09913  |
| SSPG_RS33305 | 0.0071  | 0.01               | 0.70443  |
| SSPG_RS33315 | 0       | 0.006              | 0        |
| SSPG_RS33465 | 0       | 0                  | 0        |
| SSPG_RS33470 | 0.00415 | 0.1294             | 0.04623  |
| SSPG_RS33480 | 0.0018  | 0.0606             | 0.02908  |
| SSPG_RS33485 | NA      | NA                 | NA       |
| SSPG_RS33495 | 0.0239  | 0.0174666666666667 | NA       |
| SSPG_RS33500 | 0.002   | 0.0155             | 0.12864  |
| SSPG_RS33525 | NA      | NA                 | NA       |
| SSPG_RS33530 | NA      | NA                 | NA       |
| SSPG_RS33545 | NA      | NA                 | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| SSPG_RS33555 | NA      | NA      | NA       |
| SSPG_RS33560 | NA      | NA      | NA       |
| SSPG_RS33585 | 0.0014  | 0       | NA       |
| SSPG_RS33590 | NA      | NA      | NA       |
| SSPG_RS33595 | NA      | NA      | NA       |
| SSPG_RS33605 | NA      | NA      | NA       |
| SSPG_RS33620 | NA      | NA      | NA       |
| SSPG_RS33645 | NA      | NA      | NA       |
| SSPG_RS33650 | NA      | NA      | NA       |
| SSPG_RS33660 | NA      | NA      | NA       |
| SSPG_RS33665 | NA      | NA      | NA       |
| SSPG_RS33680 | 0.00065 | 0.0125  | 0.025355 |
| SSPG_RS33690 | 0.0029  | 0.0134  | 0.21765  |
| SSPG_RS33700 | 0.0024  | 0.0076  | 0.31928  |
| SSPG_RS33705 | 0.0029  | 0.0202  | 0.14137  |
| SSPG_RS33710 | 0.0026  | 0.0083  | 0.31507  |
| SSPG_RS33770 | NA      | NA      | NA       |
| SSPG_RS33785 | 0.0016  | 0.0164  | 0.09857  |
| SSPG_RS33795 | NA      | NA      | NA       |
| SSPG_RS33825 | NA      | NA      | NA       |
| SSPG_RS33840 | NA      | NA      | NA       |
| SSPG_RS33850 | NA      | NA      | NA       |
| SSPG_RS33855 | NA      | NA      | NA       |
| SSPG_RS33860 | NA      | NA      | NA       |
| SSPG_RS33870 | 0.0009  | 0.0677  | 0.01303  |
| SSPG_RS33885 | 0       | 0.0539  | 0        |
| SSPG_RS33900 | NA      | NA      | NA       |
| SSPG_RS33915 | NA      | NA      | NA       |
| SSPG_RS33920 | 0       | 0.1181  | 0        |
| SSPG_RS33925 | 0.0012  | 0.049   | 0.0235   |
| SSPG_RS33935 | 0       | 0       | 0        |
| SSPG_RS33940 | NA      | NA      | NA       |
| SSPG_RS33945 | NA      | NA      | NA       |
| SSPG_RS33960 | NA      | NA      | NA       |
| SSPG_RS33970 | NA      | NA      | NA       |
| SSPG_RS33975 | 0       | 0       | 0        |
| SSPG_RS33980 | NA      | NA      | NA       |
| SSPG_RS33985 | 0.0024  | 0       | NA       |
| SSPG_RS33990 | NA      | NA      | NA       |
| SSPG_RS33995 | NA      | NA      | NA       |
| SSPG_RS34000 | 0.0009  | 0.0203  | 0.04532  |
| SSPG_RS34005 | 0.0018  | 0.0887  | 0.0208   |
| SSPG_RS34010 | 0.0058  | 0.1167  | 0.04961  |
| SSPG_RS34015 | NA      | NA      | NA       |
| SSPG_RS34025 | 0.0142  | 0.0608  | 0.23371  |
| SSPG_RS34035 | NA      | NA      | NA       |
| SSPG_RS34040 | 0.0009  | 0.02025 | 0.03317  |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS34050 | 0                      | 0.0369                 | 0                          |
| SSPG_RS34060 | NA                     | NA                     | NA                         |
| SSPG_RS34070 | 0                      | 0.0279                 | 0                          |
| SSPG_RS34080 | NA                     | NA                     | NA                         |
| SSPG_RS34085 | NA                     | NA                     | NA                         |
| SSPG_RS34095 | 0.0033                 | 0.0942                 | 0.03118                    |
| SSPG_RS34100 | NA                     | NA                     | NA                         |
| SSPG_RS34105 | 0                      | 0.0233                 | 0                          |
| SSPG_RS34110 | NA                     | NA                     | NA                         |
| SSPG_RS34120 | 0.0019                 | 0.0385                 | 0.04901                    |
| SSPG_RS34130 | 0.0014                 | 0.0445                 | 0.03165                    |
| SSPG_RS34135 | 0                      | 0                      | 0                          |
| SSPG_RS34140 | 0.0015                 | 0.0941                 | 0.01643                    |
| SSPG_RS34145 | 0.0013                 | 0.0156                 | 0.08017                    |
| SSPG_RS34155 | 0.0013                 | 0.0091                 | 0.13885                    |
| SSPG_RS34165 | 0.0012                 | 0.0169                 | 0.06929                    |
| SSPG_RS34175 | 0.0017                 | 0                      | NA                         |
| SSPG_RS34195 | 0                      | 0.0204                 | 0                          |
| SSPG_RS34205 | 0                      | 0                      | 0                          |
| SSPG_RS34215 | 0.0041                 | 0.0666                 | 0.06107                    |
| SSPG_RS34220 | 0.0067                 | 0.1109                 | 0.06073                    |
| SSPG_RS34230 | 0.0008                 | 0.0239                 | 0.03223                    |
| SSPG_RS34235 | NA                     | NA                     | NA                         |
| SSPG_RS34240 | NA                     | NA                     | NA                         |
| SSPG_RS34250 | 0                      | 0.0252                 | 0                          |
| SSPG_RS34260 | NA                     | NA                     | NA                         |
| SSPG_RS34270 | NA                     | NA                     | NA                         |
| SSPG_RS34275 | NA                     | NA                     | NA                         |
| SSPG_RS34280 | NA                     | NA                     | NA                         |
| SSPG_RS34285 | 0.00245                | 0.04795                | 0.07228                    |
| SSPG_RS34290 | 0.001                  | 0.0206                 | 0.04699                    |
| SSPG_RS34295 | 0.0088                 | 0.0781                 | 0.11323                    |
| SSPG_RS34305 | 0.00155                | 0.0575                 | 0.02576                    |
| SSPG_RS34310 | NA                     | NA                     | NA                         |
| SSPG_RS34320 | NA                     | NA                     | NA                         |
| SSPG_RS34335 | 0                      | 0                      | 0                          |
| SSPG_RS34340 | 0.0034                 | 0.0177                 | 0.19333                    |
| SSPG_RS34345 | 0                      | 0.0246                 | 0                          |
| SSPG_RS34350 | 0                      | 0.0178                 | 0                          |
| SSPG_RS34355 | 0.0042                 | 0.0352                 | 0.11778                    |
| SSPG_RS34360 | 0                      | 0                      | 0                          |
| SSPG_RS34365 | 0                      | 0                      | 0                          |
| SSPG_RS34370 | 0                      | 0                      | 0                          |
| SSPG_RS34375 | 0.0031                 | 0.0719                 | 0.04353                    |
| SSPG_RS34380 | 0.0008                 | 0.0331                 | 0.02556                    |
| SSPG_RS35160 | 0.0007                 | 0.0637                 | 0.01166                    |
| SSPG_RS35165 | 0                      | 0.0583                 | 0                          |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| SSPG_RS35180 | 0       | 0.0103  | 0        |
| SSPG_RS35185 | 0.0015  | 0.1279  | NA       |
| SSPG_RS35190 | NA      | NA      | NA       |
| SSPG_RS35195 | NA      | NA      | NA       |
| SSPG_RS35200 | NA      | NA      | NA       |
| SSPG_RS35205 | NA      | NA      | NA       |
| SSPG_RS35210 | NA      | NA      | NA       |
| SSPG_RS35215 | NA      | NA      | NA       |
| SSPG_RS35220 | NA      | NA      | NA       |
| SSPG_RS35225 | 0       | 0       | 0        |
| SSPG_RS35240 | 0       | 0       | 0        |
| SSPG_RS35250 | 0.0016  | 0       | NA       |
| SSPG_RS35255 | NA      | NA      | NA       |
| SSPG_RS35260 | NA      | NA      | NA       |
| SSPG_RS35265 | NA      | NA      | NA       |
| SSPG_RS35270 | NA      | NA      | NA       |
| SSPG_RS35280 | NA      | NA      | NA       |
| SSPG_RS35290 | NA      | NA      | NA       |
| SSPG_RS35300 | 0.003   | 0.0334  | 0.08994  |
| SSPG_RS35305 | 0.00315 | 0.0829  | 0.040435 |
| SSPG_RS35320 | NA      | NA      | NA       |
| SSPG_RS35325 | NA      | NA      | NA       |
| SSPG_RS35330 | 0.0011  | 0.037   | 0.02914  |
| SSPG_RS35345 | NA      | NA      | NA       |
| SSPG_RS35350 | NA      | NA      | NA       |
| SSPG_RS35370 | 0.00585 | 0.02905 | 0.12805  |
| SSPG_RS35375 | NA      | NA      | NA       |
| SSPG_RS35380 | NA      | NA      | NA       |
| SSPG_RS35390 | NA      | NA      | NA       |
| SSPG_RS35405 | NA      | NA      | NA       |
| SSPG_RS35410 | 0.0015  | 0.0251  | 0.05851  |
| SSPG_RS35415 | 0.0016  | 0.0532  | 0.02916  |
| SSPG_RS35425 | NA      | NA      | NA       |
| SSPG_RS35435 | 0       | 0.0002  | 0        |
| SSPG_RS35440 | NA      | NA      | NA       |
| SSPG_RS35460 | NA      | NA      | NA       |
| SSPG_RS35470 | NA      | NA      | NA       |
| SSPG_RS35475 | NA      | NA      | NA       |
| SSPG_RS35485 | NA      | NA      | NA       |
| SSPG_RS35490 | NA      | NA      | NA       |
| SSPG_RS35500 | NA      | NA      | NA       |
| SSPG_RS35550 | NA      | NA      | NA       |
| SSPG_RS35570 | 0.00405 | 0.01435 | 0.46785  |
| SSPG_RS35580 | NA      | NA      | NA       |
| SSPG_RS35585 | NA      | NA      | NA       |
| SSPG_RS35590 | 0       | 0       | 0        |
| SSPG_RS35595 | 0       | 0.045   | 0        |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS35600 | 0                      | 0.0334                 | 0                          |
| SSPG_RS35610 | NA                     | NA                     | NA                         |
| SSPG_RS35625 | NA                     | NA                     | NA                         |
| SSPG_RS35630 | NA                     | NA                     | NA                         |
| SSPG_RS35640 | NA                     | NA                     | NA                         |
| SSPG_RS35650 | NA                     | NA                     | NA                         |
| SSPG_RS35655 | 0                      | 0.0069                 | 0                          |
| SSPG_RS35670 | NA                     | NA                     | NA                         |
| SSPG_RS35680 | NA                     | NA                     | NA                         |
| SSPG_RS35685 | 0.0019                 | 0.0493                 | 0.03924                    |
| SSPG_RS35705 | NA                     | NA                     | NA                         |
| SSPG_RS35710 | NA                     | NA                     | NA                         |
| SSPG_RS35715 | NA                     | NA                     | NA                         |
| SSPG_RS35720 | 0.0044                 | 0.0077                 | 0.56482                    |
| SSPG_RS35735 | 0.0012                 | 0                      | NA                         |
| SSPG_RS35740 | 0.0033                 | 0                      | NA                         |
| SSPG_RS35745 | 0.0032                 | 0.0444                 | 0.07159                    |
| SSPG_RS35755 | NA                     | NA                     | NA                         |
| SSPG_RS35760 | NA                     | NA                     | NA                         |
| SSPG_RS35765 | 0                      | 0.0315                 | 0                          |
| SSPG_RS35770 | NA                     | NA                     | NA                         |
| SSPG_RS35775 | NA                     | NA                     | NA                         |
| SSPG_RS35785 | 0                      | 0                      | 0                          |
| SSPG_RS35790 | 0.00125                | 0.0313                 | 0.042375                   |
| SSPG_RS35795 | NA                     | NA                     | NA                         |
| SSPG_RS35805 | NA                     | NA                     | NA                         |
| SSPG_RS35815 | NA                     | NA                     | NA                         |
| SSPG_RS35820 | 0                      | 0                      | 0                          |
| SSPG_RS35825 | NA                     | NA                     | NA                         |
| SSPG_RS35830 | NA                     | NA                     | NA                         |
| SSPG_RS35835 | NA                     | NA                     | NA                         |
| SSPG_RS35840 | NA                     | NA                     | NA                         |
| SSPG_RS35855 | 0.0043                 | 0.0266                 | 0.16252                    |
| SSPG_RS35875 | 0                      | 0.009                  | 0                          |
| SSPG_RS35885 | NA                     | NA                     | NA                         |
| SSPG_RS35895 | NA                     | NA                     | NA                         |
| SSPG_RS35900 | 0                      | 0                      | 0                          |
| SSPG_RS35905 | NA                     | NA                     | NA                         |
| SSPG_RS35910 | NA                     | NA                     | NA                         |
| SSPG_RS35915 | 0.0017                 | 0                      | NA                         |
| SSPG_RS35920 | NA                     | NA                     | NA                         |
| SSPG_RS35925 | 0                      | 0                      | 0                          |
| SSPG_RS35935 | NA                     | NA                     | NA                         |
| SSPG_RS35940 | NA                     | NA                     | NA                         |
| SSPG_RS35950 | 0.0092                 | 0.0396                 | 0.23196                    |
| SSPG_RS35955 | NA                     | NA                     | NA                         |
| SSPG_RS35965 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| SSPG_RS35970 | NA      | NA      | NA       |
| SSPG_RS35975 | NA      | NA      | NA       |
| SSPG_RS35980 | NA      | NA      | NA       |
| SSPG_RS35985 | NA      | NA      | NA       |
| SSPG_RS35990 | 0.0064  | 0.0576  | 0.11102  |
| SSPG_RS36000 | 0.0036  | 0.0427  | 0.08437  |
| SSPG_RS36010 | 0       | 0.0457  | 0        |
| SSPG_RS36015 | 0       | 0       | 0        |
| SSPG_RS36030 | NA      | NA      | NA       |
| SSPG_RS36040 | NA      | NA      | NA       |
| SSPG_RS36050 | NA      | NA      | NA       |
| SSPG_RS36055 | 0       | 0       | 0        |
| SSPG_RS36060 | NA      | NA      | NA       |
| SSPG_RS36075 | NA      | NA      | NA       |
| SSPG_RS36085 | 0       | 0.0118  | 0        |
| SSPG_RS36090 | 0.0034  | 0.0243  | 0.14115  |
| SSPG_RS36095 | 0.0022  | 0.0091  | 0.23834  |
| SSPG_RS36105 | NA      | NA      | NA       |
| SSPG_RS36110 | 0.0018  | 0.0185  | 0.0948   |
| SSPG_RS36120 | NA      | NA      | NA       |
| SSPG_RS36125 | 0       | 0.0133  | 0        |
| SSPG_RS36130 | 0.0024  | 0.0151  | 0.15936  |
| SSPG_RS36135 | NA      | NA      | NA       |
| SSPG_RS36140 | 0.003   | 0.0732  | 0.04067  |
| SSPG_RS36150 | 0.00475 | 0.01915 | NA       |
| SSPG_RS36155 | 0       | 0.02215 | 0        |
| SSPG_RS36160 | NA      | NA      | NA       |
| SSPG_RS36165 | 0.00605 | 0.03405 | 0.40175  |
| SSPG_RS36180 | 0.0022  | 0.0074  | 0.29543  |
| SSPG_RS36185 | NA      | NA      | NA       |
| SSPG_RS36210 | NA      | NA      | NA       |
| SSPG_RS36215 | NA      | NA      | NA       |
| SSPG_RS36220 | NA      | NA      | NA       |
| SSPG_RS36225 | NA      | NA      | NA       |
| SSPG_RS36230 | 0.0012  | 0.02425 | 0.031145 |
| SSPG_RS36240 | NA      | NA      | NA       |
| SSPG_RS36250 | NA      | NA      | NA       |
| SSPG_RS36285 | NA      | NA      | NA       |
| SSPG_RS36290 | NA      | NA      | NA       |
| SSPG_RS36295 | 0.0033  | 0.0062  | 0.53135  |
| SSPG_RS36310 | 0.0047  | 0.0223  | 0.2111   |
| SSPG_RS36315 | 0.004   | 0.0242  | 0.16562  |
| SSPG_RS36320 | 0.0044  | 0.0423  | 0.10441  |
| SSPG_RS36325 | NA      | NA      | NA       |
| SSPG_RS36350 | NA      | NA      | NA       |
| SSPG_RS36360 | 0.00295 | 0.02185 | 0.144655 |
| SSPG_RS36365 | NA      | NA      | NA       |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$    | $\omega$ |
|--------------|---------|---------|----------|
| SSPG_RS36370 | NA      | NA      | NA       |
| SSPG_RS36380 | NA      | NA      | NA       |
| SSPG_RS36395 | 0       | 0.007   | 0        |
| SSPG_RS36400 | 0.0053  | 0.0192  | 0.27588  |
| SSPG_RS36405 | 0.0015  | 0.02945 | 0.03629  |
| SSPG_RS36415 | NA      | NA      | NA       |
| SSPG_RS36425 | 0.0046  | 0.0591  | 0.07812  |
| SSPG_RS36430 | NA      | NA      | NA       |
| SSPG_RS36455 | NA      | NA      | NA       |
| SSPG_RS36460 | NA      | NA      | NA       |
| SSPG_RS36470 | NA      | NA      | NA       |
| SSPG_RS36475 | NA      | NA      | NA       |
| SSPG_RS36480 | NA      | NA      | NA       |
| SSPG_RS36485 | 0       | 0.0394  | 0        |
| SSPG_RS36490 | NA      | NA      | NA       |
| SSPG_RS36495 | NA      | NA      | NA       |
| SSPG_RS36500 | 0       | 0.0083  | 0        |
| SSPG_RS36505 | 0.00075 | 0.03095 | 0.028275 |
| SSPG_RS36515 | 0.0028  | 0.0306  | 0.09033  |
| SSPG_RS36525 | 0       | 0.0079  | 0        |
| SSPG_RS36530 | 0       | 0.0605  | 0        |
| SSPG_RS36535 | NA      | NA      | NA       |
| SSPG_RS36560 | 0.0028  | 0.0339  | 0.08217  |
| SSPG_RS36585 | 0       | 0.0066  | 0        |
| SSPG_RS36590 | 0.0038  | 0.0452  | 0.08455  |
| SSPG_RS36595 | 0.0022  | 0.0331  | 0.06539  |
| SSPG_RS36600 | NA      | NA      | NA       |
| SSPG_RS36610 | 0.0007  | 0       | NA       |
| SSPG_RS36615 | NA      | NA      | NA       |
| SSPG_RS36625 | NA      | NA      | NA       |
| SSPG_RS36630 | NA      | NA      | NA       |
| SSPG_RS36635 | NA      | NA      | NA       |
| SSPG_RS36640 | NA      | NA      | NA       |
| SSPG_RS36650 | NA      | NA      | NA       |
| SSPG_RS36660 | 0.0025  | 0       | NA       |
| SSPG_RS36665 | 0.005   | 0.036   | 0.13915  |
| SSPG_RS36670 | NA      | NA      | NA       |
| SSPG_RS36675 | NA      | NA      | NA       |
| SSPG_RS36680 | 0.001   | 0.0435  | 0.023675 |
| SSPG_RS36685 | NA      | NA      | NA       |
| SSPG_RS36690 | 0.0012  | 0.0327  | 0.0358   |
| SSPG_RS36695 | 0       | 0.019   | 0        |
| SSPG_RS36700 | NA      | NA      | NA       |
| SSPG_RS36705 | NA      | NA      | NA       |
| SSPG_RS36710 | NA      | NA      | NA       |
| SSPG_RS36715 | NA      | NA      | NA       |
| SSPG_RS36725 | 0       | 0.0137  | 0        |

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**Table S3 – continued from previous page**

| <b>Gene</b>  | <b><math>dN</math></b> | <b><math>dS</math></b> | <b><math>\omega</math></b> |
|--------------|------------------------|------------------------|----------------------------|
| SSPG_RS36730 | 0                      | 0                      | 0                          |
| SSPG_RS36735 | 0.0023                 | 0.0208                 | 0.11001                    |
| SSPG_RS36745 | NA                     | NA                     | NA                         |
| SSPG_RS36750 | NA                     | NA                     | NA                         |
| SSPG_RS36755 | NA                     | NA                     | NA                         |
| SSPG_RS36770 | NA                     | NA                     | NA                         |
| SSPG_RS36775 | NA                     | NA                     | NA                         |
| SSPG_RS36780 | NA                     | NA                     | NA                         |
| SSPG_RS36795 | NA                     | NA                     | NA                         |
| SSPG_RS36800 | NA                     | NA                     | NA                         |
| SSPG_RS36815 | 0.0121                 | 0.0345                 | 0.35055                    |
| SSPG_RS36820 | NA                     | NA                     | NA                         |
| SSPG_RS36825 | NA                     | NA                     | NA                         |
| SSPG_RS36830 | 0.0056                 | 0.0278                 | 0.20007                    |
| SSPG_RS36840 | NA                     | NA                     | NA                         |
| SSPG_RS36850 | NA                     | NA                     | NA                         |
| SSPG_RS36855 | 0.0342                 | 0.0278                 | 1.22985                    |
| SSPG_RS36860 | 0.0159                 | 0.0329                 | 0.48161                    |
| SSPG_RS36865 | 0.0009                 | 0.0234                 | 0.0365                     |
| SSPG_RS36870 | NA                     | NA                     | NA                         |
| SSPG_RS36880 | 0                      | 0                      | 0                          |
| SSPG_RS36885 | 0                      | 0.03135                | 0                          |
| SSPG_RS36895 | 0.0028                 | 0.0079                 | 0.35992                    |
| SSPG_RS36900 | 0                      | 0.0235                 | 0                          |
| SSPG_RS36905 | NA                     | NA                     | NA                         |
| SSPG_RS36925 | NA                     | NA                     | NA                         |
| SSPG_RS36945 | NA                     | NA                     | NA                         |
| SSPG_RS36950 | NA                     | NA                     | NA                         |
| SSPG_RS36955 | NA                     | NA                     | NA                         |
| SSPG_RS36980 | NA                     | NA                     | NA                         |
| SSPG_RS36990 | 0                      | 0                      | 0                          |
| SSPG_RS36995 | NA                     | NA                     | NA                         |
| SSPG_RS37005 | NA                     | NA                     | NA                         |
| SSPG_RS37015 | NA                     | NA                     | NA                         |
| SSPG_RS37020 | NA                     | NA                     | NA                         |
| SSPG_RS37035 | 0                      | 0                      | 0                          |
| SSPG_RS37040 | 0                      | 0                      | 0                          |
| SSPG_RS37045 | NA                     | NA                     | NA                         |
| SSPG_RS37050 | 0.0082                 | 0                      | NA                         |
| SSPG_RS37055 | 0                      | 0.0637                 | 0                          |
| SSPG_RS37060 | NA                     | NA                     | NA                         |
| SSPG_RS37065 | NA                     | NA                     | NA                         |
| SSPG_RS37070 | NA                     | NA                     | NA                         |
| SSPG_RS37080 | NA                     | NA                     | NA                         |
| SSPG_RS37090 | 0.0017                 | 0.0168                 | 0.10239                    |
| SSPG_RS37100 | 0                      | 0                      | 0                          |
| SSPG_RS37115 | NA                     | NA                     | NA                         |

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Table S3 – continued from previous page

| Gene         | $dN$    | $dS$   | $\omega$ |
|--------------|---------|--------|----------|
| SSPG_RS37120 | NA      | NA     | NA       |
| SSPG_RS37125 | 0.0023  | 0      | NA       |
| SSPG_RS37135 | NA      | NA     | NA       |
| SSPG_RS37140 | 0.0007  | 0      | NA       |
| SSPG_RS37145 | NA      | NA     | NA       |
| SSPG_RS37150 | NA      | NA     | NA       |
| SSPG_RS37155 | 0       | 0.0145 | 0        |
| SSPG_RS37160 | 0.0059  | 0.0134 | 0.43954  |
| SSPG_RS37185 | 0.001   | 0      | NA       |
| SSPG_RS37190 | NA      | NA     | NA       |
| SSPG_RS37195 | NA      | NA     | NA       |
| SSPG_RS37200 | NA      | NA     | NA       |
| SSPG_RS37215 | 0.003   | 0.0387 | 0.07667  |
| SSPG_RS37225 | NA      | NA     | NA       |
| SSPG_RS37230 | 0.0036  | 0.0639 | 0.05714  |
| SSPG_RS37235 | NA      | NA     | NA       |
| SSPG_RS37240 | 0       | 0.0379 | 0        |
| SSPG_RS37255 | 0.0045  | 0.0527 | 0.08506  |
| SSPG_RS37265 | NA      | NA     | NA       |
| SSPG_RS37270 | 0.0047  | 0.052  | 0.08951  |
| SSPG_RS37275 | 0.0007  | 0.023  | 0.0306   |
| SSPG_RS37285 | NA      | NA     | NA       |
| SSPG_RS37300 | NA      | NA     | NA       |
| SSPG_RS37330 | NA      | NA     | NA       |
| SSPG_RS37340 | NA      | NA     | NA       |
| SSPG_RS37350 | 0       | 0      | 0        |
| SSPG_RS37355 | NA      | NA     | NA       |
| SSPG_RS37360 | NA      | NA     | NA       |
| SSPG_RS37370 | NA      | NA     | NA       |
| SSPG_RS37380 | NA      | NA     | NA       |
| SSPG_RS37395 | NA      | NA     | NA       |
| SSPG_RS37400 | 0.0045  | 0.0958 | 0.0467   |
| SSPG_RS37405 | 0.0071  | 0.3911 | 0.01803  |
| SSPG_RS37420 | NA      | NA     | NA       |
| SSPG_RS37430 | NA      | NA     | NA       |
| SSPG_RS37435 | NA      | NA     | NA       |
| SSPG_RS37465 | NA      | NA     | NA       |
| SSPG_RS37470 | NA      | NA     | NA       |
| SSPG_RS37475 | 0.00135 | 0.0813 | 0.019865 |
| SSPG_RS37480 | NA      | NA     | NA       |
| SSPG_RS37485 | 0       | 0      | 0        |
| SSPG_RS37500 | NA      | NA     | NA       |
| SSPG_RS37505 | 0       | 0.0491 | 0        |
| SSPG_RS37515 | NA      | NA     | NA       |
| SSPG_RS37535 | 0       | 0      | 0        |
| SSPG_RS37540 | 0       | 0.0443 | 0        |
| SSPG_RS37560 | 0       | 0      | 0        |

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Table S3 – continued from previous page

| Gene         | $dN$                 | $dS$               | $\omega$          |
|--------------|----------------------|--------------------|-------------------|
| SSPG_RS37565 | NA                   | NA                 | NA                |
| SSPG_RS37580 | NA                   | NA                 | NA                |
| SSPG_RS37595 | 0                    | 0.1088             | 0                 |
| SSPG_RS37600 | 0.0021               | 0.0239             | 0.08786           |
| SSPG_RS37605 | NA                   | NA                 | NA                |
| SSPG_RS37610 | NA                   | NA                 | NA                |
| SSPG_RS37615 | NA                   | NA                 | NA                |
| SSPG_RS37620 | 0.0023               | 0                  | NA                |
| SSPG_RS37630 | 0.00075              | 0.01755            | NA                |
| SSPG_RS37635 | 0.002                | 0.0759             | 0.02692           |
| SSPG_RS37650 | NA                   | NA                 | NA                |
| SSPG_RS37665 | 0.0042               | 0.0399             | 0.10572           |
| SSPG_RS37700 | NA                   | NA                 | NA                |
| SSPG_RS37720 | 0.001                | 0.0914             | 0.0111            |
| SSPG_RS37725 | 0.0027               | 0                  | NA                |
| SSPG_RS37740 | 0.0036               | 0.0334             | 0.10869           |
| SSPG_RS37760 | 0.0019               | 0                  | NA                |
| SSPG_RS37775 | NA                   | NA                 | NA                |
| SSPG_RS37785 | 0.002366666666666667 | 0.0313333333333333 | 0.229063333333333 |
| SSPG_RS37855 | NA                   | NA                 | NA                |
| SSPG_RS37875 | NA                   | NA                 | NA                |
| SSPG_RS37910 | 0.0013               | 0.0328             | 0.03855           |
| SSPG_RS37925 | 0.0027               | 0.0062             | 0.43367           |
| SSPG_RS38010 | 0                    | 0.1435             | 0                 |
| SSPG_RS38065 | NA                   | NA                 | NA                |
| SSPG_RS38090 | 0.003                | 0.0292             | 0.10188           |

Table S4: Per gene  $dN$ ,  $dS$ , and  $\omega$  values calculated for *S. meliloti* Chromosome.

| <i>Sinorhizobium meliloti</i> Chromosome |                      |         |                   |
|--|----------------------|---------|-------------------|
| Gene                                     | $dN$                 | $dS$    | $\omega$          |
| gene_name                                | dN                   | dS      | omega             |
| SinmeB_0525                              | 0.0089               | 0.0195  | 0.45669           |
| SinmeB_0526                              | 0.0012               | 0.0182  | 0.06352           |
| SinmeB_0528                              | 0.0013               | 0.0253  | 0.05144           |
| SinmeB_0531                              | 0.001266666666666667 | 0.0468  | 0.107806666666667 |
| SinmeB_0532                              | 0                    | 0.0466  | 0                 |
| SinmeB_0533                              | 0                    | 0.034   | 0                 |
| SinmeB_0534                              | 0                    | 0.01275 | 0                 |
| SinmeB_0536                              | 0.0011               | 0.0156  | 0.0687            |
| SinmeB_0537                              | 0                    | 0.0152  | 0                 |
| SinmeB_0538                              | 0.0025               | 0.0106  | 0.24016           |
| SinmeB_0539                              | 0                    | 0.0193  | 0                 |
| SinmeB_0541                              | 0                    | 0.0112  | 0                 |

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Table S4 – continued from previous page

| Gene        | $dN$                | $dS$               | $\omega$          |
|-------------|---------------------|--------------------|-------------------|
| SinmeB_0542 | 0.0022              | 0                  | NA                |
| SinmeB_0545 | 0.0008              | 0.0178             | 0.0312925         |
| SinmeB_0546 | 0.001975            | 0.042575           | 0.086775          |
| SinmeB_0547 | 0.0022              | 0.027              | 0.07997           |
| SinmeB_0549 | 0                   | 0.0577             | 0                 |
| SinmeB_0552 | 0.0023              | 0.0465             | 0.04985           |
| SinmeB_0556 | 0.003               | 0.01305            | 0.194385          |
| SinmeB_0557 | 0                   | 0                  | 0                 |
| SinmeB_0558 | 0.0017              | 0.0074             | 0.23332           |
| SinmeB_0560 | 0.0005              | 0.0039             | 0.12994           |
| SinmeB_0561 | 0                   | 0                  | 0                 |
| SinmeB_0562 | 0                   | 0                  | 0                 |
| SinmeB_0563 | 0.0035              | 0.0312             | 0.218723333333333 |
| SinmeB_0566 | 0.00223333333333333 | 0.0203333333333333 | NA                |
| SinmeB_0567 | 0                   | 0.0328             | 0                 |
| SinmeB_0569 | 0.0021              | 0.0269             | 0.07884           |
| SinmeB_0571 | 0.0088              | 0                  | NA                |
| SinmeB_0573 | 0.0019              | 0.01845            | 0.40798           |
| SinmeB_0574 | 0.0013              | 0.0906             | 0.01394           |
| SinmeB_0578 | 0.0031              | 0.0152             | 0.20471           |
| SinmeB_0580 | 0.0017              | 0.0365             | 0.04785           |
| SinmeB_0581 | 0                   | 0.0115             | 0                 |
| SinmeB_0584 | 0.0022              | 0.0644             | 0.03408           |
| SinmeB_0585 | 0.0008              | 0.0111             | 0.07319           |
| SinmeB_0591 | 0                   | 0                  | 0                 |
| SinmeB_0592 | 0                   | 0.0093             | 0                 |
| SinmeB_0593 | 0.0012              | 0                  | NA                |
| SinmeB_0594 | 0.005               | 0.0357             | 0.14079           |
| SinmeB_0595 | 0.0031              | 0.0581             | 0.05369           |
| SinmeB_0596 | 0.0074              | 0.04755            | 0.137285          |
| SinmeB_0605 | 0                   | 0.0476             | 0                 |
| SinmeB_0606 | 0.0022              | 0.0138             | 0.16254           |
| SinmeB_0608 | 0.00095             | 0.0121             | 0.114415          |
| SinmeB_0610 | 0.0036              | 0.0238             | 0.15084           |
| SinmeB_0611 | 0                   | 0                  | 0                 |
| SinmeB_0612 | 0.0043              | 0.0708             | 0.06106           |
| SinmeB_0614 | 0.0009              | 0.0349             | 0.0247            |
| SinmeB_0615 | 0.00523333333333333 | 0.0390333333333333 | NA                |
| SinmeB_0641 | 0.0181              | 0.0754             | 0.23955           |
| SinmeB_0642 | 0.001               | 0.0847             | 0.01122           |
| SinmeB_0644 | 0.00295             | 0.0409             | 0.04311           |
| SinmeB_0645 | 0.00042             | 0.0397             | 0.002208          |
| SinmeB_0646 | 0.00435             | 0.0172             | 0.126825          |
| SinmeB_0647 | 0.00215             | 0.026375           | 0.025165          |
| SinmeB_0648 | 0.0058              | 0.08               | 0.07217           |
| SinmeB_0654 | 0                   | 0.0136             | 0                 |
| SinmeB_0655 | 0.0008              | 0.0268             | 0.03028           |

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Table S4 – continued from previous page

| Gene        | $dN$                 | $dS$               | $\omega$           |
|-------------|----------------------|--------------------|--------------------|
| SinmeB_0656 | 0.0038               | 0.0118             | 0.32064            |
| SinmeB_0657 | 0                    | 0                  | 0                  |
| SinmeB_0658 | 0.0037               | 0.0168             | 0.22272            |
| SinmeB_0661 | 0.00235              | 0.02465            | NA                 |
| SinmeB_0663 | 0.0033               | 0.0549             | 0.06049            |
| SinmeB_0664 | 0.00205              | 0.0287             | 0.07917            |
| SinmeB_0666 | 0.0037               | 0.0576             | 0.06373            |
| SinmeB_0668 | 0.00115              | 0.12205            | 0.00675            |
| SinmeB_0669 | 0.0098               | 0.0935             | 0.10485            |
| SinmeB_0676 | 0.00175              | 0.01625            | 0.13391            |
| SinmeB_0677 | 0.0049               | 0.05175            | 0.088855           |
| SinmeB_0680 | 0.006566666666666667 | 0.0602333333333333 | 0.1076033333333333 |
| SinmeB_0681 | 0.0065               | 0.077              | 0.08403            |
| SinmeB_0686 | 0.0095               | 0.1339             | 0.0709             |
| SinmeB_0687 | 0.008733333333333333 | 0.1312333333333333 | 0.08777            |
| SinmeB_0689 | 0.0054               | 0.695              | 0.00777            |
| SinmeB_0691 | 0.0145               | 1.3569             | 0.01068            |
| SinmeB_0692 | 0.0115               | 0.6061             | 0.014735           |
| SinmeB_0693 | 0.005                | 0.9291             | 0.00534            |
| SinmeB_0696 | 0.0091               | 0.28895            | 0.031365           |
| SinmeB_0698 | 0.021                | 0.1536             | 0.13683            |
| SinmeB_0700 | 0.008                | 0.1199             | 0.06669            |
| SinmeB_0701 | 0.0257               | 0.0872             | 0.29459            |
| SinmeB_0702 | 0.00475              | 0.0954             | 0.04591            |
| SinmeB_0704 | 0.00775              | 0.18775            | 0.04133            |
| SinmeB_0705 | 0.0107               | 0.125              | 0.08583            |
| SinmeB_0706 | 0.0029               | 0.0735             | 0.0401             |
| SinmeB_0707 | 0.0018               | 0.04305            | 0.03429            |
| SinmeB_0709 | 0.00235              | 0.1225             | 0.016005           |
| SinmeB_0710 | 0.0017               | 0.1385             | 0.01262            |
| SinmeB_0711 | 0.0031               | 0.08405            | 0.037375           |
| SinmeB_0712 | 0.004666666666666667 | 0.0627666666666667 | 0.0816333333333333 |
| SinmeB_0713 | 0.0042               | 0.1109             | 0.03748            |
| SinmeB_0715 | 0.0048               | 0.037              | 0.12862            |
| SinmeB_0716 | 0                    | 0.0298             | 0                  |
| SinmeB_0717 | 0.0012               | 0.032              | 0.03696            |
| SinmeB_0718 | 0.0011               | 0.022              | 0.05051            |
| SinmeB_0719 | 0.003                | 0.03               | 0.10041            |
| SinmeB_0722 | 0.0042               | 0.05155            | 0.11341            |
| SinmeB_0725 | 0.0007               | 0.0485             | 0.0136             |
| SinmeB_0727 | 0                    | 0.0064             | 0                  |
| SinmeB_0731 | 0.0028               | 0.005              | 0.56996            |
| SinmeB_0733 | 0                    | 0.0396             | 0                  |
| SinmeB_0739 | 0.002                | 0.0536             | 0.03649            |
| SinmeB_0740 | 0.0043               | 0.0895             | 0.04858            |
| SinmeB_0741 | 0                    | 0.0196             | 0                  |
| SinmeB_0742 | 0                    | 0.0479             | 0                  |

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Table S4 – continued from previous page

| Gene        | $dN$                  | $dS$                | $\omega$ |
|-------------|-----------------------|---------------------|----------|
| SinmeB_0743 | 0.0037                | 0.037               | 0.10126  |
| SinmeB_0744 | 0.0011                | 0.0222              | 0.064655 |
| SinmeB_0746 | 0.0054                | 0.0373              | 0.14517  |
| SinmeB_0748 | 0.0029                | 0.028               | 0.10276  |
| SinmeB_0750 | 0.0019                | 0.0302              | 0.06271  |
| SinmeB_0751 | 0.003                 | 0.0415              | 0.07301  |
| SinmeB_0753 | 0.0054                | 0.0909              | 0.05889  |
| SinmeB_0755 | 0.0027                | 0.0026              | 1.06181  |
| SinmeB_0756 | 0                     | 0                   | 0        |
| SinmeB_0758 | 0.0021                | 0.008               | 0.25656  |
| SinmeB_0759 | 0.0014                | 0                   | NA       |
| SinmeB_0760 | 0.0008                | 0.0049              | 0.16263  |
| SinmeB_0763 | 0.0012                | 0.0042              | 0.27958  |
| SinmeB_0764 | 0.0038                | 0                   | NA       |
| SinmeB_0765 | 0                     | 0                   | 0        |
| SinmeB_0766 | 0                     | 0                   | 0        |
| SinmeB_0768 | 0                     | 0                   | 0        |
| SinmeB_0769 | 0                     | 0.0056              | 0        |
| SinmeB_0774 | 0.0035                | 0                   | NA       |
| SinmeB_0775 | 0                     | 0.0078              | 0        |
| SinmeB_0776 | 0.0033                | 0                   | NA       |
| SinmeB_0777 | 0                     | 0.0015              | 0        |
| SinmeB_0778 | 0                     | 0                   | 0        |
| SinmeB_0779 | 0.0033                | 0.00395             | NA       |
| SinmeB_0780 | 0                     | 0.0048              | 0        |
| SinmeB_0781 | 0.0025                | 0                   | NA       |
| SinmeB_0783 | 0                     | 0                   | 0        |
| SinmeB_0784 | 0                     | 0                   | 0        |
| SinmeB_0785 | 0.0035                | 0                   | NA       |
| SinmeB_0787 | 0                     | 0                   | 0        |
| SinmeB_0788 | 0                     | 0                   | 0        |
| SinmeB_0789 | 0                     | 0                   | 0        |
| SinmeB_0792 | 0                     | 0                   | 0        |
| SinmeB_0794 | 0.0026                | 0                   | NA       |
| SinmeB_0797 | 0.001033333333333333  | 0                   | NA       |
| SinmeB_0800 | 0.0016                | 0.0081              | 0.2025   |
| SinmeB_0802 | 0                     | 0                   | 0        |
| SinmeB_0803 | 0                     | 0                   | 0        |
| SinmeB_0804 | 0                     | 0                   | 0        |
| SinmeB_0806 | 0.0005666666666666667 | 0.01036666666666667 | NA       |
| SinmeB_0807 | 0.002                 | 0                   | NA       |
| SinmeB_0809 | 0.001                 | 0.004               | 0.2514   |
| SinmeB_0810 | 0                     | 0                   | 0        |
| SinmeB_0811 | 0                     | 0                   | 0        |
| SinmeB_0812 | 0                     | 0                   | 0        |
| SinmeB_0813 | 0.00145               | 0                   | NA       |
| SinmeB_0814 | 0                     | 0                   | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$                  | $dS$                 | $\omega$ |
|-------------|-----------------------|----------------------|----------|
| SinmeB_0815 | 0                     | 0                    | 0        |
| SinmeB_0816 | 0                     | 0                    | 0        |
| SinmeB_0817 | 0                     | 0                    | 0        |
| SinmeB_0818 | 0.0011                | 0                    | NA       |
| SinmeB_0820 | 0                     | 0.008                | 0        |
| SinmeB_0822 | 0.0015                | 0.034                | 0.04327  |
| SinmeB_0824 | 0                     | 0.0261               | 0        |
| SinmeB_0825 | 0                     | 0.00295              | 0        |
| SinmeB_0828 | 0.0004                | 0.0055               | 0.07692  |
| SinmeB_0830 | 0                     | 0.0078               | 0        |
| SinmeB_0831 | 0                     | 0                    | 0        |
| SinmeB_0832 | 0                     | 0                    | 0        |
| SinmeB_0833 | 0.0008                | 0.0025               | 0.30952  |
| SinmeB_0834 | 0.00125               | 0                    | NA       |
| SinmeB_0835 | 0                     | 0                    | 0        |
| SinmeB_0836 | 0                     | 0.0126               | 0        |
| SinmeB_0837 | 0.0021                | 0.0027               | 0.76099  |
| SinmeB_0839 | 0.0009                | 0                    | NA       |
| SinmeB_0841 | 0                     | 0                    | 0        |
| SinmeB_0842 | 0                     | 0                    | 0        |
| SinmeB_0843 | 0.001                 | 0                    | NA       |
| SinmeB_0844 | 0.00065               | 0                    | NA       |
| SinmeB_0846 | 0                     | 0                    | 0        |
| SinmeB_0848 | 0.0007                | 0.0027               | 0.26423  |
| SinmeB_0850 | 0                     | 0                    | 0        |
| SinmeB_0857 | 0                     | 0                    | 0        |
| SinmeB_0858 | 0.0021                | 0                    | NA       |
| SinmeB_0859 | 0                     | 0                    | 0        |
| SinmeB_0860 | 0                     | 0                    | 0        |
| SinmeB_0862 | 0.0008                | 0.0069               | 0.059445 |
| SinmeB_0863 | 0                     | 0                    | 0        |
| SinmeB_0865 | 0                     | 0.0042               | 0        |
| SinmeB_0867 | 0.0014                | 0                    | NA       |
| SinmeB_0869 | 0                     | 0                    | 0        |
| SinmeB_0871 | 0                     | 0                    | 0        |
| SinmeB_0873 | 0                     | 0.0071               | 0        |
| SinmeB_0875 | 0                     | 0                    | 0        |
| SinmeB_0877 | 0                     | 0                    | 0        |
| SinmeB_0879 | 0.00175               | 0                    | NA       |
| SinmeB_0880 | 0                     | 0                    | 0        |
| SinmeB_0881 | 0.0022                | 0                    | NA       |
| SinmeB_0883 | 0                     | 0.0026               | 0        |
| SinmeB_0884 | 0                     | 0                    | 0        |
| SinmeB_0886 | 0.0004666666666666667 | 0.005533333333333333 | 0.02714  |
| SinmeB_0888 | 0.0013                | 0                    | NA       |
| SinmeB_0889 | 0.001                 | 0.003133333333333333 | 0.13615  |
| SinmeB_0891 | 0                     | 0                    | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$                 | $\omega$ |
|-------------|---------|----------------------|----------|
| SinmeB_0894 | 0       | 0                    | 0        |
| SinmeB_0896 | 0       | 0.0091               | 0        |
| SinmeB_0897 | 0       | 0                    | 0        |
| SinmeB_0898 | 0.0019  | 0.0038               | 0.48906  |
| SinmeB_0899 | 0       | 0                    | 0        |
| SinmeB_0900 | 0.0022  | 0                    | NA       |
| SinmeB_0904 | 0.00045 | 0.0023               | NA       |
| SinmeB_0905 | 0       | 0                    | 0        |
| SinmeB_0906 | 0.0011  | 0                    | NA       |
| SinmeB_0907 | 0.0023  | 0                    | NA       |
| SinmeB_0908 | 0       | 0                    | 0        |
| SinmeB_0910 | 0       | 0                    | 0        |
| SinmeB_0913 | 0.0007  | 0                    | NA       |
| SinmeB_0914 | 0       | 0.0067               | 0        |
| SinmeB_0915 | 0.0012  | 0                    | NA       |
| SinmeB_0916 | 0       | 0.005233333333333333 | 0        |
| SinmeB_0918 | 0       | 0                    | 0        |
| SinmeB_0921 | 0       | 0                    | 0        |
| SinmeB_0923 | 0.0009  | 0                    | NA       |
| SinmeB_0924 | 0       | 0.0079               | 0        |
| SinmeB_0925 | 0       | 0                    | 0        |
| SinmeB_0926 | 0       | 0                    | 0        |
| SinmeB_0927 | 0.00045 | 0                    | NA       |
| SinmeB_0928 | 0.0026  | 0                    | NA       |
| SinmeB_0929 | 0.002   | 0                    | NA       |
| SinmeB_0930 | 0       | 0                    | 0        |
| SinmeB_0931 | 0       | 0                    | 0        |
| SinmeB_0932 | 0       | 0                    | 0        |
| SinmeB_0933 | 0       | 0.0042               | 0        |
| SinmeB_0935 | 0.0011  | 0                    | NA       |
| SinmeB_0938 | 0       | 0                    | 0        |
| SinmeB_0940 | 0.0013  | 0                    | NA       |
| SinmeB_0941 | 0       | 0                    | 0        |
| SinmeB_0942 | 0       | 0                    | 0        |
| SinmeB_0943 | 0       | 0.0083               | 0        |
| SinmeB_0944 | 0       | 0                    | 0        |
| SinmeB_0945 | 0       | 0                    | 0        |
| SinmeB_0946 | 0.0024  | 0.0102               | 0.23395  |
| SinmeB_0948 | 0       | 0                    | 0        |
| SinmeB_0949 | 0.0027  | 0                    | NA       |
| SinmeB_0955 | 0       | 0.0024               | 0        |
| SinmeB_0957 | 0.00095 | 0.0032               | 0.145585 |
| SinmeB_0958 | 0.00185 | 0.00395              | 0.2321   |
| SinmeB_0962 | 0.0008  | 0.0045               | NA       |
| SinmeB_0968 | 0.0014  | 0.002                | 0.68987  |
| SinmeB_0972 | 0       | 0.015                | 0        |
| SinmeB_0974 | 0       | 0                    | 0        |

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| Gene        | $dN$                 | $dS$                 | $\omega$           |
|-------------|----------------------|----------------------|--------------------|
| SinmeB_0975 | 0.0005               | 0                    | NA                 |
| SinmeB_0976 | 0.000266666666666667 | 0.002933333333333333 | 0.0671866666666667 |
| SinmeB_0979 | 0                    | 0                    | 0                  |
| SinmeB_0981 | 0.0007               | 0.0071               | 0.10434            |
| SinmeB_0983 | 0                    | 0.0048               | 0                  |
| SinmeB_0985 | 0                    | 0                    | 0                  |
| SinmeB_0987 | 0.0024               | 0                    | NA                 |
| SinmeB_0989 | 0                    | 0                    | 0                  |
| SinmeB_0992 | 0.0013               | 0                    | NA                 |
| SinmeB_0995 | 0.0018               | 0                    | NA                 |
| SinmeB_0997 | 0.0013               | 0                    | NA                 |
| SinmeB_0999 | 0.0021               | 0.0079               | 0.26315            |
| SinmeB_1001 | 0                    | 0                    | 0                  |
| SinmeB_1005 | 0.0016               | 0.0044               | 0.37082            |
| SinmeB_1008 | 0                    | 0                    | 0                  |
| SinmeB_1009 | 0                    | 0                    | 0                  |
| SinmeB_1011 | 0                    | 0                    | 0                  |
| SinmeB_1012 | 0                    | 0                    | 0                  |
| SinmeB_1013 | 0                    | 0                    | 0                  |
| SinmeB_1015 | 0                    | 0                    | 0                  |
| SinmeB_1016 | 0.0012               | 0                    | NA                 |
| SinmeB_1017 | 0.0014               | 0.0061               | 0.23219            |
| SinmeB_1019 | 0.0038               | 0                    | NA                 |
| SinmeB_1020 | 0                    | 0.0204               | 0                  |
| SinmeB_1022 | 0.0014               | 0                    | NA                 |
| SinmeB_1024 | 0                    | 0                    | 0                  |
| SinmeB_1025 | 0                    | 0.006                | 0                  |
| SinmeB_1026 | 0.0007               | 0.003                | 0.22139            |
| SinmeB_1027 | 0.00275              | 0                    | NA                 |
| SinmeB_1029 | 0                    | 0                    | 0                  |
| SinmeB_1031 | 0.0006               | 0.01                 | 0.05933            |
| SinmeB_1034 | 0.0015               | 0                    | NA                 |
| SinmeB_1035 | 0                    | 0                    | 0                  |
| SinmeB_1037 | 0                    | 0.0055               | 0                  |
| SinmeB_1040 | 0                    | 0                    | 0                  |
| SinmeB_1041 | 0.0009               | 0.0027               | 0.32217            |
| SinmeB_1042 | 0                    | 0                    | 0                  |
| SinmeB_1045 | 0                    | 0                    | 0                  |
| SinmeB_1046 | 0                    | 0                    | 0                  |
| SinmeB_1049 | 0.0074               | 0                    | NA                 |
| SinmeB_1053 | 0                    | 0                    | 0                  |
| SinmeB_1054 | 0.0049               | 0                    | NA                 |
| SinmeB_1055 | 0.0012               | 0.00335              | 0.178385           |
| SinmeB_1056 | 0                    | 0                    | 0                  |
| SinmeB_1058 | 0.003                | 0                    | NA                 |
| SinmeB_1059 | 0                    | 0                    | 0                  |
| SinmeB_1060 | 0                    | 0                    | 0                  |

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Table S4 – continued from previous page

| Gene        | $dN$                 | $dS$                 | $\omega$ |
|-------------|----------------------|----------------------|----------|
| SinmeB_1063 | 0                    | 0.00455              | 0        |
| SinmeB_1065 | 0                    | 0.0047               | 0        |
| SinmeB_1066 | 0                    | 0                    | 0        |
| SinmeB_1068 | 0                    | 0                    | 0        |
| SinmeB_1069 | 0                    | 0.0057               | 0        |
| SinmeB_1070 | 0                    | 0                    | 0        |
| SinmeB_1072 | 0.0013               | 0.0016               | 0.8246   |
| SinmeB_1074 | 0                    | 0.0021               | 0        |
| SinmeB_1079 | 0                    | 0.005                | 0        |
| SinmeB_1082 | 0.0015               | 0                    | NA       |
| SinmeB_1083 | 0                    | 0.0036               | 0        |
| SinmeB_1086 | 0                    | 0                    | 0        |
| SinmeB_1088 | 0                    | 0                    | 0        |
| SinmeB_1089 | 0.0017               | 0                    | NA       |
| SinmeB_1090 | 0.004233333333333333 | 0.002533333333333333 | NA       |
| SinmeB_1091 | 0                    | 0                    | 0        |
| SinmeB_1092 | 0.0014               | 0                    | NA       |
| SinmeB_1095 | 0                    | 0                    | 0        |
| SinmeB_1096 | 0.00175              | 0                    | NA       |
| SinmeB_1097 | 0                    | 0                    | 0        |
| SinmeB_1099 | 0                    | 0                    | 0        |
| SinmeB_1103 | 0.0013               | 0                    | NA       |
| SinmeB_1106 | 0                    | 0                    | 0        |
| SinmeB_1107 | 0.0007               | 0                    | NA       |
| SinmeB_1109 | 0                    | 0.0028               | 0        |
| SinmeB_1117 | 0                    | 0                    | 0        |
| SinmeB_1118 | 0                    | 0.0024               | 0        |
| SinmeB_1119 | 0                    | 0.01                 | 0        |
| SinmeB_1121 | 0                    | 0                    | 0        |
| SinmeB_1122 | 0.0015               | 0                    | NA       |
| SinmeB_1123 | 0                    | 0                    | 0        |
| SinmeB_1124 | 0                    | 0.0073               | 0        |
| SinmeB_1125 | 0.0018               | 0                    | NA       |
| SinmeB_1126 | 0.00245              | 0                    | NA       |
| SinmeB_1127 | 0.0034               | 0                    | NA       |
| SinmeB_1130 | 0                    | 0.0054               | 0        |
| SinmeB_1132 | 0                    | 0.0023               | 0        |
| SinmeB_1133 | 0                    | 0.00225              | 0        |
| SinmeB_1134 | 0                    | 0.0094               | 0        |
| SinmeB_1135 | 0                    | 0.0211               | 0        |
| SinmeB_1136 | 0.0028               | 0                    | NA       |
| SinmeB_1137 | 0.0021               | 0.008                | 0.26532  |
| SinmeB_1138 | 0.0018               | 0.0109               | 0.16653  |
| SinmeB_1142 | 0.001                | 0.0028               | 0.34616  |
| SinmeB_1143 | 0                    | 0.0026               | 0        |
| SinmeB_1146 | 0.0012               | 0                    | NA       |
| SinmeB_1148 | 0.00145              | 0                    | NA       |

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Table S4 – continued from previous page

| Gene        | $dN$                 | $dS$                 | $\omega$           |
|-------------|----------------------|----------------------|--------------------|
| SinmeB_1149 | 0.00055              | 0                    | NA                 |
| SinmeB_1151 | 0                    | 0.0058               | 0                  |
| SinmeB_1152 | 0                    | 0.003466666666666667 | 0                  |
| SinmeB_1154 | 0.00085              | 0                    | NA                 |
| SinmeB_1155 | 0                    | 0                    | 0                  |
| SinmeB_1156 | 0.001166666666666667 | 0.004133333333333333 | NA                 |
| SinmeB_1157 | 0.0007               | 0.0024               | 0.14005            |
| SinmeB_1159 | 0                    | 0.0059               | 0                  |
| SinmeB_1160 | 0                    | 0                    | 0                  |
| SinmeB_1162 | 0.002                | 0                    | NA                 |
| SinmeB_1164 | 0.0016               | 0                    | NA                 |
| SinmeB_1166 | 0.0007               | 0                    | NA                 |
| SinmeB_1167 | 0                    | 0                    | 0                  |
| SinmeB_1168 | 0                    | 0.0051               | 0                  |
| SinmeB_1169 | 0                    | 0                    | 0                  |
| SinmeB_1170 | 0                    | 0                    | 0                  |
| SinmeB_1171 | 0                    | 0                    | 0                  |
| SinmeB_1173 | 0                    | 0                    | 0                  |
| SinmeB_1175 | 0                    | 0                    | 0                  |
| SinmeB_1178 | 0.0025               | 0.0029               | 0.85885            |
| SinmeB_1179 | 0.0004               | 0                    | NA                 |
| SinmeB_1180 | 0                    | 0                    | 0                  |
| SinmeB_1181 | 0                    | 0.03055              | 0                  |
| SinmeB_1182 | 0.0012               | 0.0271               | 0.0438             |
| SinmeB_1184 | 0.0068               | 0.0363               | 0.18738            |
| SinmeB_1188 | 0.0042               | 0.0106               | 0.394              |
| SinmeB_1189 | 0                    | 0.0483               | 0                  |
| SinmeB_1190 | 0.0015               | 0.0165               | 0.08807            |
| SinmeB_1191 | 0.00245              | 0.0275               | 0.0783             |
| SinmeB_1192 | 0.0039               | 0.0124               | 0.31343            |
| SinmeB_1193 | 0                    | 0.0364               | 0                  |
| SinmeB_1196 | 0                    | 0.0043               | 0                  |
| SinmeB_1197 | 0                    | 0.0262               | 0                  |
| SinmeB_1198 | 0.0018               | 0.0339               | 0.128345           |
| SinmeB_1199 | 0.0013               | 0.0414               | 0.03234            |
| SinmeB_1200 | 0.0048               | 0.0149               | 0.32316            |
| SinmeB_1202 | 0.002                | 0.0292               | 0.0689             |
| SinmeB_1204 | 0.0102               | 0.0265               | 0.38545            |
| SinmeB_1205 | 0.0015               | 0.0143               | 0.10849            |
| SinmeB_1207 | 0.00185              | 0                    | NA                 |
| SinmeB_1208 | 0                    | 0                    | 0                  |
| SinmeB_1209 | 0.0073               | 0.036                | 0.20349            |
| SinmeB_1210 | 0                    | 0.01425              | 0                  |
| SinmeB_1211 | 0.0018               | 0.0299               | 0.06162            |
| SinmeB_1212 | 0                    | 0.0117               | 0                  |
| SinmeB_1213 | 0.00105              | 0.03365              | 0.02251            |
| SinmeB_1214 | 0.004633333333333333 | 0.013133333333333333 | 0.3714366666666667 |

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Table S4 – continued from previous page

| Gene        | $dN$                 | $dS$               | $\omega$          |
|-------------|----------------------|--------------------|-------------------|
| SinmeB_1215 | 0.0024               | 0.0124             | 0.168886666666667 |
| SinmeB_1216 | 0.0019               | 0.01045            | 0.18729           |
| SinmeB_1217 | 0                    | 0                  | 0                 |
| SinmeB_1218 | 0.0012               | 0.0154             | 0.07564           |
| SinmeB_1220 | 0                    | 0.0255             | 0                 |
| SinmeB_1221 | 0                    | 0.0339             | 0                 |
| SinmeB_1222 | 0                    | 0.0072             | 0                 |
| SinmeB_1223 | 0.00216666666666667  | 0.0335             | 0.06725           |
| SinmeB_1224 | 0.0031               | 0.0219             | 0.14152           |
| SinmeB_1225 | 0.003533333333333333 | 0.0405             | 0.121556666666667 |
| SinmeB_1227 | 0.0068               | 0.0124             | 0.55142           |
| SinmeB_1228 | 0.004933333333333333 | 0.0637333333333333 | 0.08426           |
| SinmeB_1230 | 0.0005               | 0.0677             | 0.00795           |
| SinmeB_1232 | 0.0043               | 0.0476             | 0.0907            |
| SinmeB_1233 | 0.0028               | 0.0436             | 0.06376           |
| SinmeB_1234 | 0                    | 0.0104             | 0                 |
| SinmeB_1235 | 0.0035               | 0.0134             | 0.26377           |
| SinmeB_1237 | 0.0025               | 0.0308             | 0.08063           |
| SinmeB_1238 | 0.0009               | 0.0206             | 0.0455            |
| SinmeB_1239 | 0.0009               | 0.0052             | 0.17682           |
| SinmeB_1240 | 0                    | 0                  | 0                 |
| SinmeB_1242 | 0.00205              | 0                  | NA                |
| SinmeB_1244 | 0.00208              | 0.0061             | NA                |
| SinmeB_1248 | 0                    | 0.02945            | 0                 |
| SinmeB_1249 | 0                    | 0.0138             | 0                 |
| SinmeB_1251 | 0                    | 0.0335             | 0                 |
| SinmeB_1252 | 0.0135               | 0.016              | 0.84654           |
| SinmeB_1255 | 0                    | 0                  | 0                 |
| SinmeB_1256 | 0.0061               | 0                  | NA                |
| SinmeB_1257 | 0.0011               | 0.0102             | 0.10672           |
| SinmeB_1259 | 0.0016               | 0.0404             | 0.03917           |
| SinmeB_1260 | 0.0047               | 0.048              | 0.09872           |
| SinmeB_1262 | 0                    | 0.0282             | 0                 |
| SinmeB_1264 | 0.0098               | 0.0533             | 0.18462           |
| SinmeB_1266 | 0.0101               | 0.0601             | 0.16742           |
| SinmeB_1268 | 0.002                | 0.0219             | 0.09121           |
| SinmeB_1269 | 0                    | 0.0203             | 0                 |
| SinmeB_1270 | 0.0012               | 0.009              | 0.12951           |
| SinmeB_1271 | 0.0027               | 0.0727             | 0.03733           |
| SinmeB_1273 | 0.0013               | 0.0266             | 0.0497            |
| SinmeB_1274 | 0                    | 0                  | 0                 |
| SinmeB_1275 | 0.003                | 0.07825            | 0.038635          |
| SinmeB_1277 | 0.00315              | 0.04805            | 0.042935          |
| SinmeB_1278 | 0.001                | 0.0501             | 0.02001           |
| SinmeB_1279 | 0.0038               | 0.0741             | 0.05145           |
| SinmeB_1283 | 0.0031               | 0.0204             | 0.15176           |
| SinmeB_1284 | 0.0016               | 0.0356             | 0.04631           |

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Table S4 – continued from previous page

| Gene        | $dN$               | $dS$               | $\omega$          |
|-------------|--------------------|--------------------|-------------------|
| SinmeB_1286 | 0                  | 0.0351             | 0                 |
| SinmeB_1290 | 0                  | 0                  | 0                 |
| SinmeB_1291 | 0.003              | 0.0339             | 0.08932           |
| SinmeB_1292 | 0.0013             | 0.0156666666666667 | 0.111333333333333 |
| SinmeB_1295 | 0.0104             | 0.0483             | 0.21605           |
| SinmeB_1301 | 0                  | 0.0176             | 0                 |
| SinmeB_1303 | 0                  | 0                  | 0                 |
| SinmeB_1304 | 0.0043             | 0.0227             | 0.18935           |
| SinmeB_1307 | 0                  | 0.0043             | 0                 |
| SinmeB_1308 | 0.0038333333333333 | 0.0160666666666667 | NA                |
| SinmeB_1309 | 0.0063             | 0.0128             | 0.49406           |
| SinmeB_1310 | 0.0006             | 0.04845            | 0.010675          |
| SinmeB_1312 | 0                  | 0.0113             | 0                 |
| SinmeB_1313 | 0                  | 0                  | 0                 |
| SinmeB_1315 | 0.0012             | 0.0252             | 0.04781           |
| SinmeB_1316 | 0                  | 0.0154             | 0                 |
| SinmeB_1319 | 0.0017             | 0.0461             | 0.03721           |
| SinmeB_1322 | 0.0018             | 0.0053             | 0.33749           |
| SinmeB_1324 | 0                  | 0.0672             | 0                 |
| SinmeB_1326 | 0.0096             | 0.0239             | 0.39951           |
| SinmeB_1327 | 0.0046             | 0.0695             | 0.0663            |
| SinmeB_1328 | 0                  | 0.0283             | 0                 |
| SinmeB_1330 | 0.00095            | 0.02205            | 0.13313           |
| SinmeB_1333 | 0.0018             | 0.0319             | 0.05498           |
| SinmeB_1335 | 0.01885            | 0.0855             | 0.24364           |
| SinmeB_1338 | 0.0006333333333333 | 0.0149333333333333 | 0.151146666666667 |
| SinmeB_1342 | 0                  | 0                  | 0                 |
| SinmeB_1345 | 0.0022             | 0.0078             | 0.28306           |
| SinmeB_1348 | 0.0021             | 0                  | NA                |
| SinmeB_1349 | 0                  | 0                  | 0                 |
| SinmeB_1353 | 0.0011             | 0.002              | 0.54621           |
| SinmeB_1357 | 0                  | 0.033              | 0                 |
| SinmeB_1361 | 0.0058             | 0.0185             | 0.31349           |
| SinmeB_1362 | 0.0044             | 0.0441             | 0.10016           |
| SinmeB_1363 | 0.002              | 0.0074             | 0.26958           |
| SinmeB_1364 | 0                  | 0.0145             | 0                 |
| SinmeB_1366 | 0.0008             | 0.0094             | 0.08231           |
| SinmeB_1369 | 0.002875           | 0.014875           | NA                |
| SinmeB_1371 | 0.00205            | 0.03205            | 0.031945          |
| SinmeB_1372 | 0                  | 0.0099             | 0                 |
| SinmeB_1373 | 0.0025             | 0.0227             | 0.11041           |
| SinmeB_1374 | 0                  | 0.0261             | 0                 |
| SinmeB_1375 | 0                  | 0.0096             | 0                 |
| SinmeB_1377 | 0                  | 0.0382             | 0                 |
| SinmeB_1379 | 0                  | 0.0172             | 0                 |
| SinmeB_1380 | 0                  | 0.0083             | 0                 |
| SinmeB_1382 | 0.00225            | 0.02885            | 0.05557           |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$               | $\omega$ |
|-------------|---------|--------------------|----------|
| SinmeB_1384 | 0.0201  | 0.0159             | 1.26166  |
| SinmeB_1385 | 0.0045  | 0.0076             | 0.58936  |
| SinmeB_1387 | 0       | 0.0274             | 0        |
| SinmeB_1389 | 0.001   | 0.0186             | 0.05633  |
| SinmeB_1391 | 0.0005  | 0.0246             | 0.02057  |
| SinmeB_1394 | 0       | 0.0335             | 0        |
| SinmeB_1397 | 0.00725 | 0.0290666666666667 | NA       |
| SinmeB_1399 | 0.002   | 0.0411             | 0.028655 |
| SinmeB_1401 | 0.0014  | 0.0608             | 0.02305  |
| SinmeB_1402 | 0       | 0.0281333333333333 | 0        |
| SinmeB_1403 | 0.0009  | 0.0137             | 0.0449   |
| SinmeB_1404 | 0       | 0.0275             | 0        |
| SinmeB_1405 | 0       | 0.0405             | 0        |
| SinmeB_1409 | 0       | 0.0302             | 0        |
| SinmeB_1412 | 0.0041  | 0                  | NA       |
| SinmeB_1413 | 0.0036  | 0.02545            | 0.31576  |
| SinmeB_1414 | 0.0006  | 0.0188             | 0.03221  |
| SinmeB_1416 | 0       | 0.0022             | 0        |
| SinmeB_1417 | 0       | 0.0095             | 0        |
| SinmeB_1418 | 0       | 0.039              | 0        |
| SinmeB_1419 | 0.00265 | 0                  | NA       |
| SinmeB_1420 | 0       | 0.0193             | 0        |
| SinmeB_1421 | 0       | 0.0056             | 0        |
| SinmeB_1422 | 0       | 0.0127             | 0        |
| SinmeB_1425 | 0       | 0                  | 0        |
| SinmeB_1427 | 0       | 0.0163             | 0        |
| SinmeB_1429 | 0       | 0                  | 0        |
| SinmeB_1430 | 0       | 0                  | 0        |
| SinmeB_1431 | 0       | 0.0212             | 0        |
| SinmeB_1433 | 0       | 0.03285            | 0        |
| SinmeB_1434 | 0       | 0.0207             | 0        |
| SinmeB_1435 | 0       | 0.043              | 0        |
| SinmeB_1436 | 0       | 0.0121             | 0        |
| SinmeB_1438 | 0.0027  | 0.04595            | 0.07263  |
| SinmeB_1439 | 0.0046  | 0.0459             | 0.1      |
| SinmeB_1441 | 0.0029  | 0.0807             | 0.03626  |
| SinmeB_1442 | 0.0047  | 0.0945             | 0.05272  |
| SinmeB_1443 | 0       | 0.06065            | 0        |
| SinmeB_1444 | 0.0047  | 0.0631             | 0.07386  |
| SinmeB_1445 | 0.0021  | 0.0069             | 0.29545  |
| SinmeB_1446 | 0.0015  | 0.0617             | 0.013165 |
| SinmeB_1447 | 0       | 0.0124             | 0        |
| SinmeB_1448 | 0       | 0.0121             | 0        |
| SinmeB_1450 | 0       | 0.0276             | 0        |
| SinmeB_1453 | 0.0016  | 0.0321             | 0.0489   |
| SinmeB_1454 | 0       | 0.0101             | 0        |
| SinmeB_1455 | 0.0152  | 0.01715            | 0.875015 |

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Table S4 – continued from previous page

| Gene        | $dN$                 | $dS$                 | $\omega$            |
|-------------|----------------------|----------------------|---------------------|
| SinmeB_1456 | 0.0018               | 0.0356               | 0.05127             |
| SinmeB_1457 | 0.00405              | 0.016                | 0.12679             |
| SinmeB_1460 | 0                    | 0.0513               | 0                   |
| SinmeB_1464 | 0                    | 0                    | 0                   |
| SinmeB_1466 | 0.0064               | 0.0356               | 0.17845             |
| SinmeB_1468 | 0.002                | 0.0089               | 0.22908             |
| SinmeB_1469 | 0                    | 0.0411               | 0                   |
| SinmeB_1470 | 0                    | 0.0296               | 0                   |
| SinmeB_1471 | 0                    | 0.0079               | 0                   |
| SinmeB_1472 | 0.002                | 0.0498               | 0.04022             |
| SinmeB_1473 | 0.0084               | 0.1098               | 0.07614             |
| SinmeB_1474 | 0.004633333333333333 | 0.04956666666666667  | 0.09765333333333333 |
| SinmeB_1475 | 0.0038               | 0.0334               | 0.11268             |
| SinmeB_1477 | 0.0038               | 0.0807               | 0.04675             |
| SinmeB_1478 | 0                    | 0.00495              | 0                   |
| SinmeB_1479 | 0.008                | 0.0257               | 0.3105              |
| SinmeB_1481 | 0.0034               | 0.0197               | 0.17402             |
| SinmeB_1483 | 0.0006               | 0.0306               | 0.01963             |
| SinmeB_1484 | 0.0096               | 0.0177               | 0.54037             |
| SinmeB_1485 | 0.003                | 0.0164               | 0.18259             |
| SinmeB_1486 | 0.0169               | 0.0943               | 0.17925             |
| SinmeB_1488 | 0.0033               | 0.0723               | 0.04617             |
| SinmeB_1489 | 0                    | 0                    | 0                   |
| SinmeB_1490 | 0                    | 0.013133333333333333 | 0                   |
| SinmeB_1493 | 0                    | 0.0214               | 0                   |
| SinmeB_1494 | 0.0018               | 0.0337               | 0.05374             |
| SinmeB_1496 | 0.0029               | 0.0202               | 0.14288             |
| SinmeB_1497 | 0.0089               | 0.03675              | 0.22733             |
| SinmeB_1499 | 0.0016               | 0.0783               | 0.02106             |
| SinmeB_1500 | 0                    | 0.0657               | 0                   |
| SinmeB_1501 | 0.0012               | 0.0298               | 0.04145             |
| SinmeB_1502 | 0.0024               | 0.0066               | 0.36608             |
| SinmeB_1503 | 0.0029               | 0.0055               | NA                  |
| SinmeB_1504 | 0.0043               | 0.015                | 0.288               |
| SinmeB_1505 | 0.0097               | 0.0479               | 0.20153             |
| SinmeB_1507 | 0.0033               | 0.0896               | 0.03726             |
| SinmeB_1508 | 0                    | 0.0541               | 0                   |
| SinmeB_1511 | 0                    | 0.0476               | 0                   |
| SinmeB_1513 | 0                    | 0.0355               | 0                   |
| SinmeB_1515 | 0                    | 0.0234               | 0                   |
| SinmeB_1516 | 0                    | 0                    | 0                   |
| SinmeB_1517 | 0.0018               | 0.0111               | 0.16309             |
| SinmeB_1522 | 0                    | 0.0682               | 0                   |
| SinmeB_1523 | 0.0086               | 0.0442               | 0.19494             |
| SinmeB_1526 | 0.0042               | 0.021                | 0.1377              |
| SinmeB_1528 | 0.00125              | 0.0445               | 0.03907             |
| SinmeB_1532 | 0.0011               | 0.0771               | 0.01425             |

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Table S4 – continued from previous page

| Gene        | $dN$                 | $dS$               | $\omega$           |
|-------------|----------------------|--------------------|--------------------|
| SinmeB_1533 | 0.0022               | 0.0255             | 0.082365           |
| SinmeB_1535 | 0.0022               | 0.0218             | 0.09979            |
| SinmeB_1536 | 0.0174               | 0.0458             | 0.37961            |
| SinmeB_1537 | 0                    | 0.069              | 0                  |
| SinmeB_1538 | 0.0008               | 0.00245            | NA                 |
| SinmeB_1539 | 0.00195              | 0.0234             | 0.042125           |
| SinmeB_1540 | 0                    | 0                  | 0                  |
| SinmeB_1541 | 0.0005               | 0.0284             | 0.0171             |
| SinmeB_1542 | 0                    | 0                  | 0                  |
| SinmeB_1543 | 0                    | 0.0125             | 0                  |
| SinmeB_1545 | 0.0059               | 0.0309             | 0.18566            |
| SinmeB_1546 | 0                    | 0.0561             | 0                  |
| SinmeB_1547 | 0                    | 0.04085            | 0                  |
| SinmeB_1548 | 0.002766666666666667 | 0.0214333333333333 | 0.0859833333333333 |
| SinmeB_1549 | 0.0012               | 0.0196             | 0.05961            |
| SinmeB_1550 | 0.0016               | 0.0424             | 0.03879            |
| SinmeB_1552 | 0.001566666666666667 | 0.0233666666666667 | 0.0793366666666667 |
| SinmeB_1553 | 0.0035               | 0.0329             | 0.10545            |
| SinmeB_1557 | 0.0057               | 0.0255             | 0.22185            |
| SinmeB_1560 | 0.0028               | 0.0284             | 0.09762            |
| SinmeB_1561 | 0.0029               | 0.0402             | 0.07276            |
| SinmeB_1563 | 0.0021               | 0.0123             | 0.16817            |
| SinmeB_1566 | 0.0037               | 0.0322666666666667 | 0.2002733333333333 |
| SinmeB_1567 | 0.0016               | 0.0184             | 0.08889            |
| SinmeB_1568 | 0.0018               | 0.0251             | 0.0708             |
| SinmeB_1569 | 0                    | 0                  | 0                  |
| SinmeB_1570 | 0.0011               | 0.0145             | 0.07455            |
| SinmeB_1571 | 0.0015               | 0.014              | 0.10419            |
| SinmeB_1572 | 0.0038               | 0.0125             | 0.30137            |
| SinmeB_1575 | 0.0025               | 0.0306             | 0.08286            |
| SinmeB_1577 | 0.0017               | 0                  | NA                 |
| SinmeB_1579 | 0.0012               | 0.0378             | 0.03285            |
| SinmeB_1580 | 0.0064               | 0.0212             | 0.29927            |
| SinmeB_1581 | 0.00105              | 0.01465            | 0.152975           |
| SinmeB_1582 | 0.001                | 0.0353             | 0.02801            |
| SinmeB_1583 | 0.0035               | 0.0458             | 0.07565            |
| SinmeB_1584 | 0.0042               | 0.1306             | 0.03191            |
| SinmeB_1585 | 0.0103               | 0.0536             | 0.19132            |
| SinmeB_1586 | 0.0009               | 0.0245             | 0.0355             |
| SinmeB_1587 | 0.00145              | 0.06805            | 0.014695           |
| SinmeB_1588 | 0.0005               | 0.0222             | 0.02427            |
| SinmeB_1590 | 0.0043               | 0.01175            | 0.37598            |
| SinmeB_1591 | 0.0057               | 0.01               | 0.57531            |
| SinmeB_1592 | 0.0018               | 0.0248             | 0.07237            |
| SinmeB_1595 | 0.0008               | 0.0296             | 0.02773            |
| SinmeB_1597 | 0.0017               | 0.0064             | 0.2653             |
| SinmeB_1599 | 0.0034               | 0.0172             | 0.19602            |

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| Gene        | $dN$    | $dS$    | $\omega$ |
|-------------|---------|---------|----------|
| SinmeB_1601 | 0       | 0       | 0        |
| SinmeB_1604 | 0.0081  | 0.0152  | 0.53235  |
| SinmeB_1607 | 0       | 0.0375  | 0        |
| SinmeB_1609 | 0.0096  | 0.0255  | 0.37569  |
| SinmeB_1611 | 0       | 0.0354  | 0        |
| SinmeB_1614 | 0.00215 | 0.03985 | 0.061905 |
| SinmeB_1617 | 0.0026  | 0.0212  | 0.12083  |
| SinmeB_1618 | 0.0013  | 0.0097  | 0.1357   |
| SinmeB_1619 | 0.0138  | 0.0314  | 0.43926  |
| SinmeB_1620 | 0.0034  | 0.0528  | 0.06366  |
| SinmeB_1621 | 0.0044  | 0.0364  | 0.12047  |
| SinmeB_1623 | 0       | 0.0142  | 0        |
| SinmeB_1626 | 0.0031  | 0.0349  | 0.09613  |
| SinmeB_1628 | 0.0039  | 0.0749  | 0.05169  |
| SinmeB_1630 | 0.0038  | 0.014   | 0.27309  |
| SinmeB_1631 | 0.00245 | 0.0323  | 0.050235 |
| SinmeB_1633 | 0.0172  | 0.0328  | 0.52297  |
| SinmeB_1637 | 0.0011  | 0.0434  | 0.02437  |
| SinmeB_1641 | 0.0053  | 0.0637  | 0.08289  |
| SinmeB_1646 | 0.0032  | 0.0243  | 0.13043  |
| SinmeB_1648 | 0.0019  | 0.0119  | 0.15969  |
| SinmeB_1649 | 0       | 0       | 0        |
| SinmeB_1650 | 0       | 0.008   | 0        |
| SinmeB_1651 | 0       | 0.0144  | 0        |
| SinmeB_1652 | 0.00295 | 0.0338  | 0.097835 |
| SinmeB_1654 | 0.0016  | 0.0199  | 0.07812  |
| SinmeB_1656 | 0.0022  | 0.0159  | 0.14165  |
| SinmeB_1657 | 0.0075  | 0.0299  | 0.25017  |
| SinmeB_1658 | 0.0014  | 0.0244  | 0.0576   |
| SinmeB_1659 | 0.0066  | 0       | NA       |
| SinmeB_1660 | 0.0089  | 0.0395  | 0.22479  |
| SinmeB_1661 | 0       | 0.0168  | 0        |
| SinmeB_1662 | 0.0057  | 0.0385  | 0.14843  |
| SinmeB_1666 | 0       | 0       | 0        |
| SinmeB_1668 | 0.0016  | 0       | NA       |
| SinmeB_1672 | 0.00105 | 0.00195 | NA       |
| SinmeB_1673 | 0.0025  | 0       | NA       |
| SinmeB_1674 | 0       | 0       | 0        |
| SinmeB_1676 | 0       | 0       | 0        |
| SinmeB_1677 | 0       | 0       | 0        |
| SinmeB_1678 | 0       | 0       | 0        |
| SinmeB_1683 | 0       | 0.0265  | 0        |
| SinmeB_1684 | 0.0095  | 0       | NA       |
| SinmeB_1686 | 0       | 0       | 0        |
| SinmeB_1687 | 0       | 0       | 0        |
| SinmeB_1689 | 0       | 0       | 0        |
| SinmeB_1690 | 0       | 0.0044  | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$                 | $\omega$ |
|-------------|---------|----------------------|----------|
| SinmeB_1691 | 0       | 0.0067               | 0        |
| SinmeB_1692 | 0       | 0                    | 0        |
| SinmeB_1693 | 0       | 0.002866666666666667 | 0        |
| SinmeB_1695 | 0.0029  | 0                    | NA       |
| SinmeB_1696 | 0.0006  | 0.0025               | 0.26094  |
| SinmeB_1698 | 0       | 0                    | 0        |
| SinmeB_1699 | 0.001   | 0                    | NA       |
| SinmeB_1702 | 0       | 0                    | 0        |
| SinmeB_1705 | 0       | 0                    | 0        |
| SinmeB_1707 | 0       | 0                    | 0        |
| SinmeB_1711 | 0       | 0.0162               | 0        |
| SinmeB_1712 | 0       | 0                    | 0        |
| SinmeB_1713 | 0       | 0                    | 0        |
| SinmeB_1715 | 0       | 0                    | 0        |
| SinmeB_1716 | 0       | 0.001333333333333333 | 0        |
| SinmeB_1717 | 0       | 0                    | 0        |
| SinmeB_1718 | 0       | 0                    | 0        |
| SinmeB_1722 | 0       | 0                    | 0        |
| SinmeB_1724 | 0.0016  | 0                    | NA       |
| SinmeB_1727 | 0.0012  | 0                    | NA       |
| SinmeB_1730 | 0       | 0                    | 0        |
| SinmeB_1733 | 0       | 0                    | 0        |
| SinmeB_1734 | 0       | 0.0026               | 0        |
| SinmeB_1735 | 0       | 0                    | 0        |
| SinmeB_1737 | 0.00035 | 0.00275              | 0.145285 |
| SinmeB_1738 | 0       | 0                    | 0        |
| SinmeB_1741 | 0.0013  | 0                    | NA       |
| SinmeB_1742 | 0.0016  | 0.0054               | 0.30072  |
| SinmeB_1743 | 0       | 0.0104               | 0        |
| SinmeB_1744 | 0.0023  | 0                    | NA       |
| SinmeB_1745 | 0       | 0                    | 0        |
| SinmeB_1746 | 0       | 0                    | 0        |
| SinmeB_1748 | 0       | 0                    | 0        |
| SinmeB_1749 | 0       | 0                    | 0        |
| SinmeB_1750 | 0       | 0.0048               | 0        |
| SinmeB_1751 | 0.0016  | 0                    | NA       |
| SinmeB_1752 | 0.0041  | 0                    | NA       |
| SinmeB_1755 | 0       | 0.0039               | 0        |
| SinmeB_1756 | 0.0029  | 0                    | NA       |
| SinmeB_1757 | 0       | 0                    | 0        |
| SinmeB_1760 | 0       | 0                    | 0        |
| SinmeB_1761 | 0       | 0                    | 0        |
| SinmeB_1762 | 0.0034  | 0                    | NA       |
| SinmeB_1763 | 0.0007  | 0                    | NA       |
| SinmeB_1764 | 0       | 0                    | 0        |
| SinmeB_1765 | 0       | 0                    | 0        |
| SinmeB_1767 | 0       | 0                    | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$               | $dS$    | $\omega$ |
|-------------|--------------------|---------|----------|
| SinmeB_1770 | 0.000725           | 0       | NA       |
| SinmeB_1771 | 0.0007             | 0.0058  | 0.11548  |
| SinmeB_1774 | 0                  | 0.0014  | 0        |
| SinmeB_1776 | 0                  | 0       | 0        |
| SinmeB_1778 | 0                  | 0       | 0        |
| SinmeB_1783 | 0                  | 0       | 0        |
| SinmeB_1784 | 0                  | 0       | 0        |
| SinmeB_1786 | 0                  | 0.0051  | 0        |
| SinmeB_1788 | 0                  | 0       | 0        |
| SinmeB_1789 | 0.0021             | 0       | NA       |
| SinmeB_1790 | 0                  | 0       | 0        |
| SinmeB_1793 | 0                  | 0       | 0        |
| SinmeB_1794 | 0.0011             | 0       | NA       |
| SinmeB_1797 | 0                  | 0.0244  | 0        |
| SinmeB_1798 | 0                  | 0       | 0        |
| SinmeB_1799 | 0                  | 0       | 0        |
| SinmeB_1800 | 0                  | 0       | 0        |
| SinmeB_1803 | 0                  | 0       | 0        |
| SinmeB_1806 | 0.001              | 0.0037  | 0.2597   |
| SinmeB_1808 | 0                  | 0       | 0        |
| SinmeB_1810 | 0                  | 0       | 0        |
| SinmeB_1811 | 0                  | 0       | 0        |
| SinmeB_1812 | 0                  | 0       | 0        |
| SinmeB_1814 | 0.00075            | 0       | NA       |
| SinmeB_1816 | 0                  | 0       | 0        |
| SinmeB_1817 | 0                  | 0       | 0        |
| SinmeB_1818 | 0                  | 0       | 0        |
| SinmeB_1821 | 0                  | 0       | 0        |
| SinmeB_1822 | 0                  | 0       | 0        |
| SinmeB_1824 | 0                  | 0       | 0        |
| SinmeB_1829 | 0.0008             | 0       | NA       |
| SinmeB_1831 | 0                  | 0       | 0        |
| SinmeB_1832 | 0.0013             | 0.00725 | NA       |
| SinmeB_1833 | 0.0021             | 0       | NA       |
| SinmeB_1836 | 0                  | 0       | 0        |
| SinmeB_1837 | 0                  | 0       | 0        |
| SinmeB_1838 | 0                  | 0       | 0        |
| SinmeB_1839 | 0                  | 0       | 0        |
| SinmeB_1842 | 0                  | 0.0149  | 0        |
| SinmeB_1843 | 0                  | 0       | 0        |
| SinmeB_1845 | 0                  | 0       | 0        |
| SinmeB_1846 | 0                  | 0       | 0        |
| SinmeB_1848 | 0                  | 0       | 0        |
| SinmeB_1849 | 0.0014             | 0.0039  | 0.34868  |
| SinmeB_1850 | 0                  | 0       | 0        |
| SinmeB_1851 | 0                  | 0       | 0        |
| SinmeB_1852 | 0.0005666666666667 | 0       | NA       |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$    | $\omega$ |
|-------------|---------|---------|----------|
| SinmeB_1853 | 0       | 0       | 0        |
| SinmeB_1854 | 0       | 0       | 0        |
| SinmeB_1855 | 0.00075 | 0.00245 | 0.154265 |
| SinmeB_1859 | 0.0016  | 0       | NA       |
| SinmeB_1860 | 0.0014  | 0.00215 | NA       |
| SinmeB_1861 | 0       | 0       | 0        |
| SinmeB_1862 | 0       | 0       | 0        |
| SinmeB_1863 | 0.0038  | 0.0147  | 0.25793  |
| SinmeB_1864 | 0.0019  | 0.003   | 0.62989  |
| SinmeB_1865 | 0       | 0       | 0        |
| SinmeB_1866 | 0.0006  | 0       | NA       |
| SinmeB_1867 | 0       | 0       | 0        |
| SinmeB_1868 | 0       | 0       | 0        |
| SinmeB_1869 | 0.001   | 0       | NA       |
| SinmeB_1870 | 0.0015  | 0       | NA       |
| SinmeB_1872 | 0.0014  | 0       | NA       |
| SinmeB_1874 | 0.00045 | 0.00145 | 0.151665 |
| SinmeB_1875 | 0       | 0       | 0        |
| SinmeB_1880 | 0.001   | 0       | NA       |
| SinmeB_1881 | 0       | 0       | 0        |
| SinmeB_1882 | 0.0024  | 0.0072  | 0.33534  |
| SinmeB_1885 | 0.0008  | 0       | NA       |
| SinmeB_1887 | 0.0008  | 0       | NA       |
| SinmeB_1890 | 0.0005  | 0       | NA       |
| SinmeB_1892 | 0       | 0       | 0        |
| SinmeB_1893 | 0.0014  | 0.0053  | 0.25893  |
| SinmeB_1898 | 0.0007  | 0.0059  | 0.16718  |
| SinmeB_1900 | 0       | 0       | 0        |
| SinmeB_1901 | 0       | 0       | 0        |
| SinmeB_1902 | 0.0012  | 0       | NA       |
| SinmeB_1903 | 0       | 0       | 0        |
| SinmeB_1904 | 0       | 0.0079  | 0        |
| SinmeB_1905 | 0.0017  | 0       | NA       |
| SinmeB_1907 | 0       | 0       | 0        |
| SinmeB_1908 | 0       | 0       | 0        |
| SinmeB_1913 | 0.0006  | 0.0017  | 0.36325  |
| SinmeB_1917 | 0       | 0.0017  | 0        |
| SinmeB_1918 | 0       | 0.0059  | 0        |
| SinmeB_1919 | 0       | 0.0028  | 0        |
| SinmeB_1920 | 0       | 0       | 0        |
| SinmeB_1922 | 0       | 0.0081  | 0        |
| SinmeB_1923 | 0       | 0       | 0        |
| SinmeB_1925 | 0.0012  | 0       | NA       |
| SinmeB_1926 | 0       | 0       | 0        |
| SinmeB_1927 | 0       | 0       | 0        |
| SinmeB_1928 | 0.005   | 0       | NA       |
| SinmeB_1929 | 0       | 0       | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$                  | $dS$                 | $\omega$           |
|-------------|-----------------------|----------------------|--------------------|
| SinmeB_1931 | 0                     | 0.0031               | 0                  |
| SinmeB_1933 | 0                     | 0.0069               | 0                  |
| SinmeB_1934 | 0                     | 0                    | 0                  |
| SinmeB_1935 | 0.0014                | 0                    | NA                 |
| SinmeB_1936 | 0                     | 0                    | 0                  |
| SinmeB_1938 | 0                     | 0                    | 0                  |
| SinmeB_1940 | 0                     | 0                    | 0                  |
| SinmeB_1942 | 0.0012                | 0.00185              | 0.31756            |
| SinmeB_1943 | 0                     | 0                    | 0                  |
| SinmeB_1945 | 0.0016                | 0                    | NA                 |
| SinmeB_1948 | 0.0013                | 0.004                | 0.33284            |
| SinmeB_1958 | 0.0032                | 0                    | NA                 |
| SinmeB_1959 | 0.00075               | 0                    | NA                 |
| SinmeB_1962 | 0                     | 0.004133333333333333 | 0                  |
| SinmeB_1963 | 0.0007                | 0.005                | 0.13449            |
| SinmeB_1964 | 0.0009                | 0.0047               | 0.18337            |
| SinmeB_1966 | 0                     | 0.0032               | 0                  |
| SinmeB_1968 | 0                     | 0                    | 0                  |
| SinmeB_1969 | 0                     | 0                    | 0                  |
| SinmeB_1970 | 0                     | 0                    | 0                  |
| SinmeB_1974 | 0                     | 0                    | 0                  |
| SinmeB_1977 | 0                     | 0                    | 0                  |
| SinmeB_1980 | 0                     | 0                    | 0                  |
| SinmeB_1981 | 0                     | 0.00565              | 0                  |
| SinmeB_1983 | 0                     | 0.0084               | 0                  |
| SinmeB_1984 | 0                     | 0.0077               | 0                  |
| SinmeB_1985 | 0.0012                | 0.00435              | NA                 |
| SinmeB_1987 | 0.0008                | 0                    | NA                 |
| SinmeB_1988 | 0                     | 0                    | 0                  |
| SinmeB_1989 | 0.0007333333333333333 | 0.003                | 0.0810466666666667 |
| SinmeB_1990 | 0                     | 0                    | 0                  |
| SinmeB_1991 | 0                     | 0.0124               | 0                  |
| SinmeB_1992 | 0                     | 0                    | 0                  |
| SinmeB_1993 | 0.0011                | 0                    | NA                 |
| SinmeB_1994 | 0                     | 0                    | 0                  |
| SinmeB_1997 | 0                     | 0                    | 0                  |
| SinmeB_1999 | 0                     | 0                    | 0                  |
| SinmeB_2000 | 0                     | 0.0108               | 0                  |
| SinmeB_2001 | 0.002                 | 0.00435              | 0.23022            |
| SinmeB_2002 | 0                     | 0                    | 0                  |
| SinmeB_2003 | 0                     | 0                    | 0                  |
| SinmeB_2004 | 0                     | 0.012                | 0                  |
| SinmeB_2005 | 0                     | 0                    | 0                  |
| SinmeB_2006 | 0                     | 0.003566666666666667 | 0                  |
| SinmeB_2008 | 0                     | 0                    | 0                  |
| SinmeB_2009 | 0                     | 0                    | 0                  |
| SinmeB_2010 | 0.0033                | 0                    | NA                 |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$    | $\omega$ |
|-------------|---------|---------|----------|
| SinmeB_2011 | 0       | 0       | 0        |
| SinmeB_2012 | 0       | 0.0087  | 0        |
| SinmeB_2014 | 0.0007  | 0       | NA       |
| SinmeB_2017 | 0       | 0       | 0        |
| SinmeB_2018 | 0       | 0.0039  | 0        |
| SinmeB_2021 | 0       | 0.0021  | 0        |
| SinmeB_2023 | 0       | 0.0069  | 0        |
| SinmeB_2024 | 0       | 0.0068  | 0        |
| SinmeB_2025 | 0       | 0       | 0        |
| SinmeB_2026 | 0.0012  | 0.0049  | 0.2433   |
| SinmeB_2027 | 0       | 0       | 0        |
| SinmeB_2028 | 0       | 0       | 0        |
| SinmeB_2029 | 0.0027  | 0.0037  | 0.72962  |
| SinmeB_2030 | 0.0015  | 0       | NA       |
| SinmeB_2031 | 0.0031  | 0       | NA       |
| SinmeB_2032 | 0.0014  | 0.0053  | 0.25692  |
| SinmeB_2033 | 0       | 0       | 0        |
| SinmeB_2034 | 0       | 0.0044  | 0        |
| SinmeB_2035 | 0       | 0.004   | 0        |
| SinmeB_2036 | 0.00135 | 0       | NA       |
| SinmeB_2037 | 0       | 0.00375 | 0        |
| SinmeB_2038 | 0.0011  | 0       | NA       |
| SinmeB_2039 | 0       | 0       | 0        |
| SinmeB_2043 | 0       | 0       | 0        |
| SinmeB_2044 | 0       | 0       | 0        |
| SinmeB_2046 | 0       | 0.0108  | 0        |
| SinmeB_2047 | 0       | 0       | 0        |
| SinmeB_2048 | 0       | 0       | 0        |
| SinmeB_2050 | 0.0014  | 0       | NA       |
| SinmeB_2053 | 0.0012  | 0       | NA       |
| SinmeB_2054 | 0.0024  | 0       | NA       |
| SinmeB_2055 | 0       | 0       | 0        |
| SinmeB_2056 | 0.0006  | 0       | NA       |
| SinmeB_2058 | 0       | 0       | 0        |
| SinmeB_2059 | 0.0017  | 0       | NA       |
| SinmeB_2060 | 0       | 0       | 0        |
| SinmeB_2062 | 0       | 0       | 0        |
| SinmeB_2063 | 0       | 0       | 0        |
| SinmeB_2064 | 0.0015  | 0       | NA       |
| SinmeB_2066 | 0       | 0       | 0        |
| SinmeB_2067 | 0.0009  | 0.003   | NA       |
| SinmeB_2068 | 0.0043  | 0       | NA       |
| SinmeB_2069 | 0.0008  | 0.0038  | 0.20423  |
| SinmeB_2071 | 0.0017  | 0       | NA       |
| SinmeB_2072 | 0       | 0       | 0        |
| SinmeB_2073 | 0       | 0       | 0        |
| SinmeB_2074 | 0.0009  | 0       | NA       |

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Table S4 – continued from previous page

| Gene        | $dN$                 | $dS$   | $\omega$ |
|-------------|----------------------|--------|----------|
| SinmeB_2075 | 0                    | 0      | 0        |
| SinmeB_2076 | 0                    | 0      | 0        |
| SinmeB_2077 | 0                    | 0      | 0        |
| SinmeB_2078 | 0                    | 0.0058 | 0        |
| SinmeB_2079 | 0.0014               | 0      | NA       |
| SinmeB_2080 | 0                    | 0      | 0        |
| SinmeB_2081 | 0.00305              | 0      | NA       |
| SinmeB_2082 | 0                    | 0.0042 | 0        |
| SinmeB_2083 | 0.0006               | 0.0031 | 0.09931  |
| SinmeB_2084 | 0                    | 0.0087 | 0        |
| SinmeB_2085 | 0.0008               | 0      | NA       |
| SinmeB_2087 | 0                    | 0.0039 | 0        |
| SinmeB_2088 | 0.003                | 0      | NA       |
| SinmeB_2089 | 0                    | 0      | 0        |
| SinmeB_2091 | 0                    | 0      | 0        |
| SinmeB_2092 | 0                    | 0      | 0        |
| SinmeB_2094 | 0.0033               | 0      | NA       |
| SinmeB_2095 | 0                    | 0      | 0        |
| SinmeB_2097 | 0                    | 0      | 0        |
| SinmeB_2098 | 0.001833333333333333 | 0      | NA       |
| SinmeB_2099 | 0.00185              | 0      | NA       |
| SinmeB_2102 | 0.00225              | 0      | NA       |
| SinmeB_2104 | 0                    | 0      | 0        |
| SinmeB_2105 | 0.00185              | 0      | NA       |
| SinmeB_2106 | 0                    | 0      | 0        |
| SinmeB_2107 | 0                    | 0.0047 | 0        |
| SinmeB_2108 | 0                    | 0      | 0        |
| SinmeB_2112 | 0.0019               | 0.0044 | 0.42312  |
| SinmeB_2115 | 0.0022               | 0      | NA       |
| SinmeB_2118 | 0                    | 0      | 0        |
| SinmeB_2120 | 0                    | 0      | 0        |
| SinmeB_2121 | 0                    | 0      | 0        |
| SinmeB_2123 | 0                    | 0      | 0        |
| SinmeB_2124 | 0                    | 0      | 0        |
| SinmeB_2128 | 0                    | 0      | 0        |
| SinmeB_2130 | 0.0015               | 0      | NA       |
| SinmeB_2131 | 0                    | 0.0026 | 0        |
| SinmeB_2135 | 0                    | 0      | 0        |
| SinmeB_2142 | 0.0004               | 0      | NA       |
| SinmeB_2143 | 0.0027               | 0      | NA       |
| SinmeB_2144 | 0.0007               | 0.0024 | 0.27389  |
| SinmeB_2145 | 0.00065              | 0      | NA       |
| SinmeB_2146 | 0.0022               | 0.0045 | NA       |
| SinmeB_2148 | 0.001                | 0      | NA       |
| SinmeB_2149 | 0                    | 0      | 0        |
| SinmeB_2150 | 0                    | 0      | 0        |
| SinmeB_2151 | 0.0028               | 0      | NA       |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$    | $\omega$ |
|-------------|---------|---------|----------|
| SinmeB_2152 | 0       | 0.0099  | 0        |
| SinmeB_2154 | 0       | 0       | 0        |
| SinmeB_2155 | 0       | 0       | 0        |
| SinmeB_2156 | 0.001   | 0       | NA       |
| SinmeB_2158 | 0.0006  | 0       | NA       |
| SinmeB_2160 | 0       | 0.0093  | 0        |
| SinmeB_2163 | 0       | 0.0056  | 0        |
| SinmeB_2164 | 0.003   | 0       | NA       |
| SinmeB_2165 | 0       | 0       | 0        |
| SinmeB_2166 | 0.0009  | 0       | NA       |
| SinmeB_2168 | 0       | 0       | 0        |
| SinmeB_2170 | 0       | 0       | 0        |
| SinmeB_2171 | 0.00135 | 0       | NA       |
| SinmeB_2172 | 0       | 0       | 0        |
| SinmeB_2173 | 0       | 0.005   | 0        |
| SinmeB_2176 | 0       | 0       | 0        |
| SinmeB_2177 | 0       | 0       | 0        |
| SinmeB_2178 | 0       | 0       | 0        |
| SinmeB_2179 | 0.0006  | 0       | NA       |
| SinmeB_2180 | 0.0012  | 0       | NA       |
| SinmeB_2181 | 0       | 0       | 0        |
| SinmeB_2182 | 0       | 0.0033  | 0        |
| SinmeB_2190 | 0.0007  | 0       | NA       |
| SinmeB_2192 | 0       | 0       | 0        |
| SinmeB_2193 | 0.0012  | 0       | NA       |
| SinmeB_2194 | 0       | 0       | 0        |
| SinmeB_2195 | 0       | 0.0019  | 0        |
| SinmeB_2196 | 0       | 0       | 0        |
| SinmeB_2197 | 0       | 0.0061  | 0        |
| SinmeB_2198 | 0       | 0       | 0        |
| SinmeB_2200 | 0       | 0       | 0        |
| SinmeB_2202 | 0       | 0       | 0        |
| SinmeB_2205 | 0.0012  | 0.0052  | 0.23566  |
| SinmeB_2207 | 0       | 0       | 0        |
| SinmeB_2208 | 0.0015  | 0       | NA       |
| SinmeB_2212 | 0       | 0       | 0        |
| SinmeB_2213 | 0       | 0       | 0        |
| SinmeB_2214 | 0       | 0.00915 | 0        |
| SinmeB_2215 | 0       | 0       | 0        |
| SinmeB_2216 | 0.0017  | 0       | NA       |
| SinmeB_2219 | 0.0007  | 0.0012  | 0.57706  |
| SinmeB_2221 | 0       | 0.0076  | 0        |
| SinmeB_2222 | 0       | 0       | 0        |
| SinmeB_2226 | 0       | 0       | 0        |
| SinmeB_2227 | 0       | 0       | 0        |
| SinmeB_2228 | 0       | 0       | 0        |
| SinmeB_2230 | 0       | 0       | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$    | $\omega$ |
|-------------|---------|---------|----------|
| SinmeB_2231 | 0       | 0       | 0        |
| SinmeB_2232 | 0       | 0       | 0        |
| SinmeB_2233 | 0.0012  | 0       | NA       |
| SinmeB_2235 | 0       | 0       | 0        |
| SinmeB_2236 | 0       | 0       | 0        |
| SinmeB_2237 | 0.0013  | 0.0038  | 0.34079  |
| SinmeB_2238 | 0       | 0       | 0        |
| SinmeB_2239 | 0       | 0       | 0        |
| SinmeB_2243 | 0       | 0       | 0        |
| SinmeB_2246 | 0       | 0       | 0        |
| SinmeB_2247 | 0       | 0       | 0        |
| SinmeB_2248 | 0       | 0       | 0        |
| SinmeB_2251 | 0       | 0       | 0        |
| SinmeB_2253 | 0       | 0       | 0        |
| SinmeB_2255 | 0.0012  | 0       | NA       |
| SinmeB_2257 | 0       | 0.0024  | 0        |
| SinmeB_2259 | 0       | 0       | 0        |
| SinmeB_2260 | 0       | 0       | 0        |
| SinmeB_2265 | 0.0012  | 0       | NA       |
| SinmeB_2267 | 0.00165 | 0.00565 | 0.29892  |
| SinmeB_2269 | 0       | 0.006   | 0        |
| SinmeB_2270 | 0.0025  | 0       | NA       |
| SinmeB_2271 | 0       | 0       | 0        |
| SinmeB_2272 | 0       | 0       | 0        |
| SinmeB_2273 | 0       | 0       | 0        |
| SinmeB_2274 | 0       | 0       | 0        |
| SinmeB_2275 | 0       | 0       | 0        |
| SinmeB_2276 | 0.0018  | 0       | NA       |
| SinmeB_2278 | 0       | 0       | 0        |
| SinmeB_2280 | 0       | 0       | 0        |
| SinmeB_2282 | 0.0012  | 0.0035  | 0.33219  |
| SinmeB_2283 | 0       | 0       | 0        |
| SinmeB_2285 | 0       | 0       | 0        |
| SinmeB_2286 | 0       | 0       | 0        |
| SinmeB_2287 | 0       | 0       | 0        |
| SinmeB_2288 | 0.0007  | 0.002   | 0.168915 |
| SinmeB_2289 | 0.0005  | 0       | NA       |
| SinmeB_2291 | 0       | 0       | 0        |
| SinmeB_2293 | 0.001   | 0       | NA       |
| SinmeB_2295 | 0       | 0       | 0        |
| SinmeB_2298 | 0.0013  | 0       | NA       |
| SinmeB_2302 | 0       | 0       | 0        |
| SinmeB_2305 | 0.0035  | 0       | NA       |
| SinmeB_2306 | 0       | 0       | 0        |
| SinmeB_2308 | 0       | 0.0032  | 0        |
| SinmeB_2310 | 0       | 0.0152  | 0        |
| SinmeB_2311 | 0       | 0       | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$    | $\omega$ |
|-------------|---------|---------|----------|
| SinmeB_2312 | 0       | 0       | 0        |
| SinmeB_2313 | 0.001   | 0       | NA       |
| SinmeB_2314 | 0       | 0       | 0        |
| SinmeB_2316 | 0       | 0       | 0        |
| SinmeB_2317 | 0       | 0       | 0        |
| SinmeB_2318 | 0       | 0       | 0        |
| SinmeB_2319 | 0.0008  | 0       | NA       |
| SinmeB_2321 | 0       | 0       | 0        |
| SinmeB_2322 | 0       | 0.0067  | 0        |
| SinmeB_2323 | 0       | 0       | 0        |
| SinmeB_2324 | 0       | 0       | 0        |
| SinmeB_2325 | 0       | 0       | 0        |
| SinmeB_2326 | 0       | 0       | 0        |
| SinmeB_2328 | 0       | 0       | 0        |
| SinmeB_2331 | 0.0036  | 0.0302  | 0.11851  |
| SinmeB_2332 | 0       | 0.076   | 0        |
| SinmeB_2333 | 0       | 0.0056  | 0        |
| SinmeB_2335 | 0       | 0.00375 | 0        |
| SinmeB_2336 | 0       | 0       | 0        |
| SinmeB_2339 | 0.0008  | 0       | NA       |
| SinmeB_2340 | 0       | 0.00265 | 0        |
| SinmeB_2342 | 0       | 0       | 0        |
| SinmeB_2343 | 0       | 0       | 0        |
| SinmeB_2346 | 0       | 0       | 0        |
| SinmeB_2347 | 0       | 0.0038  | 0        |
| SinmeB_2349 | 0       | 0       | 0        |
| SinmeB_2350 | 0.0023  | 0.0029  | NA       |
| SinmeB_2353 | 0.00075 | 0       | NA       |
| SinmeB_2354 | 0       | 0       | 0        |
| SinmeB_2355 | 0.0026  | 0       | NA       |
| SinmeB_2357 | 0       | 0       | 0        |
| SinmeB_2358 | 0       | 0       | 0        |
| SinmeB_2359 | 0.001   | 0.0056  | 0.18302  |
| SinmeB_2361 | 0       | 0       | 0        |
| SinmeB_2364 | 0.0008  | 0.0038  | 0.20085  |
| SinmeB_2365 | 0       | 0.0065  | 0        |
| SinmeB_2366 | 0       | 0.0065  | 0        |
| SinmeB_2367 | 0.0015  | 0       | NA       |
| SinmeB_2368 | 0.0016  | 0       | NA       |
| SinmeB_2369 | 0.0008  | 0       | NA       |
| SinmeB_2371 | 0       | 0.0034  | 0        |
| SinmeB_2372 | 0.0024  | 0.0022  | NA       |
| SinmeB_2373 | 0       | 0       | 0        |
| SinmeB_2374 | 0       | 0.005   | 0        |
| SinmeB_2375 | 0       | 0       | 0        |
| SinmeB_2377 | 0.0013  | 0       | NA       |
| SinmeB_2378 | 0       | 0       | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$                 | $\omega$ |
|-------------|---------|----------------------|----------|
| SinmeB_2383 | 0       | 0                    | 0        |
| SinmeB_2385 | 0       | 0                    | 0        |
| SinmeB_2386 | 0       | 0                    | 0        |
| SinmeB_2387 | 0       | 0                    | 0        |
| SinmeB_2390 | 0.001   | 0                    | NA       |
| SinmeB_2392 | 0.0005  | 0                    | NA       |
| SinmeB_2393 | 0       | 0                    | 0        |
| SinmeB_2395 | 0       | 0                    | 0        |
| SinmeB_2396 | 0       | 0                    | 0        |
| SinmeB_2397 | 0       | 0                    | 0        |
| SinmeB_2398 | 0.0017  | 0                    | NA       |
| SinmeB_2399 | 0.00135 | 0.005                | 0.13355  |
| SinmeB_2400 | 0       | 0                    | 0        |
| SinmeB_2401 | 0       | 0                    | 0        |
| SinmeB_2402 | 0       | 0.0049               | 0        |
| SinmeB_2406 | 0.0073  | 0.000633333333333333 | NA       |
| SinmeB_2408 | 0.0014  | 0                    | NA       |
| SinmeB_2409 | 0       | 0                    | 0        |
| SinmeB_2410 | 0       | 0                    | 0        |
| SinmeB_2411 | 0.004   | 0                    | NA       |
| SinmeB_2412 | 0       | 0                    | 0        |
| SinmeB_2413 | 0       | 0                    | 0        |
| SinmeB_2414 | 0.0027  | 0.0075               | 0.35299  |
| SinmeB_2415 | 0       | 0.007                | 0        |
| SinmeB_2417 | 0.0009  | 0.0112               | 0.0813   |
| SinmeB_2418 | 0.0266  | 0.1368               | 0.19459  |
| SinmeB_2419 | 0       | 0.1114               | 0        |
| SinmeB_2420 | 0.0096  | 0.043                | 0.2234   |
| SinmeB_2421 | 0       | 0                    | 0        |
| SinmeB_2422 | 0       | 0                    | 0        |
| SinmeB_2423 | 0       | 0                    | 0        |
| SinmeB_2425 | 0       | 0.0024               | 0        |
| SinmeB_2427 | 0.00115 | 0                    | NA       |
| SinmeB_2429 | 0       | 0                    | 0        |
| SinmeB_2432 | 0       | 0                    | 0        |
| SinmeB_2433 | 0       | 0                    | 0        |
| SinmeB_2434 | 0.001   | 0                    | NA       |
| SinmeB_2435 | 0.00225 | 0.00265              | NA       |
| SinmeB_2436 | 0       | 0.00475              | 0        |
| SinmeB_2437 | 0       | 0                    | 0        |
| SinmeB_2438 | 0.0013  | 0.002                | NA       |
| SinmeB_2440 | 0       | 0                    | 0        |
| SinmeB_2441 | 0       | 0                    | 0        |
| SinmeB_2443 | 0.00085 | 0                    | NA       |
| SinmeB_2444 | 0       | 0                    | 0        |
| SinmeB_2446 | 0       | 0.0054               | 0        |
| SinmeB_2448 | 0       | 0                    | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$                 | $\omega$ |
|-------------|---------|----------------------|----------|
| SinmeB_2450 | 0       | 0.005                | 0        |
| SinmeB_2455 | 0       | 0                    | 0        |
| SinmeB_2456 | 0       | 0                    | 0        |
| SinmeB_2457 | 0.00195 | 0                    | NA       |
| SinmeB_2458 | 0       | 0.001766666666666667 | 0        |
| SinmeB_2459 | 0       | 0.01375              | 0        |
| SinmeB_2460 | 0.00105 | 0                    | NA       |
| SinmeB_2461 | 0.0013  | 0                    | NA       |
| SinmeB_2462 | 0       | 0                    | 0        |
| SinmeB_2468 | 0       | 0.0023               | 0        |
| SinmeB_2469 | 0       | 0                    | 0        |
| SinmeB_2470 | 0       | 0                    | 0        |
| SinmeB_2472 | 0       | 0                    | 0        |
| SinmeB_2473 | 0       | 0                    | 0        |
| SinmeB_2474 | 0       | 0                    | 0        |
| SinmeB_2475 | 0       | 0                    | 0        |
| SinmeB_2476 | 0.0017  | 0                    | NA       |
| SinmeB_2477 | 0.0017  | 0.0059               | 0.14247  |
| SinmeB_2478 | 0.0008  | 0                    | NA       |
| SinmeB_2481 | 0.0021  | 0                    | NA       |
| SinmeB_2484 | 0.0014  | 0                    | NA       |
| SinmeB_2486 | 0.0006  | 0.0025               | 0.23296  |
| SinmeB_2489 | 0.0006  | 0.0019               | 0.3266   |
| SinmeB_2491 | 0.0015  | 0                    | NA       |
| SinmeB_2492 | 0       | 0.0035               | 0        |
| SinmeB_2494 | 0       | 0                    | 0        |
| SinmeB_2495 | 0       | 0                    | 0        |
| SinmeB_2497 | 0       | 0.0065               | 0        |
| SinmeB_2498 | 0       | 0                    | 0        |
| SinmeB_2501 | 0       | 0.0036               | 0        |
| SinmeB_2503 | 0.001   | 0                    | NA       |
| SinmeB_2504 | 0.0022  | 0                    | NA       |
| SinmeB_2507 | 0       | 0                    | 0        |
| SinmeB_2508 | 0.0019  | 0                    | NA       |
| SinmeB_2509 | 0.0027  | 0                    | NA       |
| SinmeB_2514 | 0.0007  | 0.0039               | 0.18287  |
| SinmeB_2515 | 0.0008  | 0.0054               | 0.14921  |
| SinmeB_2521 | 0       | 0.0033               | 0        |
| SinmeB_2523 | 0       | 0.003                | 0        |
| SinmeB_2526 | 0.00048 | 0                    | NA       |
| SinmeB_2527 | 0.00155 | 0                    | NA       |
| SinmeB_2528 | 0.00136 | 0                    | NA       |
| SinmeB_2529 | 0       | 0                    | 0        |
| SinmeB_2530 | 0       | 0.0053               | 0        |
| SinmeB_2531 | 0       | 0                    | 0        |
| SinmeB_2532 | 0.0017  | 0                    | NA       |
| SinmeB_2533 | 0       | 0                    | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$     | $dS$    | $\omega$ |
|-------------|----------|---------|----------|
| SinmeB_2534 | 0        | 0       | 0        |
| SinmeB_2535 | 0        | 0       | 0        |
| SinmeB_2536 | 0        | 0.0052  | 0        |
| SinmeB_2543 | 0        | 0       | 0        |
| SinmeB_2544 | 0.0008   | 0       | NA       |
| SinmeB_2545 | 0        | 0       | 0        |
| SinmeB_2547 | 0        | 0.0086  | 0        |
| SinmeB_2551 | 0        | 0       | 0        |
| SinmeB_2553 | 0        | 0.0043  | 0        |
| SinmeB_2554 | 0        | 0       | 0        |
| SinmeB_2556 | 0        | 0       | 0        |
| SinmeB_2557 | 0        | 0       | 0        |
| SinmeB_2558 | 0        | 0.00265 | 0        |
| SinmeB_2559 | 0.001    | 0       | NA       |
| SinmeB_2561 | 0        | 0       | 0        |
| SinmeB_2562 | 0        | 0       | 0        |
| SinmeB_2564 | 0.0012   | 0.0056  | 0.22366  |
| SinmeB_2565 | 0        | 0       | 0        |
| SinmeB_2566 | 0        | 0.0019  | 0        |
| SinmeB_2568 | 0        | 0       | 0        |
| SinmeB_2569 | 0.0021   | 0       | NA       |
| SinmeB_2570 | 0        | 0       | 0        |
| SinmeB_2571 | 0        | 0       | 0        |
| SinmeB_2573 | 0        | 0       | 0        |
| SinmeB_2574 | 0        | 0.0023  | 0        |
| SinmeB_2576 | 0.0013   | 0       | NA       |
| SinmeB_2577 | 0.0012   | 0       | NA       |
| SinmeB_2578 | 0        | 0       | 0        |
| SinmeB_2579 | 0        | 0       | 0        |
| SinmeB_2580 | 0.00085  | 0       | NA       |
| SinmeB_2581 | 0        | 0       | 0        |
| SinmeB_2583 | 0        | 0       | 0        |
| SinmeB_2584 | 0        | 0       | 0        |
| SinmeB_2585 | 0        | 0       | 0        |
| SinmeB_2586 | 0.000675 | 0       | NA       |
| SinmeB_2588 | 0        | 0       | 0        |
| SinmeB_2594 | 0.00085  | 0.00275 | 0.157125 |
| SinmeB_2595 | 0        | 0       | 0        |
| SinmeB_2596 | 0        | 0       | 0        |
| SinmeB_2597 | 0.0011   | 0       | NA       |
| SinmeB_2598 | 0        | 0.0062  | 0        |
| SinmeB_2599 | 0        | 0.0056  | 0        |
| SinmeB_2600 | 0.0013   | 0       | NA       |
| SinmeB_2602 | 0        | 0       | 0        |
| SinmeB_2604 | 0        | 0       | 0        |
| SinmeB_2606 | 0        | 0.0039  | 0        |
| SinmeB_2607 | 0        | 0       | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$                 | $dS$                 | $\omega$ |
|-------------|----------------------|----------------------|----------|
| SinmeB_2608 | 0                    | 0                    | 0        |
| SinmeB_2609 | 0                    | 0                    | 0        |
| SinmeB_2610 | 0                    | 0                    | 0        |
| SinmeB_2611 | 0                    | 0                    | 0        |
| SinmeB_2612 | 0.0011               | 0                    | NA       |
| SinmeB_2616 | 0.0014               | 0.0052               | 0.26547  |
| SinmeB_2618 | 0                    | 0                    | 0        |
| SinmeB_2620 | 0.0012               | 0.002266666666666667 | NA       |
| SinmeB_2623 | 0                    | 0.0047               | 0        |
| SinmeB_2626 | 0                    | 0                    | 0        |
| SinmeB_2627 | 0.0022               | 0                    | NA       |
| SinmeB_2628 | 0.00055              | 0                    | NA       |
| SinmeB_2630 | 0.0013               | 0                    | NA       |
| SinmeB_2631 | 0.0007               | 0                    | NA       |
| SinmeB_2632 | 0                    | 0                    | 0        |
| SinmeB_2633 | 0                    | 0.0046               | 0        |
| SinmeB_2634 | 0.0052               | 0                    | NA       |
| SinmeB_2635 | 0.0009               | 0.0035               | 0.24893  |
| SinmeB_2637 | 0.0008               | 0                    | NA       |
| SinmeB_2638 | 0.0029               | 0                    | NA       |
| SinmeB_2640 | 0                    | 0                    | 0        |
| SinmeB_2641 | 0.0015               | 0.0044               | 0.3388   |
| SinmeB_2642 | 0.001125             | 0.001175             | NA       |
| SinmeB_2643 | 0.0013               | 0                    | NA       |
| SinmeB_2644 | 0                    | 0                    | 0        |
| SinmeB_2646 | 0.0011               | 0.0054               | 0.20934  |
| SinmeB_2647 | 0                    | 0                    | 0        |
| SinmeB_2648 | 0.0018               | 0.00845              | NA       |
| SinmeB_2649 | 0                    | 0                    | 0        |
| SinmeB_2650 | 0                    | 0                    | 0        |
| SinmeB_2651 | 0.00075              | 0                    | NA       |
| SinmeB_2655 | 0                    | 0.0072               | 0        |
| SinmeB_2657 | 0.003                | 0.0064               | NA       |
| SinmeB_2660 | 0                    | 0                    | 0        |
| SinmeB_2661 | 0                    | 0.0057               | 0        |
| SinmeB_2662 | 0                    | 0                    | 0        |
| SinmeB_2665 | 0.0007               | 0                    | NA       |
| SinmeB_2667 | 0.0018               | 0.0098               | 0.18442  |
| SinmeB_2668 | 0                    | 0                    | 0        |
| SinmeB_2669 | 0.002466666666666667 | 0                    | NA       |
| SinmeB_2671 | 0                    | 0                    | 0        |
| SinmeB_2672 | 0                    | 0.0027               | 0        |
| SinmeB_2673 | 0                    | 0.0027               | 0        |
| SinmeB_2674 | 0                    | 0                    | 0        |
| SinmeB_2675 | 0.0026               | 0                    | NA       |
| SinmeB_2676 | 0                    | 0                    | 0        |
| SinmeB_2677 | 0                    | 0.002566666666666667 | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$    | $\omega$ |
|-------------|---------|---------|----------|
| SinmeB_2678 | 0       | 0.0079  | 0        |
| SinmeB_2680 | 0       | 0       | 0        |
| SinmeB_2682 | 0.00045 | 0.0014  | NA       |
| SinmeB_2684 | 0.0027  | 0       | NA       |
| SinmeB_2686 | 0       | 0       | 0        |
| SinmeB_2687 | 0       | 0       | 0        |
| SinmeB_2688 | 0       | 0       | 0        |
| SinmeB_2689 | 0       | 0       | 0        |
| SinmeB_2691 | 0.0009  | 0       | NA       |
| SinmeB_2693 | 0       | 0       | 0        |
| SinmeB_2696 | 0.004   | 0       | NA       |
| SinmeB_3062 | 0.0014  | 0.0049  | 0.28166  |
| SinmeB_3063 | 0.001   | 0       | NA       |
| SinmeB_3064 | 0       | 0       | 0        |
| SinmeB_3065 | 0.0009  | 0       | NA       |
| SinmeB_3066 | 0       | 0       | 0        |
| SinmeB_3068 | 0       | 0       | 0        |
| SinmeB_3072 | 0       | 0.0031  | 0        |
| SinmeB_3074 | 0       | 0       | 0        |
| SinmeB_3075 | 0       | 0       | 0        |
| SinmeB_3078 | 0.0042  | 0       | NA       |
| SinmeB_3079 | 0       | 0       | 0        |
| SinmeB_3080 | 0       | 0.0044  | 0        |
| SinmeB_3082 | 0       | 0       | 0        |
| SinmeB_3083 | 0.0005  | 0       | NA       |
| SinmeB_3085 | 0.0026  | 0       | NA       |
| SinmeB_3086 | 0       | 0       | 0        |
| SinmeB_3089 | 0.0011  | 0.0018  | 0.62472  |
| SinmeB_3090 | 0       | 0       | 0        |
| SinmeB_3091 | 0       | 0       | 0        |
| SinmeB_3092 | 0       | 0       | 0        |
| SinmeB_3093 | 0       | 0.00295 | 0        |
| SinmeB_3095 | 0.0007  | 0.0063  | 0.11016  |
| SinmeB_3096 | 0       | 0       | 0        |
| SinmeB_3097 | 0.0015  | 0.00125 | NA       |
| SinmeB_3100 | 0.0016  | 0       | NA       |
| SinmeB_3101 | 0       | 0       | 0        |
| SinmeB_3102 | 0.0029  | 0       | NA       |
| SinmeB_3103 | 0.0008  | 0       | NA       |
| SinmeB_3104 | 0.0017  | 0       | NA       |
| SinmeB_3105 | 0.0012  | 0       | NA       |
| SinmeB_3106 | 0.0022  | 0       | NA       |
| SinmeB_3107 | 0       | 0       | 0        |
| SinmeB_3108 | 0.00075 | 0       | NA       |
| SinmeB_3110 | 0       | 0       | 0        |
| SinmeB_3112 | 0       | 0       | 0        |
| SinmeB_3115 | 0.0009  | 0       | NA       |

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Table S4 – continued from previous page

| Gene        | $dN$                 | $dS$    | $\omega$ |
|-------------|----------------------|---------|----------|
| SinmeB_3116 | 0                    | 0       | 0        |
| SinmeB_3117 | 0                    | 0       | 0        |
| SinmeB_3119 | 0.0007               | 0       | NA       |
| SinmeB_3120 | 0                    | 0       | 0        |
| SinmeB_3121 | 0                    | 0.003   | 0        |
| SinmeB_3122 | 0.0011               | 0.0068  | 0.15871  |
| SinmeB_3123 | 0                    | 0       | 0        |
| SinmeB_3124 | 0                    | 0.0034  | 0        |
| SinmeB_3125 | 0                    | 0       | 0        |
| SinmeB_3126 | 0                    | 0       | 0        |
| SinmeB_3127 | 0                    | 0       | 0        |
| SinmeB_3128 | 0.0011               | 0       | NA       |
| SinmeB_3130 | 0                    | 0       | 0        |
| SinmeB_3133 | 0                    | 0       | 0        |
| SinmeB_3134 | 0                    | 0       | 0        |
| SinmeB_3135 | 0                    | 0       | 0        |
| SinmeB_3136 | 0                    | 0       | 0        |
| SinmeB_3137 | 0.0013               | 0       | NA       |
| SinmeB_3139 | 0.0009               | 0       | NA       |
| SinmeB_3140 | 0                    | 0       | 0        |
| SinmeB_3141 | 0.0004               | 0.0039  | 0.10489  |
| SinmeB_3143 | 0                    | 0.0035  | 0        |
| SinmeB_3144 | 0.00165              | 0       | NA       |
| SinmeB_3145 | 0.001933333333333333 | 0       | NA       |
| SinmeB_3147 | 0.0011               | 0.0062  | 0.18161  |
| SinmeB_3149 | 0                    | 0       | 0        |
| SinmeB_3150 | 0                    | 0.0034  | 0        |
| SinmeB_3151 | 0                    | 0       | 0        |
| SinmeB_3153 | 0.0038               | 0       | NA       |
| SinmeB_3154 | 0                    | 0       | 0        |
| SinmeB_3155 | 0                    | 0       | 0        |
| SinmeB_3157 | 0                    | 0       | 0        |
| SinmeB_3158 | 0                    | 0       | 0        |
| SinmeB_3159 | 0                    | 0       | 0        |
| SinmeB_3160 | 0                    | 0       | 0        |
| SinmeB_3162 | 0.002                | 0       | NA       |
| SinmeB_3163 | 0                    | 0       | 0        |
| SinmeB_3164 | 0                    | 0       | 0        |
| SinmeB_3165 | 0                    | 0       | 0        |
| SinmeB_3166 | 0                    | 0.0097  | 0        |
| SinmeB_3167 | 0.0032               | 0       | NA       |
| SinmeB_3168 | 0                    | 0       | 0        |
| SinmeB_3169 | 0                    | 0       | 0        |
| SinmeB_3171 | 0                    | 0       | 0        |
| SinmeB_3172 | 0                    | 0       | 0        |
| SinmeB_3173 | 0                    | 0.0041  | 0        |
| SinmeB_3175 | 0.0004               | 0.00165 | 0.122245 |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$   | $\omega$ |
|-------------|---------|--------|----------|
| SinmeB_3176 | 0.001   | 0.0041 | 0.239    |
| SinmeB_3248 | 0       | 0      | 0        |
| SinmeB_3249 | 0.0036  | 0      | NA       |
| SinmeB_3250 | 0       | 0      | 0        |
| SinmeB_3251 | 0       | 0.0029 | 0        |
| SinmeB_3252 | 0       | 0      | 0        |
| SinmeB_3253 | 0       | 0      | 0        |
| SinmeB_3254 | 0       | 0.0056 | 0        |
| SinmeB_3255 | 0       | 0.0031 | 0        |
| SinmeB_3256 | 0       | 0      | 0        |
| SinmeB_3258 | 0.0011  | 0.0036 | 0.31317  |
| SinmeB_3259 | 0       | 0      | 0        |
| SinmeB_3260 | 0       | 0.0083 | 0        |
| SinmeB_3262 | 0       | 0.0018 | 0        |
| SinmeB_3263 | 0       | 0      | 0        |
| SinmeB_3264 | 0       | 0      | 0        |
| SinmeB_3265 | 0       | 0      | 0        |
| SinmeB_3266 | 0       | 0      | 0        |
| SinmeB_3267 | 0.0025  | 0      | NA       |
| SinmeB_3268 | 0       | 0      | 0        |
| SinmeB_3269 | 0       | 0      | 0        |
| SinmeB_3270 | 0       | 0      | 0        |
| SinmeB_3272 | 0       | 0      | 0        |
| SinmeB_3273 | 0       | 0.0056 | 0        |
| SinmeB_3275 | 0       | 0.0035 | 0        |
| SinmeB_3277 | 0       | 0      | 0        |
| SinmeB_3278 | 0       | 0      | 0        |
| SinmeB_3279 | 0       | 0      | 0        |
| SinmeB_3281 | 0       | 0      | 0        |
| SinmeB_3282 | 0       | 0      | 0        |
| SinmeB_3283 | 0       | 0      | 0        |
| SinmeB_3284 | 0       | 0      | 0        |
| SinmeB_3285 | 0       | 0      | 0        |
| SinmeB_3286 | 0.00065 | 0      | NA       |
| SinmeB_3287 | 0       | 0      | 0        |
| SinmeB_3288 | 0.0027  | 0      | NA       |
| SinmeB_3289 | 0       | 0.0069 | 0        |
| SinmeB_3290 | 0       | 0      | 0        |
| SinmeB_3292 | 0       | 0.0047 | 0        |
| SinmeB_3293 | 0.0026  | 0      | NA       |
| SinmeB_3294 | 0.002   | 0      | NA       |
| SinmeB_3296 | 0       | 0      | 0        |
| SinmeB_3297 | 0       | 0.0052 | 0        |
| SinmeB_3298 | 0.001   | 0      | NA       |
| SinmeB_3299 | 0       | 0      | 0        |
| SinmeB_3300 | 0       | 0      | 0        |
| SinmeB_3301 | 0       | 0      | 0        |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$    | $\omega$ |
|-------------|---------|---------|----------|
| SinmeB_3302 | 0       | 0       | 0        |
| SinmeB_3304 | 0.0005  | 0.0057  | 0.0858   |
| SinmeB_3306 | 0       | 0       | 0        |
| SinmeB_3307 | 0       | 0.0019  | 0        |
| SinmeB_3308 | 0.00175 | 0       | NA       |
| SinmeB_3309 | 0.0031  | 0       | NA       |
| SinmeB_3310 | 0       | 0.0127  | 0        |
| SinmeB_3311 | 0       | 0       | 0        |
| SinmeB_3314 | 0       | 0       | 0        |
| SinmeB_3315 | 0       | 0       | 0        |
| SinmeB_3316 | 0       | 0       | 0        |
| SinmeB_3317 | 0       | 0       | 0        |
| SinmeB_3318 | 0       | 0       | 0        |
| SinmeB_3319 | 0       | 0.0024  | 0        |
| SinmeB_3320 | 0       | 0       | 0        |
| SinmeB_3321 | 0.0028  | 0       | NA       |
| SinmeB_3322 | 0       | 0       | 0        |
| SinmeB_3323 | 0       | 0       | 0        |
| SinmeB_3324 | 0       | 0.01025 | 0        |
| SinmeB_3325 | 0       | 0.00405 | 0        |
| SinmeB_3326 | 0       | 0       | 0        |
| SinmeB_3327 | 0.0015  | 0       | NA       |
| SinmeB_3328 | 0       | 0.0067  | 0        |
| SinmeB_3331 | 0       | 0.0028  | 0        |
| SinmeB_3332 | 0       | 0       | 0        |
| SinmeB_3333 | 0.0025  | 0       | NA       |
| SinmeB_3334 | 0       | 0       | 0        |
| SinmeB_3335 | 0.0008  | 0.0027  | 0.31027  |
| SinmeB_3337 | 0       | 0.0144  | 0        |
| SinmeB_3338 | 0       | 0.0038  | 0        |
| SinmeB_3339 | 0       | 0       | 0        |
| SinmeB_3340 | 0       | 0       | 0        |
| SinmeB_3341 | 0       | 0       | 0        |
| SinmeB_3343 | 0.001   | 0       | NA       |
| SinmeB_3344 | 0       | 0       | 0        |
| SinmeB_3345 | 0       | 0.0049  | 0        |
| SinmeB_3346 | 0       | 0       | 0        |
| SinmeB_3348 | 0       | 0       | 0        |
| SinmeB_3351 | 0.002   | 0.0179  | 0.10922  |
| SinmeB_3352 | 0.002   | 0.0045  | 0.43195  |
| SinmeB_3354 | 0.0023  | 0       | NA       |
| SinmeB_3355 | 0       | 0.0118  | 0        |
| SinmeB_3356 | 0       | 0       | 0        |
| SinmeB_3358 | 0       | 0       | 0        |
| SinmeB_3359 | 0       | 0.0076  | 0        |
| SinmeB_3361 | 0.0007  | 0       | NA       |
| SinmeB_3363 | 0.0023  | 0       | NA       |

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Table S4 – continued from previous page

| Gene        | $dN$    | $dS$   | $\omega$ |
|-------------|---------|--------|----------|
| SinmeB_3364 | 0       | 0      | 0        |
| SinmeB_3365 | 0.0007  | 0      | NA       |
| SinmeB_3367 | 0       | 0      | 0        |
| SinmeB_3368 | 0       | 0      | 0        |
| SinmeB_3376 | 0.0004  | 0.0007 | 0.65307  |
| SinmeB_3383 | 0       | 0      | 0        |
| SinmeB_3384 | 0       | 0.008  | 0        |
| SinmeB_3385 | 0.0008  | 0      | NA       |
| SinmeB_3391 | 0       | 0      | 0        |
| SinmeB_3393 | 0.0008  | 0      | NA       |
| SinmeB_3395 | 0       | 0.0063 | 0        |
| SinmeB_3396 | 0       | 0      | 0        |
| SinmeB_3399 | 0       | 0      | 0        |
| SinmeB_3403 | 0.0008  | 0      | NA       |
| SinmeB_3404 | 0.0025  | 0      | NA       |
| SinmeB_3405 | 0       | 0.009  | 0        |
| SinmeB_3407 | 0.0021  | 0.0047 | 0.45552  |
| SinmeB_3409 | 0       | 0.0031 | 0        |
| SinmeB_3411 | 0       | 0      | 0        |
| SinmeB_3413 | 0.00055 | 0.003  | 0.09082  |
| SinmeB_3415 | 0.0013  | 0.0028 | 0.46836  |
| SinmeB_3419 | 0       | 0      | 0        |
| SinmeB_3420 | 0       | 0      | 0        |
| SinmeB_3421 | 0.0015  | 0      | NA       |
| SinmeB_3423 | 0       | 0      | 0        |
| SinmeB_3424 | 0       | 0      | 0        |
| SinmeB_3427 | 0.001   | 0.0012 | 0.85033  |
| SinmeB_3429 | 0       | 0.0033 | 0        |
| SinmeB_3432 | 0.0008  | 0      | NA       |
| SinmeB_3434 | 0.0011  | 0.005  | 0.21716  |
| SinmeB_3436 | 0.0013  | 0.0053 | 0.25057  |
| SinmeB_3439 | 0       | 0      | 0        |
| SinmeB_3441 | 0.0019  | 0      | NA       |
| SinmeB_3442 | 0       | 0.0026 | 0        |
| SinmeB_3444 | 0       | 0      | 0        |
| SinmeB_3445 | 0       | 0      | 0        |
| SinmeB_3446 | 0       | 0      | 0        |
| SinmeB_3447 | 0       | 0      | 0        |
| SinmeB_3448 | 0       | 0      | 0        |
| SinmeB_3449 | 0.0017  | 0.0056 | 0.29801  |
| SinmeB_3451 | 0       | 0      | 0        |
| SinmeB_3452 | 0.0022  | 0.0042 | 0.51792  |
| SinmeB_3453 | 0       | 0.0023 | 0        |
| SinmeB_3455 | 0       | 0      | 0        |
| SinmeB_3457 | 0.0023  | 0      | NA       |
| SinmeB_3458 | 0.0015  | 0      | NA       |
| SMc00010    | 0.0007  | 0.0119 | 0.05943  |

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Table S4 – continued from previous page

| Gene     | $dN$   | $dS$   | $\omega$ |
|----------|--------|--------|----------|
| SMc00018 | 0      | 0      | 0        |
| SMc00019 | 0      | 0      | 0        |
| SMc00020 | 0      | 0      | 0        |
| SMc00024 | 0.0004 | 0      | NA       |
| SMc00026 | 0      | 0      | 0        |
| SMc00030 | 0      | 0      | 0        |
| SMc00041 | 0      | 0      | 0        |
| SMc00051 | 0      | 0.0038 | 0        |
| SMc00056 | 0.0037 | 0      | NA       |
| SMc00057 | 0      | 0      | 0        |
| SMc00058 | 0      | 0      | 0        |
| SMc00059 | 0.0009 | 0      | NA       |
| SMc00060 | 0.0015 | 0      | NA       |
| SMc00071 | 0      | 0      | 0        |
| SMc00073 | 0.0016 | 0.0055 | 0.2862   |
| SMc00074 | 0      | 0.0034 | 0        |
| SMc00077 | 0      | 0.0041 | 0        |
| SMc00081 | 0      | 0      | 0        |
| SMc00083 | 0      | 0      | 0        |
| SMc00086 | 0      | 0.0047 | 0        |
| SMc00092 | 0      | 0      | 0        |
| SMc00094 | 0      | 0.0043 | 0        |
| SMc00097 | 0.0019 | 0      | NA       |
| SMc00099 | 0      | 0      | 0        |
| SMc00106 | 0      | 0      | 0        |
| SMc00109 | 0      | 0.0092 | 0        |
| SMc00115 | 0.0015 | 0      | NA       |
| SMc00120 | 0.0013 | 0      | NA       |
| SMc00129 | 0      | 0      | 0        |
| SMc00135 | 0      | 0      | 0        |
| SMc00138 | 0      | 0      | 0        |
| SMc00139 | 0      | 0      | 0        |
| SMc00141 | 0.0009 | 0      | NA       |
| SMc00142 | 0.0024 | 0      | NA       |
| SMc00154 | 0      | 0.0041 | 0        |
| SMc00161 | 0.0008 | 0      | NA       |
| SMc00162 | 0      | 0      | 0        |
| SMc00164 | 0.0011 | 0      | NA       |
| SMc00172 | 0.0033 | 0.0041 | 0.79106  |
| SMc00177 | 0.0022 | 0      | NA       |
| SMc00235 | 0.0013 | 0      | NA       |
| SMc00239 | 0      | 0      | 0        |
| SMc00247 | 0      | 0      | 0        |
| SMc00249 | 0      | 0      | 0        |
| SMc00261 | 0      | 0.0024 | 0        |
| SMc00273 | 0      | 0      | 0        |
| SMc00276 | 0.0014 | 0      | NA       |

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Table S4 – continued from previous page

| Gene     | $dN$   | $dS$   | $\omega$ |
|----------|--------|--------|----------|
| SMc00297 | 0      | 0      | 0        |
| SMc00302 | 0.0036 | 0      | NA       |
| SMc00452 | 0      | 0      | 0        |
| SMc00454 | 0      | 0      | 0        |
| SMc00471 | 0.0005 | 0      | NA       |
| SMc00478 | 0      | 0.0026 | 0        |
| SMc00485 | 0      | 0      | 0        |
| SMc00492 | 0.0033 | 0.0205 | 0.16144  |
| SMc00518 | 0      | 0      | 0        |
| SMc00531 | 0.0016 | 0      | NA       |
| SMc00534 | 0      | 0      | 0        |
| SMc00537 | 0      | 0      | 0        |
| SMc00560 | 0      | 0      | 0        |
| SMc00561 | 0.0008 | 0.0089 | 0.09019  |
| SMc00562 | 0      | 0      | 0        |
| SMc00572 | 0.0017 | 0.0293 | 0.058    |
| SMc00573 | 0      | 0.0147 | 0        |
| SMc00582 | 0.0016 | 0.0243 | 0.06628  |
| SMc00593 | 0      | 0.009  | 0        |
| SMc00597 | 0.0023 | 0      | NA       |
| SMc00599 | 0.0084 | 0.0098 | 0.86314  |
| SMc00773 | 0      | 0.0178 | 0        |
| SMc00788 | 0      | 0      | 0        |
| SMc00790 | 0      | 0      | 0        |
| SMc00804 | 0      | 0      | 0        |
| SMc00808 | 0      | 0.0053 | 0        |
| SMc00812 | 0.0034 | 0      | NA       |
| SMc00818 | 0      | 0      | 0        |
| SMc00825 | 0      | 0.0035 | 0        |
| SMc00856 | 0      | 0      | 0        |
| SMc00857 | 0      | 0.0046 | 0        |
| SMc00862 | 0.0015 | 0      | NA       |
| SMc00869 | 0      | 0.011  | 0        |
| SMc00877 | 0      | 0      | 0        |
| SMc00881 | 0.0015 | 0      | NA       |
| SMc00887 | 0      | 0.0031 | 0        |
| SMc00914 | 0      | 0      | 0        |
| SMc00919 | 0.0016 | 0      | NA       |
| SMc00922 | 0.0025 | 0      | NA       |
| SMc00929 | 0.0013 | 0      | NA       |
| SMc00939 | 0      | 0      | 0        |
| SMc00945 | 0      | 0      | 0        |
| SMc00951 | 0      | 0      | 0        |
| SMc00955 | 0.0011 | 0.0039 | 0.28531  |
| SMc00956 | 0      | 0      | 0        |
| SMc00966 | 0.0035 | 0.0037 | 0.93697  |
| SMc00968 | 0.0013 | 0      | NA       |

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Table S4 – continued from previous page

| Gene     | $dN$   | $dS$   | $\omega$ |
|----------|--------|--------|----------|
| SMc00969 | 0      | 0.0043 | 0        |
| SMc00971 | 0.0013 | 0      | NA       |
| SMc00993 | 0.003  | 0      | NA       |
| SMc00995 | 0      | 0.0083 | 0        |
| SMc00996 | 0.0017 | 0.0193 | 0.08833  |
| SMc01000 | 0.0143 | 0.0195 | 0.73623  |
| SMc01004 | 0      | 0.01   | 0        |
| SMc01022 | 0.0084 | 0.0337 | 0.24966  |
| SMc01028 | 0.0019 | 0.0708 | 0.02708  |
| SMc01190 | 0      | 0      | 0        |
| SMc01194 | 0      | 0      | 0        |
| SMc01203 | 0      | 0      | 0        |
| SMc01213 | 0.0026 | 0.0128 | 0.20532  |
| SMc01224 | 0.0014 | 0.0041 | 0.33219  |
| SMc01229 | 0      | 0.0214 | 0        |
| SMc01242 | 0.0013 | 0      | NA       |
| SMc01256 | 0.0036 | 0.0413 | 0.08685  |
| SMc01258 | 0.0144 | 0.02   | 0.72299  |
| SMc01266 | 0      | 0.0421 | 0        |
| SMc01274 | 0.0102 | 0.0693 | 0.14698  |
| SMc01290 | 0.0027 | 0      | NA       |
| SMc01293 | 0      | 0      | 0        |
| SMc01295 | 0      | 0.0151 | 0        |
| SMc01297 | 0.0023 | 0.0182 | 0.12765  |
| SMc01301 | 0      | 0      | 0        |
| SMc01306 | 0      | 0.0264 | 0        |
| SMc01332 | 0.0077 | 0.0509 | 0.15138  |
| SMc01336 | 0.0044 | 0.0285 | 0.1536   |
| SMc01343 | 0.003  | 0.0265 | 0.11492  |
| SMc01358 | 0.007  | 0.0105 | 0.66497  |
| SMc01370 | 0.001  | 0.0089 | 0.10958  |
| SMc01406 | 0      | 0      | 0        |
| SMc01429 | 0      | 0      | 0        |
| SMc01435 | 0      | 0      | 0        |
| SMc01437 | 0.0023 | 0      | NA       |
| SMc01438 | 0      | 0      | 0        |
| SMc01439 | 0      | 0.0138 | 0        |
| SMc01457 | 0      | 0      | 0        |
| SMc01488 | 0      | 0.0094 | 0        |
| SMc01491 | 0.0004 | 0.0043 | 0.09976  |
| SMc01496 | 0      | 0      | 0        |
| SMc01497 | 0.0014 | 0      | NA       |
| SMc01500 | 0      | 0.0079 | 0        |
| SMc01503 | 0      | 0      | 0        |
| SMc01513 | 0.0012 | 0.0044 | 0.28053  |
| SMc01525 | 0.0016 | 0      | NA       |
| SMc01531 | 0      | 0      | 0        |

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Table S4 – continued from previous page

| Gene     | $dN$   | $dS$   | $\omega$ |
|----------|--------|--------|----------|
| SMc01534 | 0      | 0.0045 | 0        |
| SMc01542 | 0      | 0      | 0        |
| SMc01559 | 0      | 0      | 0        |
| SMc01578 | 0      | 0      | 0        |
| SMc01580 | 0      | 0      | 0        |
| SMc01581 | 0.005  | 0      | NA       |
| SMc01583 | 0.0021 | 0      | NA       |
| SMc01584 | 0      | 0      | 0        |
| SMc01585 | 0      | 0      | 0        |
| SMc01586 | 0      | 0      | 0        |
| SMc01587 | 0      | 0      | 0        |
| SMc01609 | 0      | 0      | 0        |
| SMc01611 | 0.0006 | 0      | NA       |
| SMc01613 | 0      | 0      | 0        |
| SMc01619 | 0.0013 | 0      | NA       |
| SMc01625 | 0      | 0      | 0        |
| SMc01626 | 0      | 0      | 0        |
| SMc01632 | 0      | 0      | 0        |
| SMc01641 | 0      | 0      | 0        |
| SMc01656 | 0.0008 | 0.005  | 0.16212  |
| SMc01668 | 0.0021 | 0      | NA       |
| SMc01698 | 0.0018 | 0.0118 | 0.14883  |
| SMc01764 | 0.0016 | 0.0245 | 0.06716  |
| SMc01767 | 0      | 0.0373 | 0        |
| SMc01772 | 0      | 0      | 0        |
| SMc01780 | 0.0006 | 0.0264 | 0.02185  |
| SMc01781 | 0      | 0.0226 | 0        |
| SMc01785 | 0      | 0.0366 | 0        |
| SMc01787 | 0.0022 | 0      | NA       |
| SMc01789 | 0.0086 | 0.0636 | 0.13446  |
| SMc01791 | 0      | 0      | 0        |
| SMc01812 | 0.0049 | 0.0271 | 0.18178  |
| SMc01821 | 0.0008 | 0.0043 | 0.19324  |
| SMc01823 | 0      | 0      | 0        |
| SMc01825 | 0.0014 | 0.0123 | 0.11463  |
| SMc01826 | 0      | 0      | 0        |
| SMc01832 | 0      | 0      | 0        |
| SMc01847 | 0      | 0      | 0        |
| SMc01860 | 0      | 0.0031 | 0        |
| SMc01874 | 0.0007 | 0.0029 | 0.2411   |
| SMc01881 | 0      | 0      | 0        |
| SMc01903 | 0      | 0.0187 | 0        |
| SMc01905 | 0      | 0.0167 | 0        |
| SMc01911 | 0.0063 | 0.0589 | 0.1066   |
| SMc01918 | 0      | 0.043  | 0        |
| SMc01960 | 0      | 0      | 0        |
| SMc01961 | 0.0013 | 0      | NA       |

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Table S4 – continued from previous page

| Gene     | $dN$    | $dS$    | $\omega$ |
|----------|---------|---------|----------|
| SMc01981 | 0       | 0       | 0        |
| SMc02048 | 0       | 0.0171  | 0        |
| SMc02070 | 0.0015  | 0.0347  | 0.04433  |
| SMc02078 | 0       | 0.031   | 0        |
| SMc02082 | 0.01165 | 0.17655 | 0.0676   |
| SMc02087 | 0.0019  | 0.0136  | 0.13956  |
| SMc02093 | 0.0036  | 0.0468  | 0.07737  |
| SMc02105 | 0       | 0       | 0        |
| SMc02121 | 0       | 0.0361  | 0        |
| SMc02124 | 0.0022  | 0.0471  | 0.04707  |
| SMc02134 | 0.0045  | 0.0193  | 0.2336   |
| SMc02139 | 0       | 0       | 0        |
| SMc02147 | 0       | 0.0205  | 0        |
| SMc02229 | 0.0013  | 0.0419  | 0.03099  |
| SMc02231 | 0       | 0.0234  | 0        |
| SMc02244 | 0.0019  | 0.0251  | 0.07553  |
| SMc02251 | 0.0021  | 0.0593  | 0.03589  |
| SMc02255 | 0.0009  | 0.0171  | 0.05062  |
| SMc02257 | 0.0015  | 0       | NA       |
| SMc02259 | 0.0015  | 0.0166  | 0.09276  |
| SMc02261 | 0.0041  | 0.0527  | 0.07772  |
| SMc02264 | 0.0075  | 0       | NA       |
| SMc02265 | 0.001   | 0.0401  | 0.02431  |
| SMc02273 | 0.0031  | 0.0197  | 0.15721  |
| SMc02306 | 0.0029  | 0.0485  | 0.0595   |
| SMc02315 | 0.0231  | 0.0824  | 0.27988  |
| SMc02320 | 0       | 0       | 0        |
| SMc02322 | 0.0011  | 0.078   | 0.01473  |
| SMc02333 | 0.0016  | 0.0076  | 0.21691  |
| SMc02336 | 0.0016  | 0       | NA       |
| SMc02338 | 0       | 0.0054  | 0        |
| SMc02349 | 0       | 0.0059  | 0        |
| SMc02362 | 0       | 0       | 0        |
| SMc02370 | 0.0009  | 0       | NA       |
| SMc02386 | 0       | 0.0036  | 0        |
| SMc02392 | 0       | 0       | 0        |
| SMc02394 | 0       | 0       | 0        |
| SMc02396 | 0       | 0.0042  | 0        |
| SMc02407 | 0       | 0       | 0        |
| SMc02418 | 0       | 0       | 0        |
| SMc02469 | 0.0011  | 0       | NA       |
| SMc02488 | 0.0012  | 0       | NA       |
| SMc02494 | 0       | 0.0023  | 0        |
| SMc02509 | 0       | 0       | 0        |
| SMc02599 | 0.0008  | 0.0065  | 0.12004  |
| SMc02603 | 0       | 0       | 0        |
| SMc02634 | 0       | 0.0027  | 0        |

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Table S4 – continued from previous page

| Gene     | $dN$   | $dS$   | $\omega$ |
|----------|--------|--------|----------|
| SMc02646 | 0.0026 | 0.0048 | 0.54043  |
| SMc02655 | 0      | 0.0071 | 0        |
| SMc02658 | 0      | 0      | 0        |
| SMc02685 | 0      | 0      | 0        |
| SMc02690 | 0      | 0      | 0        |
| SMc02698 | 0      | 0.0096 | 0        |
| SMc02705 | 0      | 0.0019 | 0        |
| SMc02711 | 0      | 0      | 0        |
| SMc02734 | 0.0011 | 0      | NA       |
| SMc02737 | 0      | 0.0058 | 0        |
| SMc02738 | 0.0015 | 0      | NA       |
| SMc02813 | 0      | 0      | 0        |
| SMc02818 | 0      | 0      | 0        |
| SMc03001 | 0.0024 | 0.0294 | 0.08318  |
| SMc03014 | 0.0007 | 0.0348 | 0.02116  |
| SMc03019 | 0.0047 | 0.1058 | 0.0443   |
| SMc03024 | 0.0052 | 0.0831 | 0.06266  |
| SMc03025 | 0.0017 | 0.1274 | 0.01354  |
| SMc03026 | 0.0091 | 0.0428 | 0.21195  |
| SMc03027 | 0      | 0.0288 | 0        |
| SMc03028 | 0.006  | 0.106  | 0.05658  |
| SMc03029 | 0.0036 | 0.1748 | 0.02038  |
| SMc03030 | 0.0015 | 0.1421 | 0.01064  |
| SMc03031 | 0.0054 | 0.0571 | 0.09377  |
| SMc03032 | 0.0022 | 0.1085 | 0.02026  |
| SMc03037 | 0.0982 | 0.8115 | 0.12106  |
| SMc03043 | 0.0102 | 0.0916 | 0.11187  |
| SMc03044 | 0.0491 | 0.0856 | 0.5736   |
| SMc03047 | 0.0114 | 0.354  | 0.03234  |
| SMc03070 | 0      | 0.0082 | 0        |
| SMc03090 | 0      | 0.0117 | 0        |
| SMc03100 | 0      | 0.0337 | 0        |
| SMc03108 | 0      | 0      | 0        |
| SMc03239 | 0      | 0      | 0        |
| SMc03241 | 0      | 0      | 0        |
| SMc03747 | 0.0024 | 0      | NA       |
| SMc03748 | 0      | 0.0043 | 0        |
| SMc03808 | 0.0005 | 0.0022 | 0.2069   |
| SMc03818 | 0      | 0      | 0        |
| SMc03835 | 0      | 0      | 0        |
| SMc03837 | 0      | 0      | 0        |
| SMc03882 | 0      | 0      | 0        |
| SMc04088 | 0      | 0.0071 | 0        |
| SMc04092 | 0      | 0      | 0        |
| SMc04178 | 0.0017 | 0      | NA       |
| SMc04179 | 0      | 0      | 0        |
| SMc04183 | 0      | 0      | 0        |

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Table S4 – continued from previous page

| Gene     | $dN$   | $dS$   | $\omega$ |
|----------|--------|--------|----------|
| SMc04194 | 0      | 0      | 0        |
| SMc04204 | 0      | 0      | 0        |
| SMc04208 | 0      | 0.0056 | 0        |
| SMc04219 | 0      | 0      | 0        |
| SMc04221 | 0      | 0      | 0        |
| SMc04227 | 0      | 0      | 0        |
| SMc04228 | 0      | 0      | 0        |
| SMc04240 | 0      | 0      | 0        |
| SMc04252 | 0.0012 | 0.0062 | 0.19134  |
| SMc04254 | 0      | 0      | 0        |
| SMc04256 | 0      | 0      | 0        |
| SMc04266 | 0      | 0      | 0        |
| SMc04274 | 0.0011 | 0.005  | 0.2232   |
| SMc04276 | 0      | 0      | 0        |
| SMc04285 | 0      | 0      | 0        |
| SMc04286 | 0      | 0.0062 | 0        |
| SMc04288 | 0      | 0      | 0        |
| SMc04292 | 0.0014 | 0      | NA       |
| SMc04296 | 0      | 0.008  | 0        |
| SMc04322 | 0      | 0.0052 | 0        |
| SMc04339 | 0      | 0      | 0        |
| SMc04357 | 0      | 0.015  | 0        |
| SMc04386 | 0.001  | 0      | NA       |
| SMc04387 | 0      | 0      | 0        |
| SMc04388 | 0.0009 | 0      | NA       |
| SMc04395 | 0      | 0.0068 | 0        |
| SMc04397 | 0      | 0      | 0        |
| SMc04398 | 0      | 0      | 0        |
| SMc04440 | 0      | 0      | 0        |
| SMc04450 | 0      | 0.0026 | 0        |
| SMc04882 | 0      | 0      | 0        |

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$gene_{name}, dN, dS, omega$  DU99\_18825, 0.0027, 0.01595, 0.08507 DU99\_18915, 0.00305, 0, NA DU99\_19155, 0.0229, 0.0983,

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Table S6: Per gene  $dN$ ,  $dS$ , and  $\omega$  values calculated for *S. meliloti* pSymB.

| <i>Sinorhizobium meliloti</i> pSymB |          |         |           |
|-------------------------------------|----------|---------|-----------|
| Gene                                | $dN$     | $dS$    | $\omega$  |
| gene_name                           | dN       | dS      | omega     |
| Sinme_3754                          | 0        | 0.0402  | 0         |
| Sinme_3756                          | 0.0078   | 0.0519  | 0.14988   |
| Sinme_3757                          | 0.0057   | 0.0509  | 0.11204   |
| Sinme_3760                          | 0.0149   | 0.1544  | 0.09648   |
| Sinme_3761                          | 0        | 0.0718  | 0         |
| Sinme_3762                          | 0.0032   | 0.0197  | 0.15977   |
| Sinme_3763                          | 0.0016   | 0.0412  | 0.03937   |
| Sinme_3765                          | 0        | 0.0142  | 0         |
| Sinme_3768                          | 0        | 0.0132  | 0         |
| Sinme_3769                          | 0.0096   | 0.0177  | NA        |
| Sinme_3770                          | 0        | 0.0878  | 0         |
| Sinme_3771                          | 0.0054   | 0.0748  | 0.0727    |
| Sinme_3772                          | 0.00945  | 0.2333  | 0.040945  |
| Sinme_3774                          | 0.00755  | 0.17255 | 0.044465  |
| Sinme_3775                          | 0.0356   | 0.2167  | 0.158705  |
| Sinme_3776                          | 0.0089   | 0.163   | 0.05475   |
| Sinme_3779                          | 0.0182   | 0.1842  | 0.0986    |
| Sinme_3780                          | 0.017    | 0.0617  | 0.27512   |
| Sinme_3783                          | 0.02015  | 0.1643  | 0.130535  |
| Sinme_3784                          | 0.02285  | 0.2089  | 0.10835   |
| Sinme_3785                          | 0.0037   | 0.0477  | 0.07659   |
| Sinme_3787                          | 0.009325 | 0.0275  | 0.4112125 |
| Sinme_3788                          | 0.013    | 0.0886  | 0.14664   |
| Sinme_3789                          | 0        | 0.0589  | 0         |
| Sinme_3790                          | 0.00935  | 0.06385 | 0.2125    |
| Sinme_3791                          | 0.0063   | 0.0559  | 0.11339   |
| Sinme_3792                          | 0.015    | 0.1199  | 0.12503   |
| Sinme_3794                          | 0.0197   | 0.0658  | 0.29873   |
| Sinme_3795                          | 0.0215   | 0.1006  | 0.21408   |
| Sinme_3797                          | 0.0237   | 0.0933  | 0.25393   |
| Sinme_3798                          | 0.0104   | 0.0833  | 0.12457   |
| Sinme_3799                          | 0.0145   | 0.0872  | 0.16685   |
| Sinme_3800                          | 0.0114   | 0.0843  | 0.13505   |
| Sinme_3804                          | 0.0095   | 0.079   | 0.12068   |
| Sinme_3806                          | 0        | 0.0731  | 0         |
| Sinme_3808                          | 0.0053   | 0.0378  | 0.14111   |
| Sinme_3809                          | 0.014    | 0.026   | 0.53841   |
| Sinme_3810                          | 0.0008   | 0.0237  | 0.03392   |
| Sinme_3812                          | 0.004    | 0.0118  | 0.33915   |
| Sinme_3813                          | 0.0045   | 0.0109  | 0.41189   |
| Sinme_3814                          | 0.0147   | 0.08975 | 0.208025  |
| Sinme_3815                          | 0.0017   | 0.0556  | 0.03073   |
| Sinme_3816                          | 0.0021   | 0.0409  | 0.05197   |
| Sinme_3818                          | 0.0011   | 0.0982  | 0.0116    |

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Table S6 – continued from previous page

| Gene       | $dN$                 | $dS$                | $\omega$            |
|------------|----------------------|---------------------|---------------------|
| Sinme_3820 | 0.0034               | 0.0459              | 0.0751              |
| Sinme_3822 | 0.0042               | 0.0082              | NA                  |
| Sinme_3823 | 0.0025               | 0.0311              | 0.08104             |
| Sinme_3825 | 0.0012               | 0.0161              | 0.07398             |
| Sinme_3826 | 0                    | 0.0328              | 0                   |
| Sinme_3828 | 0.005                | 0.063               | 0.07873             |
| Sinme_3829 | 0.0073               | 0.0241              | 0.30439             |
| Sinme_3831 | 0.0074               | 0.0901              | 0.08232             |
| Sinme_3833 | 0.007666666666666667 | 0.11816666666666667 | 0.05218333333333333 |
| Sinme_3834 | 0.0082               | 0.0472              | 0.17309             |
| Sinme_3836 | 0.003566666666666667 | 0.08563333333333333 | 0.04262333333333333 |
| Sinme_3837 | 0.0082               | 0.037               | 0.22157             |
| Sinme_3840 | 0                    | 0.437               | 0                   |
| Sinme_3841 | 0.0034               | 0.0622              | 0.05462             |
| Sinme_3842 | 0.0105               | 0.1289              | 0.08183             |
| Sinme_3843 | 0                    | 0.1273              | 0                   |
| Sinme_3844 | 0.0016               | 0.1614              | 0.00998             |
| Sinme_3845 | 0.0137               | 0.0135              | 1.01386             |
| Sinme_3846 | 0                    | 0.0223              | 0                   |
| Sinme_3848 | 0.0034               | 0.0229              | 0.15066             |
| Sinme_3849 | 0                    | 0.3041              | 0                   |
| Sinme_3850 | 0.0552               | 0.2826              | 0.19529             |
| Sinme_3864 | 0.0018               | 0.1903              | 0.00954             |
| Sinme_3865 | 0                    | 0.1397              | 0                   |
| Sinme_3867 | 0.03105              | 0.2375              | 0.113345            |
| Sinme_3868 | 0.0061               | 0.1094              | 0.05588             |
| Sinme_3871 | 0.0063               | 0.0617              | 0.10154             |
| Sinme_3872 | 0.001                | 0.0685              | 0.02832             |
| Sinme_3873 | 0                    | 0.0335              | 0                   |
| Sinme_3874 | 0                    | 0.0759              | 0                   |
| Sinme_3875 | 0.0103               | 0                   | NA                  |
| Sinme_3877 | 0.00315              | 0.10735             | 0.069795            |
| Sinme_3878 | 0.0095               | 0.1621              | 0.05833             |
| Sinme_3880 | 0.0072               | 0.0264              | 0.27356             |
| Sinme_3881 | 0.008633333333333333 | 0.07723333333333333 | 0.12266666666666667 |
| Sinme_3882 | 0.0043               | 0.0291              | 0.14833             |
| Sinme_3884 | 0.0169               | 0.0647              | 0.2603              |
| Sinme_3885 | 0.0018               | 0.1195              | 0.01491             |
| Sinme_3886 | 0.00745              | 0.16                | 0.0411              |
| Sinme_3887 | 0                    | 0.0456              | 0                   |
| Sinme_3888 | 0.0022               | 0.0446              | 0.05038             |
| Sinme_3890 | 0.0066               | 0.0303              | 0.21855             |
| Sinme_3891 | 0                    | 0.0144              | 0                   |
| Sinme_3892 | 0.0071               | 0.032               | 0.22088             |
| Sinme_3893 | 0.0027               | 0.066               | 0.04151             |
| Sinme_3895 | 0.00225              | 0.05075             | 0.048035            |
| Sinme_3896 | 0                    | 0                   | 0                   |

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Table S6 – continued from previous page

| Gene       | $dN$   | $dS$    | $\omega$ |
|------------|--------|---------|----------|
| Sinme_3897 | 0.0139 | 0.06425 | 0.195915 |
| Sinme_3899 | 0.0017 | 0.0656  | 0.02651  |
| Sinme_3901 | 0.0141 | 0.092   | 0.15335  |
| Sinme_3903 | 0.0024 | 0.0451  | 0.05237  |
| Sinme_3904 | 0.0099 | 0.027   | 0.36719  |
| Sinme_3905 | 0.0028 | 0.0616  | 0.04486  |
| Sinme_3906 | 0.0026 | 0.008   | 0.3228   |
| Sinme_3907 | 0      | 0.0064  | 0        |
| Sinme_3909 | 0.001  | 0.0033  | 0.29822  |
| Sinme_3910 | 0.0018 | 0.0122  | 0.1443   |
| Sinme_3911 | 0.0029 | 0       | NA       |
| Sinme_3912 | 0      | 0       | 0        |
| Sinme_3914 | 0.0071 | 0       | NA       |
| Sinme_3915 | 0.005  | 0       | NA       |
| Sinme_3916 | 0      | 0.01885 | 0        |
| Sinme_3918 | 0.0041 | 0.0076  | 0.54207  |
| Sinme_3920 | 0.0093 | 0.0669  | 0.1392   |
| Sinme_3921 | 0      | 0.0448  | 0        |
| Sinme_3922 | 0.0014 | 0.0519  | 0.02783  |
| Sinme_3923 | 0.001  | 0.0367  | 0.02844  |
| Sinme_3924 | 0.0133 | 0.1446  | 0.09229  |
| Sinme_3925 | 0.0119 | 0.08215 | 0.18973  |
| Sinme_3926 | 0.005  | 0.0318  | 0.15722  |
| Sinme_3927 | 0.0023 | 0.0125  | 0.1863   |
| Sinme_3928 | 0.0085 | 0.0372  | 0.22918  |
| Sinme_3929 | 0.0046 | 0.0257  | 0.17756  |
| Sinme_3930 | 0.011  | 0.055   | 0.19925  |
| Sinme_3931 | 0.0102 | 0.0458  | 0.22269  |
| Sinme_3932 | 0.0069 | 0.0933  | 0.07394  |
| Sinme_3933 | 0      | 0.0045  | 0        |
| Sinme_3934 | 0      | 0.0048  | 0        |
| Sinme_3935 | 0.003  | 0.0131  | 0.2285   |
| Sinme_3938 | 0.0035 | 0.0266  | 0.13109  |
| Sinme_3939 | 0      | 0       | 0        |
| Sinme_3940 | 0      | 0       | 0        |
| Sinme_3941 | 0.001  | 0.0073  | 0.13919  |
| Sinme_3942 | 0      | 0.0147  | 0        |
| Sinme_3943 | 0.0024 | 0       | NA       |
| Sinme_3944 | 0.0102 | 0.132   | 0.0775   |
| Sinme_3946 | 0      | 0.0052  | 0        |
| Sinme_3948 | 0.0106 | 0.064   | 0.16511  |
| Sinme_3951 | 0.0017 | 0.0115  | 0.15138  |
| Sinme_3952 | 0.0045 | 0       | NA       |
| Sinme_3953 | 0      | 0.02255 | 0        |
| Sinme_3954 | 0      | 0.0274  | 0        |
| Sinme_3955 | 0.001  | 0.0044  | 0.23333  |
| Sinme_3956 | 0.0012 | 0.0144  | 0.08223  |

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Table S6 – continued from previous page

| Gene       | $dN$    | $dS$    | $\omega$ |
|------------|---------|---------|----------|
| Sinme_3957 | 0.0035  | 0.0215  | 0.16188  |
| Sinme_3959 | 0.00785 | 0.09445 | 0.077255 |
| Sinme_3960 | 0.0059  | 0.0857  | 0.06854  |
| Sinme_3961 | 0.0022  | 0.007   | 0.31824  |
| Sinme_3962 | 0       | 0       | 0        |
| Sinme_3964 | 0.00455 | 0.01685 | 0.28468  |
| Sinme_3967 | 0.0046  | 0.0362  | 0.12838  |
| Sinme_3969 | 0.0101  | 0.0407  | 0.24864  |
| Sinme_3970 | 0.0097  | 0.0094  | 1.03608  |
| Sinme_3971 | 0.0034  | 0.0506  | 0.06768  |
| Sinme_3972 | 0.0014  | 0.11315 | 0.0146   |
| Sinme_3973 | 0.0034  | 0.1303  | 0.02575  |
| Sinme_3974 | 0.0095  | 0.0361  | 0.26189  |
| Sinme_3976 | 0.0049  | 0.0411  | 0.11899  |
| Sinme_3977 | 0.0058  | 0.0228  | 0.25568  |
| Sinme_3978 | 0.0051  | 0.038   | 0.13529  |
| Sinme_3982 | 0.0041  | 0.1059  | 0.0389   |
| Sinme_3984 | 0.002   | 0.036   | 0.05681  |
| Sinme_3986 | 0.0051  | 0.1027  | 0.04995  |
| Sinme_3987 | 0       | 0.0628  | 0        |
| Sinme_3988 | 0.0109  | 0.0275  | 0.39842  |
| Sinme_3990 | 0.0077  | 0.1797  | 0.04265  |
| Sinme_3991 | 0.0157  | 0.1227  | 0.1275   |
| Sinme_3993 | 0.0261  | 0.15825 | 0.18942  |
| Sinme_3994 | 0.0042  | 0.1298  | 0.03268  |
| Sinme_3996 | 0.0122  | 0.1551  | 0.07869  |
| Sinme_3999 | 0       | 0.0156  | 0        |
| Sinme_4001 | 0.0084  | 0.0129  | 0.64832  |
| Sinme_4002 | 0.003   | 0       | NA       |
| Sinme_4003 | 0.0039  | 0.0335  | 0.116    |
| Sinme_4006 | 0.0068  | 0.0426  | 0.15859  |
| Sinme_4008 | 0.0013  | 0.0367  | 0.03412  |
| Sinme_4009 | 0.0026  | 0.0331  | 0.0774   |
| Sinme_4010 | 0.0025  | 0.0219  | 0.11499  |
| Sinme_4011 | 0.0115  | 0.0459  | 0.25138  |
| Sinme_4012 | 0.0036  | 0.1505  | 0.02404  |
| Sinme_4013 | 0.0266  | 0.3185  | 0.08363  |
| Sinme_4014 | 0.00295 | 0.0885  | 0.020565 |
| Sinme_4015 | 0.004   | 0.0456  | 0.0873   |
| Sinme_4016 | 0.0038  | 0.0272  | 0.13901  |
| Sinme_4017 | 0       | 0.0237  | 0        |
| Sinme_4018 | 0.0071  | 0.0229  | 0.31174  |
| Sinme_4019 | 0.0033  | 0.2744  | 0.01191  |
| Sinme_4020 | 0.0037  | 0.3093  | 0.01187  |
| Sinme_4021 | 0       | 0.1472  | 0        |
| Sinme_4025 | 0.0411  | 0.506   | 0.08131  |
| Sinme_4026 | 0.0257  | 0.4572  | 0.05616  |

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Table S6 – continued from previous page

| Gene       | $dN$                 | $dS$                | $\omega$ |
|------------|----------------------|---------------------|----------|
| Sinme_4027 | 0.0479               | 0.6089              | 0.10473  |
| Sinme_4028 | 0.0111               | 0.1953              | 0.05664  |
| Sinme_4029 | 0.0261               | 0.2472              | 0.1056   |
| Sinme_4030 | 0.02785              | 0.1062              | 0.338745 |
| Sinme_4031 | 0.0076               | 0.0409              | 0.18511  |
| Sinme_4032 | 0.0123               | 0.1151              | 0.10646  |
| Sinme_4033 | 0.0028               | 0.0451              | 0.06119  |
| Sinme_4034 | 0.0106               | 0.0729              | 0.1459   |
| Sinme_4035 | 0.0102               | 0.1413              | 0.072    |
| Sinme_4038 | 0.0206               | 0.067               | 0.30807  |
| Sinme_4040 | 0.0039               | 0.107               | 0.03656  |
| Sinme_4041 | 0.0063               | 0.0452              | 0.13832  |
| Sinme_4042 | 0.0039               | 0.0269              | 0.14586  |
| Sinme_4043 | 0.0054               | 0.0592              | 0.11128  |
| Sinme_4049 | 0.0088               | 0.0221              | 0.3986   |
| Sinme_4050 | 0.0075               | 0.077               | 0.09763  |
| Sinme_4051 | 0.0225               | 0.0112              | 1.99893  |
| Sinme_4052 | 0.0023               | 0.02945             | 0.087315 |
| Sinme_4054 | 0.0109               | 0.0425              | 0.2559   |
| Sinme_4055 | 0.0164               | 0.4093              | 0.04014  |
| Sinme_4056 | 0.0215               | 0.4701              | 0.04542  |
| Sinme_4058 | 0.0374               | 0.4352              | 0.08588  |
| Sinme_4059 | 0.0111               | 0.2668              | 0.04144  |
| Sinme_4060 | 0.0168               | 0.3532              | 0.04747  |
| Sinme_4065 | 0.0102               | 0.25745             | 0.04875  |
| Sinme_4066 | 0.0052               | 0.0142              | 0.36674  |
| Sinme_4067 | 0.0036               | 0.03685             | 0.065705 |
| Sinme_4068 | 0.0219               | 0.16225             | 0.13375  |
| Sinme_4069 | 0.0208               | 0.3675              | 0.05649  |
| Sinme_4070 | 0.0198               | 0.224               | 0.08824  |
| Sinme_4072 | 0.01525              | 0.3606              | 0.04561  |
| Sinme_4073 | 0.0115               | 0.19725             | 0.060585 |
| Sinme_4074 | 0.0075               | 0.0507              | 0.1478   |
| Sinme_4075 | 0.0203               | 0.0244              | 0.82958  |
| Sinme_4078 | 0.0121               | 0.1042              | 0.11621  |
| Sinme_4079 | 0.0152               | 0.1001              | 0.15182  |
| Sinme_4080 | 0.0243               | 0.0722              | 0.33578  |
| Sinme_4082 | 0.0205               | 0.1474              | 0.13884  |
| Sinme_4085 | 0.0121               | 0.137               | 0.08837  |
| Sinme_4087 | 0.0044               | 0.1968              | 0.02215  |
| Sinme_4088 | 0.002833333333333333 | 0.04796666666666667 | 0.19047  |
| Sinme_4091 | 0.0071               | 0.0686              | 0.10339  |
| Sinme_4092 | 0.0093               | 0.0428              | 0.21753  |
| Sinme_4095 | 0.0095               | 0.0524              | 0.18057  |
| Sinme_4096 | 0.0072               | 0.0771              | 0.09352  |
| Sinme_4097 | 0.00785              | 0.08345             | 0.098515 |
| Sinme_4098 | 0.0182               | 0.1367              | 0.13296  |

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Table S6 – continued from previous page

| Gene       | $dN$               | $dS$              | $\omega$          |
|------------|--------------------|-------------------|-------------------|
| Sinme_4112 | 0.0059             | 0.0193            | 0.30694           |
| Sinme_4113 | 0.0161             | 0.12735           | 0.13743           |
| Sinme_4115 | 0.00475            | 0.1527            | 0.031815          |
| Sinme_4116 | 0.0043             | 0.2795            | 0.01544           |
| Sinme_4117 | 0.0074             | 0.1715            | 0.04328           |
| Sinme_4118 | 0.0064             | 0.1005            | 0.06352           |
| Sinme_4121 | 0.0035             | 0.1445            | 0.02426           |
| Sinme_4122 | 0.0163             | 0.198             | 0.08239           |
| Sinme_4124 | 0.0025             | 0.248             | 0.01              |
| Sinme_4125 | 0.004              | 0.0787            | 0.05101           |
| Sinme_4126 | 0.00305            | 0.0307            | 0.113185          |
| Sinme_4127 | 0.00275            | 0.0576            | 0.040495          |
| Sinme_4128 | 0.0205             | 0.1309            | 0.15663           |
| Sinme_4129 | 0.0185             | 0.0864            | 0.21464           |
| Sinme_4130 | 0.025              | 0.2042            | 0.12242           |
| Sinme_4131 | 0.001              | 0.0747            | 0.01384           |
| Sinme_4132 | 0.0105             | 0.0899            | 0.117             |
| Sinme_4135 | 0.00155            | 0.05815           | 0.02904           |
| Sinme_4138 | 0.0145             | 0.1004            | 0.1445            |
| Sinme_4140 | 0.0086             | 0.0997            | 0.08659           |
| Sinme_4142 | 0.0086             | 0.0823            | 0.10489           |
| Sinme_4143 | 0.0104             | 0.0412            | 0.25153           |
| Sinme_4144 | 0.0046             | 0.153             | 0.02998           |
| Sinme_4146 | 0.0045             | 0.1207            | 0.03689           |
| Sinme_4147 | 0.0146571428571429 | 0.119585714285714 | 0.109864285714286 |
| Sinme_4148 | 0.0222             | 0.3388            | 0.06561           |
| Sinme_4149 | 0.0131             | 0.1433            | 0.0912            |
| Sinme_4150 | 0.0106             | 0.2925            | 0.03613           |
| Sinme_4151 | 0.0084             | 0.0908            | 0.09286           |
| Sinme_4152 | 0.0152             | 0.169             | 0.08977           |
| Sinme_4153 | 0.02965            | 0.1839            | 0.14765           |
| Sinme_4154 | 0.0049             | 0.03025           | 0.16283           |
| Sinme_4155 | 0.0051             | 0.0842            | 0.06078           |
| Sinme_4156 | 0.0067             | 0.1606            | 0.04173           |
| Sinme_4163 | 0.0299             | 0.11805           | 0.253685          |
| Sinme_4164 | 0.011              | 0.108             | 0.10224           |
| Sinme_4165 | 0.0081             | 0.0574            | 0.1413            |
| Sinme_4167 | 0.0174             | 0.1454            | 0.11997           |
| Sinme_4168 | 0.0149             | 0.1697            | 0.08761           |
| Sinme_4169 | 0.00675            | 0.1115            | 0.063125          |
| Sinme_4172 | 0.01255            | 0.1945            | 0.058025          |
| Sinme_4175 | 0                  | 0.1202            | 0                 |
| Sinme_4176 | 0.0162             | 0.3376            | 0.04805           |
| Sinme_4177 | 0.00625            | 0.12245           | 0.051565          |
| Sinme_4178 | 0.01505            | 0.1154            | 0.12412           |
| Sinme_4179 | 0.0107             | 0.0171            | 0.62548           |
| Sinme_4180 | 0.0094             | 0.0623            | 0.15071           |

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Table S6 – continued from previous page

| Gene       | $dN$    | $dS$     | $\omega$  |
|------------|---------|----------|-----------|
| Sinme_4181 | 0.00595 | 0.03765  | 0.15647   |
| Sinme_4182 | 0.0111  | 0.0275   | 0.40232   |
| Sinme_4183 | 0.0078  | 0.0414   | 0.18943   |
| Sinme_4185 | 0.0169  | 0.0719   | 0.23546   |
| Sinme_4188 | 0.0087  | 0.0811   | 0.10695   |
| Sinme_4190 | 0.0137  | 0.0448   | 0.30562   |
| Sinme_4192 | 0.0153  | 0.0995   | 0.15403   |
| Sinme_4193 | 0.0126  | 0.0972   | 0.12956   |
| Sinme_4194 | 0.0038  | 0.0461   | 0.08185   |
| Sinme_4195 | 0.00525 | 0.05515  | 0.14236   |
| Sinme_4196 | 0.0062  | 0.0069   | 0.89941   |
| Sinme_4197 | 0.0103  | 0.0157   | 0.65693   |
| Sinme_4198 | 0.0027  | 0.0561   | 0.04904   |
| Sinme_4200 | 0.004   | 0.0443   | 0.099815  |
| Sinme_4201 | 0.0036  | 0.0439   | 0.0814    |
| Sinme_4203 | 0.0042  | 0.0648   | 0.06417   |
| Sinme_4207 | 0.0273  | 0.0325   | 0.84197   |
| Sinme_4208 | 0.0391  | 0.2539   | 0.15386   |
| Sinme_4209 | 0.02855 | 0.33     | 0.091005  |
| Sinme_4210 | 0.0291  | 0.3347   | 0.08686   |
| Sinme_4211 | 0.0559  | 0.1938   | 0.28856   |
| Sinme_4217 | 0.0041  | 0.0485   | 0.055555  |
| Sinme_4220 | 0.023   | 0.07295  | 0.30706   |
| Sinme_4221 | 0.0228  | 0.0464   | 0.49151   |
| Sinme_4222 | 0.0239  | 0.059025 | 0.4365725 |
| Sinme_4224 | 0.0232  | 0.1185   | 0.19556   |
| Sinme_4226 | 0.0167  | 0.0749   | 0.299015  |
| Sinme_4227 | 0.0241  | 0.1309   | 0.18452   |
| Sinme_4228 | 0.004   | 0.055    | 0.07358   |
| Sinme_4231 | 0.0188  | 0.3152   | 0.05952   |
| Sinme_4241 | 0.1473  | 0.2743   | 0.53702   |
| Sinme_4242 | 0.0432  | 0.2126   | 0.20342   |
| Sinme_4243 | 0.0142  | 0.0691   | 0.20542   |
| Sinme_4244 | 0.0279  | 0.0456   | 0.61122   |
| Sinme_4245 | 0.0395  | 0.1023   | 0.38638   |
| Sinme_4246 | 0.0406  | 0.2054   | 0.19756   |
| Sinme_4248 | 0.0539  | 0.32     | 0.16832   |
| Sinme_4249 | 0.0307  | 0.4565   | 0.06717   |
| Sinme_4250 | 0.03485 | 0.2646   | 0.14819   |
| Sinme_4252 | 0.0205  | 0.1834   | 0.11165   |
| Sinme_4253 | 0.0056  | 0.1251   | 0.0445    |
| Sinme_4254 | 0.0255  | 0.1083   | 0.23525   |
| Sinme_4255 | 0       | 0.0125   | 0         |
| Sinme_4256 | 0.0153  | 0.06425  | 0.23905   |
| Sinme_4257 | 0.0154  | 0.16     | 0.09637   |
| Sinme_4259 | 0.0193  | 0.1469   | 0.13148   |
| Sinme_4261 | 0.0252  | 0.1649   | 0.15274   |

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Table S6 – continued from previous page

| Gene       | $dN$                | $dS$                | $\omega$            |
|------------|---------------------|---------------------|---------------------|
| Sinme_4263 | 0.0157              | 0.2016              | 0.07787             |
| Sinme_4264 | 0.0202              | 0.1827              | 0.11082             |
| Sinme_4265 | 0.079               | 0.2217              | 0.35609             |
| Sinme_4266 | 0.13845             | 0.75665             | 0.204565            |
| Sinme_4267 | 0.0602              | 0.3098333333333333  | 0.1780166666666667  |
| Sinme_4268 | 0.02326666666666667 | 0.2523666666666667  | 0.09794833333333333 |
| Sinme_4269 | 0.0286              | 0.4972              | 0.05754             |
| Sinme_4271 | 0.0392              | 1.1163              | 0.03508             |
| Sinme_4283 | 0.05035             | 2.26845             | 0.02231             |
| Sinme_4284 | 0.0103              | 1.0912              | 0.00947             |
| Sinme_4285 | 0.050925            | 1.057525            | 0.0598              |
| Sinme_4288 | 0.0236              | 0.1653              | 0.14253             |
| Sinme_4290 | 0.0175              | 0.1724              | 0.10128             |
| Sinme_4292 | 0.0171              | 0.1944              | 0.08806             |
| Sinme_4293 | 0.0331              | 0.1228              | 0.26964             |
| Sinme_4294 | 0.0216              | 0.1265              | 0.17085             |
| Sinme_4295 | 0.0051              | 0.5367              | 0.00952             |
| Sinme_4297 | 0.0277              | 0.1721              | 0.16088             |
| Sinme_4300 | 0.0169              | 0.1566              | 0.10789             |
| Sinme_4301 | 0.0054              | 0.1704              | 0.03183             |
| Sinme_4302 | 0.0341              | 0.2732              | 0.12478             |
| Sinme_4303 | 0.0239              | 0.4546              | 0.05263             |
| Sinme_4304 | 0.0081              | 0.1387              | 0.0583              |
| Sinme_4307 | 0.035               | 0.2176              | 0.16089             |
| Sinme_4309 | 0                   | 0                   | 0                   |
| Sinme_4310 | 0.046               | 0.2683              | 0.169555            |
| Sinme_4311 | 0.0227              | 0.167               | 0.13598             |
| Sinme_4312 | 0.0147              | 0.1048              | 0.14002             |
| Sinme_4314 | 0.02785             | 0.272               | 0.093255            |
| Sinme_4315 | 0.0264              | 0.4427333333333333  | 0.08021             |
| Sinme_4316 | 0.0351              | 0.2551              | 0.13762             |
| Sinme_4317 | 0.0531              | 0.3496              | 0.15188             |
| Sinme_4325 | 0.0187              | 0.1882              | 0.09961             |
| Sinme_4387 | 0.0028              | 0.069               | 0.04111             |
| Sinme_4389 | 0                   | 0.0735              | 0                   |
| Sinme_4390 | 0.0194              | 0.0911              | 0.21255             |
| Sinme_4392 | 0.0087              | 0.2153              | 0.04041             |
| Sinme_4393 | 0.0167              | 0.233               | 0.08603             |
| Sinme_4394 | 0.01535             | 0.1776              | 0.088055            |
| Sinme_4397 | 0.0529              | 0.1328              | 0.39793             |
| Sinme_4398 | 0.0293              | 0.1912              | 0.15324             |
| Sinme_4399 | 0.0016              | 0.2818              | 0.0057              |
| Sinme_4402 | 0.0126              | 0.1964              | 0.06399             |
| Sinme_4404 | 0.0113              | 0.1397              | 0.085035            |
| Sinme_4405 | 0.01115             | 0.0536              | NA                  |
| Sinme_4406 | 0.0049              | 0.03706666666666667 | 0.1696              |
| Sinme_4407 | 0                   | 0.2001              | 0                   |

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Table S6 – continued from previous page

| Gene       | $dN$    | $dS$    | $\omega$ |
|------------|---------|---------|----------|
| Sinme_4409 | 0.0051  | 0.1079  | 0.0475   |
| Sinme_4410 | 0.0044  | 0.0776  | 0.05715  |
| Sinme_4412 | 0.0016  | 0.0496  | 0.03209  |
| Sinme_4414 | 0.0101  | 0.0904  | 0.11136  |
| Sinme_4416 | 0.0034  | 0.0374  | 0.09167  |
| Sinme_4417 | 0.01135 | 0.0511  | 0.24579  |
| Sinme_4418 | 0.01875 | 0.13635 | 0.133695 |
| Sinme_4419 | 0.0257  | 0.1636  | 0.15731  |
| Sinme_4422 | 0       | 0.1039  | 0        |
| Sinme_4426 | 0.0112  | 0.2391  | 0.04685  |
| Sinme_4430 | 0.008   | 0.1561  | 0.0513   |
| Sinme_4432 | 0       | 0.0593  | 0        |
| Sinme_4433 | 0.0069  | 0.0363  | 0.18968  |
| Sinme_4435 | 0.009   | 0.0302  | 0.29821  |
| Sinme_4436 | 0.0034  | 0.0488  | 0.07015  |
| Sinme_4437 | 0.0028  | 0.0095  | 0.29574  |
| Sinme_4438 | 0.0092  | 0.0284  | 0.33857  |
| Sinme_4439 | 0.0091  | 0.0193  | 0.47399  |
| Sinme_4440 | 0.0051  | 0.0125  | 0.41082  |
| Sinme_4441 | 0.0011  | 0.0108  | 0.09966  |
| Sinme_4442 | 0.0014  | 0.0107  | 0.13278  |
| Sinme_4443 | 0.002   | 0.0617  | 0.03195  |
| Sinme_4445 | 0.0046  | 0.0177  | 0.26028  |
| Sinme_4446 | 0.0071  | 0.012   | 0.59248  |
| Sinme_4448 | 0.0161  | 0.0866  | 0.18635  |
| Sinme_4453 | 0.0215  | 0.0549  | 0.39261  |
| Sinme_4456 | 0.0031  | 0.1473  | 0.02118  |
| Sinme_4458 | 0.0162  | 0.0644  | 0.25126  |
| Sinme_4461 | 0.0511  | 0.1333  | 0.38346  |
| Sinme_4463 | 0.0125  | 0.0922  | 0.13561  |
| Sinme_4467 | 0.0024  | 0.0526  | 0.04576  |
| Sinme_4469 | 0.0141  | 0.0775  | 0.18165  |
| Sinme_4472 | 0.0241  | 0.4094  | 0.05893  |
| Sinme_4474 | 0.0172  | 0.20175 | 0.089875 |
| Sinme_4475 | 0.004   | 0.1464  | 0.02753  |
| Sinme_4477 | 0.0319  | 0.2733  | 0.11691  |
| Sinme_4480 | 0.0037  | 0.0638  | 0.05834  |
| Sinme_4482 | 0.0165  | 0.0206  | 0.8022   |
| Sinme_4483 | 0.00415 | 0.05245 | 0.075135 |
| Sinme_4489 | 0.0026  | 0.0311  | 0.08519  |
| Sinme_4491 | 0.0007  | 0.0705  | 0.00965  |
| Sinme_4495 | 0       | 0.0284  | 0        |
| Sinme_4504 | 0.0162  | 0.0364  | 0.44557  |
| Sinme_4509 | 0.0012  | 0.0511  | 0.02402  |
| Sinme_4512 | 0.0101  | 0.0823  | 0.12256  |
| Sinme_4514 | 0.006   | 0.1355  | 0.04391  |
| Sinme_4518 | 0.0049  | 0.0805  | 0.06112  |

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Table S6 – continued from previous page

| Gene       | $dN$                 | $dS$                 | $\omega$            |
|------------|----------------------|----------------------|---------------------|
| Sinme_4520 | 0.044                | 0.221                | 0.19927             |
| Sinme_4522 | 0.0278               | 0.2077               | 0.13364             |
| Sinme_4524 | 0.0012               | 0.0302               | 0.0383              |
| Sinme_4525 | 0.0079               | 0                    | NA                  |
| Sinme_4527 | 0.004                | 0.0162               | 0.24619             |
| Sinme_4529 | 0                    | 0                    | 0                   |
| Sinme_4530 | 0.0017               | 0.0125               | 0.13891             |
| Sinme_4533 | 0.00425              | 0.00585              | NA                  |
| Sinme_4534 | 0                    | 0.077                | 0                   |
| Sinme_4536 | 0.0038               | 0.0426               | 0.09035             |
| Sinme_4538 | 0.00245              | 0.06185              | 0.031505            |
| Sinme_4540 | 0.0226               | 0.1311               | 0.17281             |
| Sinme_4544 | 0.0092               | 0.0424               | 0.21752             |
| Sinme_4548 | 0.0139               | 0.0458               | 0.30268             |
| Sinme_4549 | 0.004                | 0.0528               | 0.07529             |
| Sinme_4551 | 0.006                | 0.0331               | 0.18073             |
| Sinme_4553 | 0.0028               | 0.01605              | 0.087955            |
| Sinme_4554 | 0.0047               | 0.0066               | 0.71587             |
| Sinme_4556 | 0.0089               | 0.0677               | 0.13175             |
| Sinme_4558 | 0.007266666666666667 | 0.030466666666666667 | 0.23977666666666667 |
| Sinme_4561 | 0.0013               | 0.0094               | 0.13932             |
| Sinme_4562 | 0.0043               | 0.0276               | 0.15716             |
| Sinme_4563 | 0.0064               | 0.1539               | 0.04183             |
| Sinme_4564 | 0.0189               | 0.1439               | 0.13118             |
| Sinme_4565 | 0.012                | 0.0631               | 0.18967             |
| Sinme_4567 | 0.0069               | 0.033                | 0.20965             |
| Sinme_4568 | 0.0095               | 0.10115              | 0.09613             |
| Sinme_4569 | 0.0095               | 0.0654               | 0.14539             |
| Sinme_4571 | 0.0147               | 0.0877               | 0.16735             |
| Sinme_4572 | 0.0137               | 0.0783               | 0.17539             |
| Sinme_4573 | 0.0043               | 0.1825               | 0.02377             |
| Sinme_4575 | 0.0165               | 0.0596               | 0.27601             |
| Sinme_4576 | 0.0033               | 0.0759               | 0.04346             |
| Sinme_4577 | 0.0011               | 0.0326               | 0.03301             |
| Sinme_4578 | 0.027                | 0.1943               | 0.13883             |
| Sinme_4579 | 0.0062               | 0.0572               | 0.10838             |
| Sinme_4580 | 0.001833333333333333 | 0.012866666666666667 | 0.1054433333333333  |
| Sinme_4581 | 0.0023               | 0                    | NA                  |
| Sinme_4583 | 0.0066               | 0.044                | 0.1499              |
| Sinme_4586 | 0.0026               | 0.0679               | 0.03852             |
| Sinme_4588 | 0.018                | 0.0511               | 0.35278             |
| Sinme_4589 | 0.0117               | 0.0772               | 0.15184             |
| Sinme_4590 | 0.0039               | 0.0698               | 0.0561              |
| Sinme_4591 | 0.0103               | 0.0421               | 0.24556             |
| Sinme_4592 | 0.0093               | 0.0647               | 0.14385             |
| Sinme_4593 | 0.0022               | 0.0158               | 0.1383              |
| Sinme_4595 | 0.0027               | 0.0106               | 0.25377             |

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Table S6 – continued from previous page

| Gene       | $dN$     | $dS$     | $\omega$ |
|------------|----------|----------|----------|
| Sinme_4597 | 0.0089   | 0.0152   | 0.58314  |
| Sinme_4598 | 0.0034   | 0.0148   | 0.22682  |
| Sinme_4599 | 0.0029   | 0.0416   | 0.069    |
| Sinme_4600 | 0        | 0.0092   | 0        |
| Sinme_4601 | 0.0018   | 0.00565  | 0.50086  |
| Sinme_4602 | 0        | 0.0185   | 0        |
| Sinme_4604 | 0.0014   | 0.0182   | 0.07927  |
| Sinme_4606 | 0.00065  | 0.01395  | 0.15191  |
| Sinme_4608 | 0.00055  | 0.0144   | 0.030175 |
| Sinme_4610 | 0.0019   | 0.0037   | 0.51798  |
| Sinme_4611 | 0.0036   | 0.0128   | 0.27842  |
| Sinme_4613 | 0.0091   | 0.0321   | 0.28283  |
| Sinme_4614 | 0.0043   | 0.0228   | 0.18871  |
| Sinme_4615 | 0.0011   | 0.0304   | 0.03642  |
| Sinme_4616 | 0        | 0.0269   | 0        |
| Sinme_4617 | 0.00345  | 0.0157   | 0.30676  |
| Sinme_4618 | 0.0055   | 0.0072   | 0.7583   |
| Sinme_4619 | 0.00285  | 0.0107   | 0.201575 |
| Sinme_4621 | 0.0037   | 0.0293   | 0.12459  |
| Sinme_4622 | 0        | 0.0157   | 0        |
| Sinme_4623 | 0        | 0.0196   | 0        |
| Sinme_4624 | 0        | 0.0084   | 0        |
| Sinme_4627 | 0.0018   | 0.0038   | 0.47004  |
| Sinme_4629 | 0.00535  | 0.0107   | NA       |
| Sinme_4630 | 0.0015   | 0        | NA       |
| Sinme_4632 | 0.004    | 0.0127   | 0.31675  |
| Sinme_4633 | 0        | 0.0711   | 0        |
| Sinme_4634 | 0.0136   | 0.0886   | 0.15367  |
| Sinme_4636 | 0.0037   | 0.0938   | 0.03939  |
| Sinme_4637 | 0.0072   | 0.1028   | 0.0704   |
| Sinme_4639 | 0.0065   | 0.0604   | 0.1079   |
| Sinme_4642 | 0.0024   | 0.0345   | 0.06877  |
| Sinme_4645 | 0        | 0.0131   | 0        |
| Sinme_4646 | 0.0042   | 0.0208   | 0.26672  |
| Sinme_4647 | 0.0071   | 0.0248   | 0.28799  |
| Sinme_4648 | 0.0012   | 0.0284   | 0.04187  |
| Sinme_4649 | 0        | 0.0216   | 0        |
| Sinme_4651 | 0        | 0.0193   | 0        |
| Sinme_4652 | 0.0042   | 0.0167   | 0.25412  |
| Sinme_4653 | 0.0057   | 0.0142   | NA       |
| Sinme_4656 | 0.003975 | 0.012825 | NA       |
| Sinme_4657 | 0.00215  | 0.0201   | 0.111235 |
| Sinme_4658 | 0.0037   | 0.0102   | 0.36775  |
| Sinme_4659 | 0.0017   | 0.0273   | 0.06181  |
| Sinme_4661 | 0.0013   | 0.0171   | 0.07368  |
| Sinme_4663 | 0        | 0.01     | 0        |
| Sinme_4664 | 0.00475  | 0.01295  | 0.37276  |

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Table S6 – continued from previous page

| Gene       | $dN$     | $dS$    | $\omega$ |
|------------|----------|---------|----------|
| Sinme_4665 | 0        | 0.0205  | 0        |
| Sinme_4666 | 0        | 0.033   | 0        |
| Sinme_4667 | 0        | 0.0271  | 0        |
| Sinme_4668 | 0.0063   | 0.0243  | 0.26003  |
| Sinme_4671 | 0.0028   | 0.0432  | 0.06363  |
| Sinme_4672 | 0.0389   | 0.1247  | 0.32386  |
| Sinme_4674 | 0.0031   | 0       | NA       |
| Sinme_4675 | 0.008    | 0.0656  | 0.12244  |
| Sinme_4676 | 0.0072   | 0.0123  | 0.58444  |
| Sinme_4677 | 0.00775  | 0.01045 | 0.36988  |
| Sinme_4678 | 0.0106   | 0.0041  | 2.62073  |
| Sinme_4679 | 0.0013   | 0.0252  | 0.05208  |
| Sinme_4680 | 0.0049   | 0.0082  | 0.59696  |
| Sinme_4682 | 0.0025   | 0.03    | 0.08359  |
| Sinme_4684 | 0.0051   | 0.0381  | 0.124565 |
| Sinme_4685 | 0.0051   | 0.0352  | 0.14472  |
| Sinme_4686 | 0.0078   | 0.079   | 0.09928  |
| Sinme_4687 | 0.0037   | 0.0523  | 0.07181  |
| Sinme_4691 | 0.0246   | 0.0941  | 0.26187  |
| Sinme_4697 | 0.0068   | 0.1328  | 0.05121  |
| Sinme_4698 | 0.0038   | 0.1267  | 0.03004  |
| Sinme_4700 | 0.0015   | 0.0895  | 0.01724  |
| Sinme_4701 | 0        | 0.0785  | 0        |
| Sinme_4702 | 0.0053   | 0.1228  | 0.04347  |
| Sinme_4703 | 0.002    | 0.107   | 0.019    |
| Sinme_4704 | 0        | 0.0546  | 0        |
| Sinme_4707 | 0.005    | 0.0702  | 0.07139  |
| Sinme_4708 | 0.0067   | 0.0525  | 0.12789  |
| Sinme_4711 | 0.0029   | 0.0764  | 0.03819  |
| Sinme_4712 | 0.0062   | 0.0219  | 0.28433  |
| Sinme_4713 | 0.0044   | 0.0543  | 0.08076  |
| Sinme_4715 | 0.0061   | 0.0715  | 0.08463  |
| Sinme_4716 | 0.007    | 0.0288  | 0.24203  |
| Sinme_4717 | 0.00375  | 0.04525 | 0.072035 |
| Sinme_4720 | 0.005    | 0.0437  | 0.11426  |
| Sinme_4723 | 0.0056   | 0.0596  | 0.0946   |
| Sinme_4724 | 0.007475 | 0.0533  | NA       |
| Sinme_4725 | 0.0185   | 0.3148  | 0.0588   |
| Sinme_4728 | 0.00225  | 0.0277  | 0.110425 |
| Sinme_4729 | 0.0184   | 0.0829  | 0.22166  |
| Sinme_4732 | 0.0012   | 0.01    | 0.11786  |
| Sinme_4733 | 0        | 0.0028  | 0        |
| Sinme_4734 | 0        | 0       | 0        |
| Sinme_4735 | 0.0031   | 0.0034  | 0.92805  |
| Sinme_4736 | 0.0018   | 0.0037  | 0.2434   |
| Sinme_4737 | 0.00255  | 0       | NA       |
| Sinme_4738 | 0.0038   | 0.0099  | 0.38524  |

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| Gene       | $dN$    | $dS$    | $\omega$ |
|------------|---------|---------|----------|
| Sinme_4739 | 0.00595 | 0       | NA       |
| Sinme_4740 | 0       | 0       | 0        |
| Sinme_4741 | 0.0012  | 0.0103  | 0.11934  |
| Sinme_4742 | 0.0025  | 0.0111  | 0.22972  |
| Sinme_4744 | 0.0026  | 0.0201  | 0.12919  |
| Sinme_4747 | 0.0111  | 0.0345  | 0.32153  |
| Sinme_4749 | 0.009   | 0.0155  | 0.58186  |
| Sinme_4752 | 0.0057  | 0.0345  | 0.16646  |
| Sinme_4753 | 0.0058  | 0.022   | 0.26204  |
| Sinme_4754 | 0.006   | 0.0202  | 0.29924  |
| Sinme_4756 | 0.0105  | 0.0495  | 0.567205 |
| Sinme_4757 | 0.0046  | 0.029   | 0.15998  |
| Sinme_4758 | 0.008   | 0.0384  | 0.20903  |
| Sinme_4759 | 0.0024  | 0.0206  | 0.11634  |
| Sinme_4760 | 0       | 0.1088  | 0        |
| Sinme_4761 | 0.005   | 0.1084  | 0.04594  |
| Sinme_4763 | 0.0076  | 0.1266  | 0.0721   |
| Sinme_4764 | 0.0051  | 0.021   | 0.2448   |
| Sinme_4765 | 0.0011  | 0.0177  | 0.0626   |
| Sinme_4766 | 0.00075 | 0.03105 | 0.01327  |
| Sinme_4768 | 0.001   | 0.0081  | 0.12915  |
| Sinme_4769 | 0       | 0.0175  | 0        |
| Sinme_4770 | 0.0077  | 0.0102  | 0.75616  |
| Sinme_4771 | 0.0012  | 0.0046  | 0.26733  |
| Sinme_4773 | 0.0022  | 0.0038  | 0.5876   |
| Sinme_4775 | 0       | 0.0064  | 0        |
| Sinme_4776 | 0.0015  | 0.0074  | 0.19983  |
| Sinme_4777 | 0       | 0       | 0        |
| Sinme_4778 | 0.00255 | 0.0217  | 0.11447  |
| Sinme_4779 | 0.0011  | 0.0098  | 0.11667  |
| Sinme_4780 | 0.0008  | 0.0241  | 0.03321  |
| Sinme_4782 | 0.0033  | 0.0252  | 0.13062  |
| Sinme_4783 | 0.0116  | 0.0141  | 0.81782  |
| Sinme_4785 | 0.0031  | 0.0145  | 0.21523  |
| Sinme_4786 | 0.0013  | 0.0422  | 0.02974  |
| Sinme_4788 | 0.005   | 0.0172  | 0.29142  |
| Sinme_4789 | 0.0018  | 0.0358  | 0.04988  |
| Sinme_4791 | 0.0057  | 0.022   | 0.26124  |
| Sinme_4792 | 0.0024  | 0.0199  | NA       |
| Sinme_4794 | 0.0042  | 0.0285  | 0.14912  |
| Sinme_4795 | 0.0055  | 0.0349  | 0.15697  |
| Sinme_4796 | 0.00285 | 0.01895 | 0.1017   |
| Sinme_4798 | 0.0007  | 0.0232  | 0.02976  |
| Sinme_4805 | 0.0079  | 0.0223  | 0.3521   |
| Sinme_4806 | 0.0032  | 0.0351  | 0.09255  |
| Sinme_4807 | 0.0039  | 0.0456  | 0.08519  |
| Sinme_4809 | 0.0423  | 0.2093  | 0.20235  |

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Table S6 – continued from previous page

| Gene       | $dN$    | $dS$    | $\omega$ |
|------------|---------|---------|----------|
| Sinme_4810 | 0.0123  | 0.127   | 0.09691  |
| Sinme_4811 | 0.00375 | 0.11005 | 0.035125 |
| Sinme_4812 | 0.009   | 0.0875  | 0.1516   |
| Sinme_4813 | 0.0023  | 0.0122  | 0.19219  |
| Sinme_4814 | 0       | 0.0168  | 0        |
| Sinme_4815 | 0.00215 | 0.03775 | 0.03628  |
| Sinme_4816 | 0.0098  | 0.0795  | 0.12386  |
| Sinme_4817 | 0.0098  | 0.0392  | 0.25059  |
| Sinme_4818 | 0.00135 | 0.06775 | 0.02539  |
| Sinme_4820 | 0.0017  | 0.0163  | 0.1012   |
| Sinme_4821 | 0       | 0       | 0        |
| Sinme_4822 | 0       | 0       | 0        |
| Sinme_4823 | 0.002   | 0.0341  | 0.05738  |
| Sinme_4824 | 0.0048  | 0.0368  | 0.13136  |
| Sinme_4825 | 0.0185  | 0.0477  | 0.38883  |
| Sinme_4826 | 0.0031  | 0.0264  | 0.11828  |
| Sinme_4827 | 0       | 0.0914  | 0        |
| Sinme_4829 | 0.0061  | 0.0268  | 0.22233  |
| Sinme_4833 | 0       | 0.0183  | 0        |
| Sinme_4834 | 0.0241  | 0.0637  | 0.37764  |
| Sinme_4835 | 0.0017  | 0.1393  | 0.01205  |
| Sinme_4836 | 0.012   | 0.0406  | 0.29553  |
| Sinme_4839 | 0.00245 | 0.059   | 0.241855 |
| Sinme_4840 | 0.0089  | 0.1666  | 0.05324  |
| Sinme_4841 | 0.004   | 0.0559  | 0.07134  |
| Sinme_4842 | 0.0036  | 0.1681  | 0.02165  |
| Sinme_4843 | 0.0142  | 0.1129  | 0.12579  |
| Sinme_4845 | 0.0367  | 0.143   | 0.25638  |
| Sinme_4846 | 0.0016  | 0.1389  | 0.01168  |
| Sinme_4847 | 0.0232  | 0.18235 | 0.11366  |
| Sinme_4848 | 0.0085  | 0.0359  | 0.23746  |
| Sinme_4849 | 0.0151  | 0.1027  | 0.1466   |
| Sinme_4853 | 0.0057  | 0.2635  | 0.02182  |
| Sinme_4854 | 0.0067  | 0.1188  | 0.05613  |
| Sinme_4855 | 0.05775 | 1.54975 | 0.037245 |
| Sinme_4856 | 0.0152  | 0.1264  | 0.12     |
| Sinme_4857 | 0.0083  | 0.1714  | 0.04831  |
| Sinme_4858 | 0.01445 | 0.1372  | 0.101845 |
| Sinme_4859 | 0.0341  | 0.16705 | 0.23904  |
| Sinme_4860 | 0.0041  | 0.0272  | 0.15209  |
| Sinme_4861 | 0.0041  | 0.1117  | 0.0368   |
| Sinme_4862 | 0.0113  | 0.0683  | 0.16526  |
| Sinme_4863 | 0.0165  | 0.0858  | 0.19252  |
| Sinme_4866 | 0.0279  | 0.0919  | 0.30394  |
| Sinme_4867 | 0.0015  | 0.05    | 0.02918  |
| Sinme_4869 | 0.005   | 0.0699  | 0.07159  |
| Sinme_4870 | 0.0041  | 0.0742  | 0.05531  |

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Table S6 – continued from previous page

| Gene       | $dN$     | $dS$               | $\omega$          |
|------------|----------|--------------------|-------------------|
| Sinme_4872 | 0.0056   | 0.0329             | 0.16931           |
| Sinme_4873 | 0.0082   | 0.0366             | 0.22487           |
| Sinme_4875 | 0.0036   | 0.0497333333333333 | 0.07613           |
| Sinme_4876 | 0.0036   | 0.0235             | 0.15287           |
| Sinme_4877 | 0.0042   | 0.0351             | 0.12011           |
| Sinme_4878 | 0.0137   | 0.0404             | 0.33915           |
| Sinme_4879 | 0.0105   | 0.0341             | 0.30884           |
| Sinme_4880 | 0.0079   | 0.0638             | 0.12411           |
| Sinme_4882 | 0.0091   | 0.0426             | 0.21345           |
| Sinme_4886 | 0.00885  | 0.02445            | 0.378235          |
| Sinme_4887 | 0.01     | 0.0449             | 0.22292           |
| Sinme_4890 | 0.0134   | 0.0554             | 0.24241           |
| Sinme_4893 | 0.01055  | 0.06375            | 0.17042           |
| Sinme_4894 | 0.0036   | 0.048              | 0.07601           |
| Sinme_4895 | 0.0074   | 0.1289             | 0.05755           |
| Sinme_4896 | 0.0051   | 0.0281             | 0.17979           |
| Sinme_4897 | 0        | 0.0287             | 0                 |
| Sinme_4898 | 0.0053   | 0.0971             | 0.055             |
| Sinme_4900 | 0.0113   | 0.0849             | 0.150406666666667 |
| Sinme_4901 | 0        | 0.0528             | 0                 |
| Sinme_4903 | 0.009725 | 0.0938             | 0.1049475         |
| Sinme_4904 | 0.0088   | 0.12105            | 0.07236           |
| Sinme_4909 | 0.0025   | 0.099              | 0.0254            |
| Sinme_4910 | 0.0076   | 0.0625             | 0.12198           |
| Sinme_4911 | 0.001    | 0.0182             | 0.05321           |
| Sinme_4913 | 0        | 0.0371             | 0                 |
| Sinme_4914 | 0.00055  | 0.0398             | 0.012695          |
| Sinme_4915 | 0.0044   | 0.03105            | 0.111285          |
| Sinme_4917 | 0.0025   | 0.0101             | 0.25268           |
| Sinme_4920 | 0.0085   | 0.0238             | 0.35655           |
| Sinme_4921 | 0.0012   | 0.0364             | 0.03291           |
| Sinme_4922 | 0.0035   | 0.0873             | 0.03975           |
| Sinme_4923 | 0        | 0.0231             | 0                 |
| Sinme_4937 | 0.0334   | 0.0693             | 0.48229           |
| Sinme_4939 | 0.005    | 0.0151             | 0.33236           |
| Sinme_4941 | 0.0039   | 0                  | NA                |
| Sinme_4942 | 0.00145  | 0.02095            | 0.07217           |
| Sinme_4943 | 0.0097   | 0.0241             | 0.40079           |
| Sinme_4945 | 0.0028   | 0                  | NA                |
| Sinme_4946 | 0.0129   | 0.0548             | 0.23568           |
| Sinme_4948 | 0.00835  | 0.10435            | 0.08017           |
| Sinme_4949 | 0.0248   | 0.1358             | 0.18272           |
| Sinme_4957 | 0.0031   | 0.0314             | 0.09953           |
| Sinme_4958 | 0.0068   | 0.01965            | 0.402975          |
| Sinme_4959 | 0.0012   | 0.0481             | 0.022005          |
| Sinme_4960 | 0.0043   | 0.05135            | 0.082775          |
| Sinme_4961 | 0.0152   | 0.0509             | 0.29903           |

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Table S6 – continued from previous page

| Gene       | $dN$    | $dS$               | $\omega$           |
|------------|---------|--------------------|--------------------|
| Sinme_4965 | 0.0064  | 0.0791             | 0.08113            |
| Sinme_4966 | 0       | 0.0286             | 0                  |
| Sinme_4967 | 0.0165  | 0.1144             | 0.14459            |
| Sinme_4969 | 0.0154  | 0.1843             | 0.08366            |
| Sinme_4970 | 0.0089  | 0.193              | 0.04621            |
| Sinme_4972 | 0.0337  | 0.1653             | 0.20358            |
| Sinme_4973 | 0.0167  | 0.1206             | 0.13829            |
| Sinme_4974 | 0.0255  | 0.1596             | 0.15971            |
| Sinme_4975 | 0.01995 | 0.084              | 0.30124            |
| Sinme_4976 | 0.0183  | 0.1489             | 0.12298            |
| Sinme_4977 | 0.0149  | 0.1075             | 0.13862            |
| Sinme_4978 | 0.0103  | 0.1418             | 0.07296            |
| Sinme_4979 | 0.0086  | 0.1285             | 0.06698            |
| Sinme_4980 | 0.013   | 0.0575             | 0.22598            |
| Sinme_4981 | 0.0039  | 0.0196             | 0.19723            |
| Sinme_4983 | 0.0057  | 0.0195             | 0.29098            |
| Sinme_4984 | 0.0081  | 0.0519             | 0.1566             |
| Sinme_4985 | 0.0103  | 0.0818             | 0.12531            |
| Sinme_4986 | 0.005   | 0.0423             | 0.11904            |
| Sinme_4987 | 0.0057  | 0.1845             | 0.03079            |
| Sinme_4989 | 0.0037  | 0.1381             | 0.02704            |
| Sinme_4990 | 0.0606  | 0.0929             | 0.65279            |
| Sinme_4991 | 0.0081  | 0.1346             | 0.06022            |
| Sinme_4992 | 0.0035  | 0.1000666666666667 | 0.0389866666666667 |
| Sinme_4993 | 0.0037  | 0.1204             | 0.03038            |
| Sinme_4994 | 0.0364  | 0.1791             | 0.20315            |
| Sinme_4995 | 0.014   | 0.2561             | 0.05464            |
| Sinme_4997 | 0.0277  | 0.0926             | 0.29918            |
| Sinme_4998 | 0       | 0.0381             | 0                  |
| Sinme_4999 | 0.0019  | 0.0389             | 0.0281233333333333 |
| Sinme_5000 | 0.0024  | 0.0205             | 0.11761            |
| Sinme_5004 | 0.0023  | 0.0153             | 0.14887            |
| Sinme_5005 | 0.0023  | 0.0624             | 0.03675            |
| Sinme_5006 | 0.0178  | 0.0188             | 0.94471            |
| Sinme_5007 | 0.01335 | 0.1109             | 0.173575           |
| Sinme_5008 | 0       | 0.0183             | 0                  |
| Sinme_5010 | 0.00245 | 0.04615            | 0.0616             |
| Sinme_5012 | 0.0057  | 0.0984             | 0.05754            |
| Sinme_5017 | 0.0023  | 0.087              | 0.02619            |
| Sinme_5019 | 0.0141  | 0.0626             | 0.22433            |
| Sinme_5021 | 0.0074  | 0.0611             | 0.12138            |
| Sinme_5022 | 0.0171  | 0.0463             | 0.36981            |
| Sinme_5023 | 0.0035  | 0.0446             | 0.0782             |
| Sinme_5024 | 0.0132  | 0.0767             | 0.17238            |
| Sinme_5025 | 0.0102  | 0.1344             | 0.07596            |
| Sinme_5026 | 0.0057  | 0.0384             | 0.1489             |
| Sinme_5027 | 0.0082  | 0.0989             | 0.08293            |

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Table S6 – continued from previous page

| Gene       | $dN$               | $dS$               | $\omega$ |
|------------|--------------------|--------------------|----------|
| Sinme_5033 | 0.00175            | 0.0211             | 0.0648   |
| Sinme_5036 | 0.0068             | 0.0427             | 0.15836  |
| Sinme_5038 | 0.0009             | 0.0129             | 0.07157  |
| Sinme_5045 | 0.0091             | 0.0230333333333333 | NA       |
| Sinme_5055 | 0.00975            | 0.04895            | 0.355155 |
| Sinme_5058 | 0.0013             | 0.0128             | 0.10236  |
| Sinme_5059 | 0.0009             | 0.0222             | 0.04241  |
| Sinme_5060 | 0.0103333333333333 | 0.0717666666666667 | NA       |
| Sinme_5061 | 0.0214             | 0.3201             | 0.06693  |
| Sinme_5062 | 0.0097             | 0.1504             | 0.06467  |
| Sinme_5063 | 0.0115             | 0.0965             | 0.11917  |
| Sinme_5067 | 0.0063             | 0                  | NA       |
| Sinme_5069 | 0.0021             | 0.0134             | 0.15522  |
| Sinme_5070 | 0.0012             | 0.0705             | 0.0177   |
| Sinme_5073 | 0.0079             | 0.0717             | 0.11006  |
| Sinme_5076 | 0.0149             | 0.1051             | 0.14137  |
| Sinme_5078 | 0.0012             | 0.1552             | 0.00772  |
| Sinme_5079 | 0.0058             | 0.08875            | 0.064965 |
| Sinme_5080 | 0.0054             | 0.0461             | 0.11656  |
| Sinme_5081 | 0.0126             | 0.0871             | 0.14525  |
| Sinme_5082 | 0.0028             | 0.0769             | 0.0358   |
| Sinme_5083 | 0.0045             | 0.0366             | 0.12315  |
| Sinme_5084 | 0.0028             | 0.0207             | 0.13444  |
| Sinme_5085 | 0.0029             | 0.008              | 0.367    |
| Sinme_5087 | 0.0015             | 0.0117             | 0.13034  |
| Sinme_5088 | 0.0026             | 0.0124             | 0.20549  |
| Sinme_5090 | 0.0043             | 0.0237             | 0.18021  |
| Sinme_5092 | 0.0048             | 0.0076             | 0.63468  |
| Sinme_5094 | 0.0114             | 0.017              | 0.67142  |
| Sinme_5100 | 0.03375            | 0.2423             | 0.175215 |
| Sinme_5102 | 0.0108             | 0.0956             | 0.11284  |
| Sinme_5109 | 0.0031             | 0.0242             | 0.12877  |
| Sinme_5110 | 0                  | 0.0362             | 0        |
| Sinme_5111 | 0.0011             | 0.0081             | 0.13485  |
| Sinme_5113 | 0.0024             | 0.0241             | 0.09945  |
| Sinme_5118 | 0.0026             | 0.0133             | 0.19524  |
| Sinme_5123 | 0                  | 0.0259             | 0        |
| Sinme_5124 | 0.0047             | 0.0286             | 0.1658   |
| Sinme_5125 | 0.00515            | 0.04265            | 0.153035 |
| Sinme_5126 | 0.0008             | 0.0359             | 0.02208  |
| Sinme_5127 | 0                  | 0.0364             | 0        |
| Sinme_5128 | 0                  | 0.0382             | 0        |
| Sinme_5129 | 0.0055             | 0.0379             | 0.14636  |
| Sinme_5130 | 0.0039             | 0.0186             | 0.21191  |
| Sinme_5131 | 0                  | 0.027              | 0        |
| Sinme_5132 | 0.0026             | 0.0127             | 0.20252  |
| Sinme_5133 | 0                  | 0.0201             | 0        |

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| Gene       | $dN$    | $dS$    | $\omega$ |
|------------|---------|---------|----------|
| Sinme_5134 | 0       | 0.0336  | 0        |
| Sinme_5135 | 0       | 0.0414  | 0        |
| Sinme_5136 | 0       | 0.0304  | 0        |
| Sinme_5142 | 0.0143  | 0.06845 | 0.20504  |
| Sinme_5143 | 0       | 0.0267  | 0        |
| Sinme_5144 | 0.0202  | 0.1116  | 0.18079  |
| Sinme_5145 | 0.0067  | 0.0276  | 0.24135  |
| Sinme_5148 | 0.0038  | 0.0191  | 0.2005   |
| Sinme_5149 | 0.003   | 0.0275  | 0.10924  |
| Sinme_5152 | 0.0039  | 0.0619  | 0.06338  |
| Sinme_5153 | 0.0142  | 0.0866  | 0.16409  |
| Sinme_5154 | 0.0125  | 0.0758  | 0.19738  |
| Sinme_5155 | 0.0055  | 0.0498  | 0.1098   |
| Sinme_5156 | 0.0041  | 0.1007  | 0.04032  |
| Sinme_5157 | 0.0032  | 0.0753  | 0.04271  |
| Sinme_5158 | 0.00475 | 0.0545  | 0.099775 |
| Sinme_5162 | 0.00735 | 0.05755 | 0.13254  |
| Sinme_5165 | 0.0012  | 0.1428  | 0.0085   |
| Sinme_5166 | 0.0024  | 0.0823  | 0.02944  |
| Sinme_5167 | 0.00425 | 0.0692  | 0.06351  |
| Sinme_5174 | 0.0199  | 0.187   | 0.1062   |
| Sinme_5178 | 0.0145  | 0.0599  | 0.24205  |
| Sinme_5181 | 0.0101  | 0.2571  | 0.03924  |
| Sinme_5185 | 0.0046  | 0.068   | 0.06736  |
| Sinme_5187 | 0.00095 | 0.1382  | 0.006495 |
| Sinme_5188 | 0.0165  | 0.1248  | 0.13252  |
| Sinme_5189 | 0.0295  | 0.0913  | 0.32344  |
| Sinme_5190 | 0.0036  | 0.0541  | 0.06612  |
| Sinme_5191 | 0.0166  | 0.0788  | 0.2111   |
| Sinme_5192 | 0.0081  | 0.1716  | 0.04739  |
| Sinme_5193 | 0.0136  | 0.0543  | 0.25016  |
| Sinme_5194 | 0.0087  | 0.04885 | 0.178205 |
| Sinme_5195 | 0.0056  | 0.0291  | 0.19165  |
| Sinme_5198 | 0.00345 | 0.09155 | 0.04283  |
| Sinme_5199 | 0.0042  | 0.0233  | 0.18018  |
| Sinme_5201 | 0.0087  | 0.0528  | 0.163695 |
| Sinme_5202 | 0.0091  | 0.0516  | 0.17559  |
| Sinme_5203 | 0.0343  | 0.0307  | 1.11686  |
| Sinme_5204 | 0.01    | 0.06915 | 0.17389  |
| Sinme_5206 | 0.0021  | 0.1334  | 0.01569  |
| Sinme_5207 | 0.005   | 0.0032  | 1.57684  |
| Sinme_5208 | 0.0061  | 0.057   | 0.10742  |
| Sinme_5209 | 0       | 0.061   | 0        |
| Sinme_5210 | 0.0126  | 0.0828  | 0.15175  |
| Sinme_5211 | 0.006   | 0.0342  | 0.17589  |
| Sinme_5212 | 0.0049  | 0.0911  | 0.05332  |
| Sinme_5213 | 0.0222  | 0.1091  | 0.20356  |

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| Gene          | $dN$    | $dS$               | $\omega$           |
|---------------|---------|--------------------|--------------------|
| Sinme_5214    | 0.0032  | 0.0616             | 0.05119            |
| Sinme_5217    | 0.0078  | 0.0701             | 0.11063            |
| Sinme_5222    | 0.0203  | 0.1041             | 0.19514            |
| Sinme_5226    | 0.0063  | 0.1165             | 0.05408            |
| Sinme_5228    | 0.0022  | 0.2001             | 0.01124            |
| Sinme_5233    | 0.0117  | 0.2326             | 0.05038            |
| Sinme_5235    | 0.0267  | 0.0733             | 0.36448            |
| Sinme_5237    | 0.0151  | 0.1064333333333333 | 0.1276066666666667 |
| Sinme_5238    | 0.0095  | 0.2015             | 0.04708            |
| Sinme_5239    | 0.0214  | 0.1044             | 0.2048             |
| Sinme_5251    | 0.0092  | 0.00635            | NA                 |
| Sinme_5252    | 0.0034  | 0.0533             | 0.06345            |
| Sinme_5253    | 0.00995 | 0.1037             | 0.099145           |
| Sinme_5258    | 0.0039  | 0.1811             | 0.02148            |
| Sinme_5259    | 0.0043  | 0.0612             | 0.06994            |
| Sinme_5260    | 0.02255 | 0.0831             | 0.319615           |
| Sinme_5261    | 0.0032  | 0.0271             | 0.11691            |
| Sinme_5262    | 0.0025  | 0.1564             | 0.01589            |
| Sinme_5263    | 0.0131  | 0.1626             | 0.08029            |
| Sinme_5264    | 0.0139  | 0.1894             | 0.07324            |
| Sinme_5265    | 0.0251  | 0.12795            | 0.19544            |
| Sinme_5266    | 0       | 0.0884             | 0                  |
| Sinme_5267    | 0.0049  | 0.0321             | 0.15118            |
| Sinme_5268    | 0.01385 | 0.02665            | 0.55278            |
| Sinme_5269    | 0.0089  | 0.0974             | 0.09134            |
| Sinme_5271    | 0       | 0.0937             | 0                  |
| Sinme_5272    | 0.0012  | 0.1273             | 0.00942            |
| Sinme_5273    | 0.0006  | 0.142              | 0.0041             |
| Sinme_5275    | 0       | 0.1788             | 0                  |
| SM2011_b20047 | 0.0138  | 0                  | NA                 |
| SM2011_b20049 | 0.0013  | 0.0099             | 0.13117            |
| SM2011_b20055 | 0       | 0.0551             | 0                  |
| SM2011_b20082 | 0.0015  | 0.0454             | 0.03397            |
| SM2011_b20097 | 0.0131  | 0.0558             | 0.23525            |
| SM2011_b20102 | 0.0034  | 0.0096             | 0.35868            |
| SM2011_b20109 | 0       | 0.0107             | 0                  |
| SM2011_b20125 | 0.0028  | 0.0202             | 0.13686            |
| SM2011_b20131 | 0.0078  | 0                  | NA                 |
| SM2011_b20164 | 0.0023  | 0.0785             | 0.02896            |
| SM2011_b20171 | 0       | 0.1048             | 0                  |
| SM2011_b20178 | 0.0022  | 0.0123             | 0.18292            |
| SM2011_b20184 | 0       | 0.022              | 0                  |
| SM2011_b20185 | 0       | 0.0109             | 0                  |
| SM2011_b20186 | 0       | 0                  | 0                  |
| SM2011_b20212 | 0.0037  | 0.0317             | 0.11747            |
| SM2011_b20222 | 0.0037  | 0.0153             | 0.24306            |
| SM2011_b20256 | 0       | 0.0099             | 0                  |

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| Gene          | $dN$   | $dS$   | $\omega$ |
|---------------|--------|--------|----------|
| SM2011_b20260 | 0.0214 | 0.091  | 0.23502  |
| SM2011_b20261 | 0.0024 | 0.0513 | 0.04624  |
| SM2011_b20278 | 0.0067 | 0.0226 | 0.2952   |
| SM2011_b20314 | 0.0088 | 0.0728 | 0.12131  |
| SM2011_b20321 | 0.0048 | 0.2084 | 0.02292  |
| SM2011_b20347 | 0.0102 | 0.064  | 0.15988  |
| SM2011_b20348 | 0      | 0.0537 | 0        |
| SM2011_b20371 | 0.0056 | 0.2695 | 0.02075  |
| SM2011_b20398 | 0.0024 | 0      | NA       |
| SM2011_b20400 | 0.0104 | 0      | NA       |
| SM2011_b20436 | 0.002  | 0.0531 | 0.03799  |
| SM2011_b20443 | 0.0022 | 0.0252 | 0.08833  |
| SM2011_b20444 | 0.0026 | 0.2382 | 0.01109  |
| SM2011_b20482 | 0.0176 | 0.2976 | 0.05927  |
| SM2011_b20485 | 0.0079 | 0.2712 | 0.02922  |
| SM2011_b20489 | 0.0168 | 0.0507 | 0.33082  |
| SM2011_b20504 | 0.0024 | 0.0714 | 0.03364  |
| SM2011_b20511 | 0.0034 | 0.0812 | 0.04155  |
| SM2011_b20522 | 0.0112 | 0.2086 | 0.05373  |
| SM2011_b20534 | 0.0146 | 0.1457 | 0.1003   |
| SM2011_b20546 | 0.0657 | 0.0901 | 0.72918  |
| SM2011_b20568 | 0.0074 | 0.1826 | 0.04053  |
| SM2011_b20569 | 0.0088 | 0.0806 | 0.10855  |
| SM2011_b20570 | 0.0067 | 0.1094 | 0.06085  |
| SM2011_b20582 | 0.0082 | 0.034  | 0.24038  |
| SM2011_b20586 | 0.0053 | 0.0226 | 0.23321  |
| SM2011_b20594 | 0.0321 | 0.099  | 0.32452  |
| SM2011_b20595 | 0.0303 | 0.0238 | 1.27594  |
| SM2011_b20603 | 0.0053 | 0.098  | 0.05366  |
| SM2011_b20605 | 0.0027 | 0.2293 | 0.01195  |
| SM2011_b20606 | 0.0144 | 0.0333 | 0.43151  |
| SM2011_b20607 | 0.008  | 0.1423 | 0.05603  |
| SM2011_b20610 | 0      | 0.2079 | 0        |
| SM2011_b20611 | 0      | 0.101  | 0        |
| SM2011_b20612 | 0.0149 | 0.1752 | 0.08507  |
| SM2011_b20633 | 0.0026 | 0.0655 | 0.03947  |
| SM2011_b20634 | 0.0039 | 0.1347 | 0.02859  |
| SM2011_b20649 | 0.0062 | 0.0694 | 0.08892  |
| SM2011_b20650 | 0.0041 | 0.0508 | 0.08068  |
| SM2011_b20651 | 0.0051 | 0      | NA       |
| SM2011_b20652 | 0.0046 | 0.0454 | 0.10031  |
| SM2011_b20655 | 0.0077 | 0.0265 | 0.28888  |
| SM2011_b20658 | 0      | 0.0468 | 0        |
| SM2011_b20667 | 0.0029 | 0.0312 | 0.09289  |
| SM2011_b20668 | 0.0072 | 0.0253 | 0.28629  |
| SM2011_b20676 | 0.0313 | 0.0569 | 0.55045  |
| SM2011_b20683 | 0      | 0      | 0        |

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Table S6 – continued from previous page

| Gene          | $dN$    | $dS$    | $\omega$ |
|---------------|---------|---------|----------|
| SM2011_b20687 | 0.0036  | 0.0123  | 0.29549  |
| SM2011_b20688 | 0.0081  | 0.00525 | NA       |
| SM2011_b20696 | 0.0061  | 0.007   | 0.86837  |
| SM2011_b20697 | 0.0008  | 0.0078  | 0.10053  |
| SM2011_b20700 | 0.0034  | 0.0301  | 0.11419  |
| SM2011_b20701 | 0.0017  | 0.0363  | 0.04551  |
| SM2011_b20702 | 0.0033  | 0.0113  | 0.28968  |
| SM2011_b20703 | 0       | 0.0097  | 0        |
| SM2011_b20705 | 0.0014  | 0.0782  | 0.0173   |
| SM2011_b20709 | 0.005   | 0.0074  | 0.66872  |
| SM2011_b20710 | 0       | 0.0058  | 0        |
| SM2011_b20711 | 0.0094  | 0.0302  | 0.30979  |
| SM2011_b20713 | 0       | 0.0268  | 0        |
| SM2011_b20748 | 0.0037  | 0.0343  | 0.10729  |
| SM2011_b20752 | 0.0122  | 0.0995  | 0.12274  |
| SM2011_b20754 | 0.0072  | 0.073   | 0.09803  |
| SM2011_b20769 | 0.0008  | 0.0801  | 0.00956  |
| SM2011_b20770 | 0.0026  | 0.0616  | 0.04256  |
| SM2011_b20775 | 0.14328 | 4.18116 | 0.040904 |
| SM2011_b20785 | 0.0083  | 0.0232  | 0.36007  |
| SM2011_b20786 | 0.0332  | 0.2508  | 0.13221  |
| SM2011_b20815 | 0.0496  | 0.7319  | 0.06781  |
| SM2011_b20831 | 0.0526  | 1.7554  | 0.02995  |
| SM2011_b20846 | 0.0114  | 0.1138  | 0.10064  |
| SM2011_b20849 | 0.0056  | 0.0443  | 0.12681  |
| SM2011_b20863 | 0.0113  | 0.0448  | 0.25137  |
| SM2011_b20880 | 0.0054  | 0.0994  | 0.05406  |
| SM2011_b20890 | 0.0036  | 0.0697  | 0.05223  |
| SM2011_b20942 | 0.0025  | 0.0537  | 0.04742  |
| SM2011_b20943 | 0.0042  | 0       | NA       |
| SM2011_b20947 | 0.0187  | 0.1964  | 0.09518  |
| SM2011_b20978 | 0.0113  | 0.041   | 0.27465  |
| SM2011_b20986 | 0.0125  | 0.0757  | 0.16481  |
| SM2011_b20988 | 0.0159  | 0.0768  | 0.20656  |
| SM2011_b20993 | 0.0178  | 0.1591  | 0.11201  |
| SM2011_b20994 | 0.003   | 0.0784  | 0.03877  |
| SM2011_b20995 | 0.0044  | 0.1972  | 0.02208  |
| SM2011_b20998 | 0.0178  | 0.1663  | 0.10726  |
| SM2011_b21007 | 0.0094  | 0.1222  | 0.07724  |
| SM2011_b21018 | 0.0052  | 0.2036  | 0.02545  |
| SM2011_b21036 | 0.1482  | 0.2848  | 0.5202   |
| SM2011_b21044 | 0.0354  | 0.2189  | 0.16154  |
| SM2011_b21090 | 0.0091  | 0.0548  | 0.16544  |
| SM2011_b21093 | 0.0102  | 0.089   | 0.11457  |
| SM2011_b21098 | 0.0328  | 0.1949  | 0.16848  |
| SM2011_b21100 | 0.0172  | 0.1576  | 0.10903  |
| SM2011_b21105 | 0.0015  | 0.2477  | 0.00594  |

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Table S6 – continued from previous page

| Gene          | $dN$    | $dS$   | $\omega$ |
|---------------|---------|--------|----------|
| SM2011_b21116 | 0.0284  | 0.1238 | 0.22955  |
| SM2011_b21117 | 0       | 0.0304 | 0        |
| SM2011_b21130 | 0.0095  | 0.2271 | 0.04167  |
| SM2011_b21131 | 0.0094  | 0.1509 | 0.06197  |
| SM2011_b21132 | 0.003   | 0.1547 | 0.01934  |
| SM2011_b21134 | 0.0197  | 0.2778 | 0.07085  |
| SM2011_b21136 | 0.0078  | 0.2767 | 0.02825  |
| SM2011_b21147 | 0.0072  | 0.0119 | 0.60787  |
| SM2011_b21148 | 0.0033  | 0.0042 | 0.77484  |
| SM2011_b21151 | 0.0071  | 0.0915 | 0.07709  |
| SM2011_b21154 | 0.0217  | 0.1307 | 0.16637  |
| SM2011_b21156 | 0.0237  | 0.0391 | 0.60536  |
| SM2011_b21175 | 0.0013  | 0.0283 | 0.04571  |
| SM2011_b21181 | 0.0041  | 0.0243 | 0.17025  |
| SM2011_b21199 | 0.003   | 0.0192 | 0.1575   |
| SM2011_b21227 | 0       | 0.0151 | 0        |
| SM2011_b21229 | 0.0022  | 0.0475 | 0.04548  |
| SM2011_b21231 | 0.0259  | 0.2055 | 0.12584  |
| SM2011_b21236 | 0.0276  | 0.1384 | 0.19943  |
| SM2011_b21237 | 0.0103  | 0.1168 | 0.08845  |
| SM2011_b21240 | 0.0096  | 0.1155 | 0.08319  |
| SM2011_b21241 | 0.0054  | 0.0911 | 0.05949  |
| SM2011_b21243 | 0.0129  | 0.1078 | 0.11967  |
| SM2011_b21248 | 0.0076  | 0.1442 | 0.05285  |
| SM2011_b21250 | 0.0082  | 0.0581 | 0.14067  |
| SM2011_b21252 | 0.0449  | 0.1323 | 0.33905  |
| SM2011_b21256 | 0.0019  | 0.0044 | 0.4253   |
| SM2011_b21257 | 0.00145 | 0.0197 | 0.03719  |
| SM2011_b21261 | 0.0013  | 0.0566 | 0.02356  |
| SM2011_b21263 | 0.0024  | 0.0564 | 0.04192  |
| SM2011_b21264 | 0.0031  | 0.0527 | 0.05961  |
| SM2011_b21265 | 0.0085  | 0.056  | 0.15225  |
| SM2011_b21269 | 0       | 0.061  | 0        |
| SM2011_b21270 | 0       | 0.0278 | 0        |
| SM2011_b21271 | 0.0034  | 0.0392 | 0.0875   |
| SM2011_b21274 | 0.0078  | 0.1173 | 0.06661  |
| SM2011_b21278 | 0.0413  | 0.2476 | 0.16691  |
| SM2011_b21279 | 0.0032  | 0.0387 | 0.08385  |
| SM2011_b21280 | 0.0206  | 0.1213 | 0.16992  |
| SM2011_b21281 | 0       | 0      | 0        |
| SM2011_b21284 | 0.0026  | 0.0186 | 0.13687  |
| SM2011_b21290 | 0.0072  | 0.0312 | 0.23099  |
| SM2011_b21292 | 0.002   | 0.0311 | 0.06461  |
| SM2011_b21296 | 0.0042  | 0.0936 | 0.04516  |
| SM2011_b21308 | 0.0039  | 0.0113 | 0.34263  |
| SM2011_b21319 | 0.0055  | 0.0224 | 0.24646  |
| SM2011_b21321 | 0.001   | 0.0106 | 0.0972   |

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Table S6 – continued from previous page

| Gene          | $dN$    | $dS$    | $\omega$ |
|---------------|---------|---------|----------|
| SM2011_b21327 | 0.0062  | 0.0083  | 0.74447  |
| SM2011_b21336 | 0.003   | 0.0097  | 0.31061  |
| SM2011_b21346 | 0.0051  | 0.02    | 0.25374  |
| SM2011_b21355 | 0.0091  | 0.0168  | 0.54145  |
| SM2011_b21356 | 0.0026  | 0.0418  | 0.06302  |
| SM2011_b21377 | 0.0014  | 0.0169  | 0.08354  |
| SM2011_b21378 | 0.0184  | 0.092   | 0.20006  |
| SM2011_b21405 | 0.0049  | 0       | NA       |
| SM2011_b21412 | 0.0068  | 0.0318  | 0.21507  |
| SM2011_b21418 | 0.0111  | 0.0434  | 0.25695  |
| SM2011_b21428 | 0.0234  | 0.0722  | 0.32377  |
| SM2011_b21486 | 0.005   | 0.042   | 0.11855  |
| SM2011_b21497 | 0.0058  | 0.0504  | 0.11466  |
| SM2011_b21508 | 0.0378  | 0.2354  | 0.16077  |
| SM2011_b21512 | 0.0152  | 0.0529  | 0.2874   |
| SM2011_b21513 | 0.0116  | 0.0651  | 0.17884  |
| SM2011_b21514 | 0.0073  | 0.0121  | 0.60085  |
| SM2011_b21517 | 0.0035  | 0       | NA       |
| SM2011_b21518 | 0       | 0.0124  | 0        |
| SM2011_b21520 | 0       | 0.0167  | 0        |
| SM2011_b21521 | 0.0045  | 0.02365 | NA       |
| SM2011_b21522 | 0       | 0.0465  | 0        |
| SM2011_b21523 | 0       | 0.0183  | 0        |
| SM2011_b21527 | 0.0017  | 0.1105  | 0.01559  |
| SM2011_b21532 | 0.0053  | 0.073   | 0.07296  |
| SM2011_b21548 | 0.00695 | 0.07995 | 0.087195 |
| SM2011_b21555 | 0       | 0.0106  | 0        |
| SM2011_b21575 | 0.0161  | 0.0126  | 1.28128  |
| SM2011_b21578 | 0.0038  | 0.0289  | 0.13228  |
| SM2011_b21599 | 0       | 0.0119  | 0        |
| SM2011_b21644 | 0.0073  | 0.1776  | 0.04116  |
| SM2011_b21649 | 0.0095  | 0.0316  | 0.29986  |
| SM2011_b21650 | 0.0093  | 0.0621  | 0.15035  |
| SM2011_b21651 | 0.0068  | 0       | NA       |
| SM2011_b21696 | 0.0449  | 0.1044  | 0.43031  |
| SM2011_b22017 | 0.0127  | 0.0714  | 0.17807  |