

| Motif          | Score cutoff (bits) | Matches upstream of Drosophila genes | A/T bias | Upstream bias? | Conserved? | Forward orientation (%) | Orientation bias (p-value) |
|----------------|---------------------|--------------------------------------|----------|----------------|------------|-------------------------|----------------------------|
| TIFDMEM0000001 | -0.0                | 2                                    | 0.54     | No             | No         | 100.0                   | 0.250                      |
| TIFDMEM0000002 | -2.0                | 532                                  | 0.79     | Yes            | No         | 50.6                    | 0.414                      |
| TIFDMEM0000003 | -3.0                | 272                                  | 0.51     | No             | Yes        | 45.6                    | 0.0815                     |
| TIFDMEM0000004 | -5.0                | 1975                                 | 0.82     | Yes            | Yes        | 50.2                    | 0.428                      |
| TIFDMEM0000005 | -8.0                | 1506                                 | 0.61     | Yes            | Yes        | 51.3                    | 0.158                      |
| TIFDMEM0000006 | -2.0                | 424                                  | 0.61     | Yes            | No         | 51.9                    | 0.233                      |
| TIFDMEM0000007 | -2.0                | 21                                   | 0.42     | No             | Yes        | 28.6                    | 0.0392                     |
| TIFDMEM0000008 | -5.0                | 865                                  | 0.61     | No             | Yes        | 47.2                    | 0.0513                     |
| TIFDMEM0000009 | -1.0                | 435                                  | 0.46     | No             | No         | 34.9                    | 1.70e-10                   |
| TIFDMEM0000010 | -4.0                | 94                                   | 0.39     | No             | Yes        | 53.2                    | 0.303                      |
| TIFDMEM0000011 | -4.0                | 1567                                 | 0.67     | Yes            | No         | 50.1                    | 0.480                      |
| TIFDMEM0000012 | -3.0                | 1692                                 | 0.54     | Yes            | No         | 48.9                    | 0.198                      |
| TIFDMEM0000013 | -2.0                | 331                                  | 0.75     | Yes            | Yes        | 48.6                    | 0.330                      |
| TIFDMEM0000014 | -4.0                | 465                                  | 0.75     | Yes            | No         | 52.7                    | 0.133                      |
| TIFDMEM0000015 | -5.0                | 992                                  | 0.46     | Yes            | Yes        | 54.0                    | 0.00605                    |
| TIFDMEM0000016 | -2.0                | 109                                  | 0.70     | Yes            | Yes        | 42.2                    | 0.0625                     |
| TIFDMEM0000017 | -1.0                | 1798                                 | 0.81     | Yes            | Yes        | 50.0                    | 0.510                      |
| TIFDMEM0000018 | -2.0                | 1954                                 | 0.56     | Yes            | No         | 47.3                    | 0.00989                    |
| TIFDMEM0000019 | -2.0                | 2371                                 | 0.76     | Yes            | No         | 48.8                    | 0.134                      |
| TIFDMEM0000020 | -3.0                | 269                                  | 0.43     | No             | No         | 52.8                    | 0.197                      |
| TIFDMEM0000021 | -6.0                | 1709                                 | 0.83     | Yes            | No         | 48.3                    | 0.0804                     |
| TIFDMEM0000022 | -6.0                | 1267                                 | 0.68     | Yes            | No         | 50.1                    | 0.478                      |
| TIFDMEM0000023 | -3.0                | 567                                  | 0.60     | No             | Yes        | 50.6                    | 0.401                      |
| TIFDMEM0000024 | -6.0                | 1785                                 | 0.80     | Yes            | Yes        | 47.1                    | 0.00787                    |
| TIFDMEM0000025 | -2.0                | 207                                  | 0.58     | No             | Yes        | 53.1                    | 0.202                      |
| TIFDMEM0000026 | -6.0                | 745                                  | 0.44     | Yes            | Yes        | 58.0                    | 7.39e-06                   |
| TIFDMEM0000027 | -2.0                | 55                                   | 0.68     | No             | No         | 56.4                    | 0.209                      |
| TIFDMEM0000028 | -2.0                | 504                                  | 0.51     | No             | Yes        | 53.0                    | 0.0982                     |
| TIFDMEM0000029 | -7.0                | 1928                                 | 0.65     | Yes            | No         | 53.6                    | 0.000901                   |
| TIFDMEM0000030 | -4.0                | 800                                  | 0.76     | Yes            | No         | 47.1                    | 0.0558                     |
| TIFDMEM0000031 | -5.0                | 819                                  | 0.75     | No             | No         | 51.0                    | 0.288                      |
| TIFDMEM0000032 | -2.0                | 175                                  | 0.74     | No             | No         | 78.3                    | 1.23e-14                   |
| TIFDMEM0000033 | -3.0                | 635                                  | 0.47     | Yes            | Yes        | 52.1                    | 0.151                      |
| TIFDMEM0000034 | -7.0                | 4007                                 | 0.81     | No             | Yes        | 50.6                    | 0.224                      |
| TIFDMEM0000035 | -3.0                | 439                                  | 0.66     | No             | No         | 46.9                    | 0.107                      |
| TIFDMEM0000036 | -4.0                | 986                                  | 0.45     | No             | No         | 57.2                    | 3.44e-06                   |
| TIFDMEM0000037 | -2.0                | 143                                  | 0.54     | No             | No         | 65.0                    | 0.000203                   |
| TIFDMEM0000038 | -6.0                | 2853                                 | 0.69     | Yes            | Yes        | 50.3                    | 0.397                      |
| TIFDMEM0000039 | -3.0                | 609                                  | 0.77     | Yes            | No         | 48.1                    | 0.186                      |
| TIFDMEM0000040 | -4.0                | 1585                                 | 0.55     | Yes            | Yes        | 54.1                    | 0.000544                   |
| TIFDMEM0000041 | -4.0                | 808                                  | 0.67     | Yes            | Yes        | 45.0                    | 0.00271                    |
| TIFDMEM0000042 | -5.0                | 1355                                 | 0.46     | Yes            | Yes        | 63.8                    | 7.59e-25                   |
| TIFDMEM0000043 | -0.0                | 0                                    | 0.59     | No             | Yes        | -                       | -                          |
| TIFDMEM0000044 | -6.0                | 561                                  | 0.52     | Yes            | Yes        | 48.1                    | 0.199                      |
| TIFDMEM0000045 | -7.0                | 1348                                 | 0.51     | Yes            | Yes        | 51.4                    | 0.157                      |
| TIFDMEM0000046 | -1.0                | 45                                   | 0.61     | No             | Yes        | 55.6                    | 0.276                      |
| TIFDMEM0000047 | -3.0                | 554                                  | 0.74     | Yes            | No         | 50.4                    | 0.449                      |
| TIFDMEM0000048 | -5.0                | 387                                  | 0.71     | Yes            | Yes        | 51.2                    | 0.342                      |
| TIFDMEM0000049 | -6.0                | 1338                                 | 0.73     | Yes            | No         | 54.7                    | 0.000314                   |
| TIFDMEM0000050 | -1.0                | 336                                  | 0.53     | No             | Yes        | 51.2                    | 0.351                      |
| TIFDMEM0000051 | -7.0                | 1728                                 | 0.69     | Yes            | Yes        | 49.7                    | 0.396                      |
| TIFDMEM0000052 | -4.0                | 502                                  | 0.69     | Yes            | Yes        | 49.8                    | 0.482                      |
| TIFDMEM0000053 | -2.0                | 375                                  | 0.61     | No             | Yes        | 49.6                    | 0.459                      |
| TIFDMEM0000054 | -3.0                | 686                                  | 0.79     | Yes            | Yes        | 52.8                    | 0.0789                     |
| TIFDMEM0000055 | -4.0                | 1347                                 | 0.65     | Yes            | Yes        | 49.4                    | 0.351                      |
| TIFDMEM0000056 | -1.0                | 232                                  | 0.67     | Yes            | Yes        | 49.1                    | 0.422                      |
| TIFDMEM0000057 | -3.0                | 190                                  | 0.30     | Yes            | Yes        | 53.7                    | 0.173                      |
| TIFDMEM0000058 | -2.0                | 285                                  | 0.40     | No             | Yes        | 49.8                    | 0.500                      |
| TIFDMEM0000059 | -1.0                | 313                                  | 0.51     | No             | No         | 54.0                    | 0.0874                     |
| TIFDMEM0000060 | -1.0                | 23                                   | 0.61     | No             | Yes        | 21.7                    | 0.00531                    |
| TIFDMEM0000061 | -1.0                | 1109                                 | 0.78     | Yes            | No         | 54.6                    | 0.00109                    |
| TIFDMEM0000062 | -4.0                | 692                                  | 0.71     | No             | No         | 47.3                    | 0.0798                     |
| TIFDMEM0000063 | -4.0                | 1114                                 | 0.40     | No             | Yes        | 50.1                    | 0.488                      |
| TIFDMEM0000064 | -5.0                | 3127                                 | 0.73     | Yes            | Yes        | 48.5                    | 0.0464                     |
| TIFDMEM0000065 | -2.0                | 351                                  | 0.57     | No             | Yes        | 54.7                    | 0.0437                     |
| TIFDMEM0000066 | -1.0                | 767                                  | 0.77     | Yes            | No         | 50.2                    | 0.471                      |
| TIFDMEM0000067 | -4.0                | 1009                                 | 0.56     | Yes            | Yes        | 48.9                    | 0.244                      |
| TIFDMEM0000068 | -3.0                | 1730                                 | 0.87     | No             | Yes        | 50.4                    | 0.377                      |
| TIFDMEM0000069 | -4.0                | 743                                  | 0.55     | No             | No         | 48.6                    | 0.232                      |
| TIFDMEM0000070 | -5.0                | 2934                                 | 0.79     | Yes            | Yes        | 52.0                    | 0.0169                     |
| TIFDMEM0000071 | -2.0                | 85                                   | 0.52     | No             | Yes        | 44.7                    | 0.193                      |
| TIFDMEM0000072 | -3.0                | 2662                                 | 0.71     | Yes            | Yes        | 52.0                    | 0.0190                     |
| TIFDMEM0000073 | -3.0                | 728                                  | 0.65     | Yes            | Yes        | 49.0                    | 0.315                      |
| TIFDMEM0000074 | -6.0                | 1258                                 | 0.55     | Yes            | Yes        | 51.0                    | 0.259                      |
| TIFDMEM0000075 | -5.0                | 1869                                 | 0.77     | Yes            | No         | 50.1                    | 0.463                      |
| TIFDMEM0000076 | -6.0                | 1365                                 | 0.29     | No             | Yes        | 51.8                    | 0.0969                     |
| TIFDMEM0000077 | -1.0                | 16                                   | 0.65     | No             | Yes        | 81.3                    | 0.0106                     |
| TIFDMEM0000078 | -3.0                | 479                                  | 0.75     | Yes            | Yes        | 45.1                    | 0.0177                     |
| TIFDMEM0000079 | -1.0                | 612                                  | 0.48     | Yes            | Yes        | 50.0                    | 0.516                      |
| TIFDMEM0000080 | -5.0                | 797                                  | 0.68     | No             | Yes        | 49.8                    | 0.472                      |
| TIFDMEM0000081 | -1.0                | 28                                   | 0.64     | No             | Yes        | 35.7                    | 0.0925                     |
| TIFDMEM0000082 | -2.0                | 358                                  | 0.58     | No             | Yes        | 53.4                    | 0.112                      |
| TIFDMEM0000083 | -5.0                | 876                                  | 0.71     | Yes            | Yes        | 70.4                    | 9.67e-35                   |
| TIFDMEM0000084 | -2.0                | 338                                  | 0.73     | Yes            | Yes        | 50.9                    | 0.393                      |
| TIFDMEM0000085 | -6.0                | 8267                                 | 0.79     | Yes            | Yes        | 51.2                    | 0.0173                     |
| TIFDMEM0000086 | -4.0                | 789                                  | 0.80     | Yes            | No         | 50.8                    | 0.335                      |
| TIFDMEM0000087 | -1.0                | 86                                   | 0.51     | No             | Yes        | 50.0                    | 0.543                      |
| TIFDMEM0000088 | -7.0                | 1977                                 | 0.46     | No             | Yes        | 47.7                    | 0.0239                     |
| TIFDMEM0000089 | -4.0                | 401                                  | 0.64     | No             | No         | 49.1                    | 0.382                      |
| TIFDMEM0000090 | -1.0                | 2048                                 | 0.63     | Yes            | No         | 49.0                    | 0.182                      |
| TIFDMEM0000091 | -7.0                | 1110                                 | 0.72     | Yes            | Yes        | 64.1                    | 2.81e-21                   |
| TIFDMEM0000092 | -4.0                | 407                                  | 0.69     | No             | No         | 50.4                    | 0.461                      |
| TIFDMEM0000093 | -2.0                | 1223                                 | 0.63     | Yes            | Yes        | 46.9                    | 0.0172                     |
| TIFDMEM0000094 | -1.0                | 127                                  | 0.76     | No             | Yes        | 58.3                    | 0.0378                     |
| TIFDMEM0000095 | -1.0                | 204                                  | 0.84     | No             | No         | 56.9                    | 0.0292                     |
| TIFDMEM0000096 | -5.0                | 989                                  | 0.64     | Yes            | No         | 48.6                    | 0.204                      |
| TIFDMEM0000097 | -2.0                | 643                                  | 0.60     | Yes            | No         | 48.2                    | 0.193                      |
| TIFDMEM0000098 | -7.0                | 2041                                 | 0.64     | Yes            | Yes        | 48.0                    | 0.0347                     |
| TIFDMEM0000099 | -4.0                | 209                                  | 0.37     | No             | Yes        | 51.2                    | 0.391                      |
| TIFDMEM0000100 | -3.0                | 717                                  | 0.61     | No             | No         | 49.0                    | 0.301                      |
| TIFDMEM0000101 | -3.0                | 711                                  | 0.36     | No             | Yes        | 45.0                    | 0.00431                    |
| TIFDMEM0000102 | -3.0                | 71                                   | 0.35     | Yes            | Yes        | 46.5                    | 0.318                      |
| TIFDMEM0000103 | -1.0                | 61                                   | 0.72     | No             | Yes        | 47.5                    | 0.399                      |
| TIFDMEM0000104 | -6.0                | 1404                                 | 0.81     | Yes            | No         | 48.1                    | 0.0786                     |
| TIFDMEM0000105 | -2.0                | 753                                  | 0.69     | No             | Yes        | 45.3                    | 0.00535                    |
| TIFDMEM0000106 | -3.0                | 356                                  | 0.71     | No             | Yes        | 45.2                    | 0.0401                     |
| TIFDMEM0000107 | -5.0                | 2031                                 | 0.65     | Yes            | Yes        | 67.1                    | 1.50e-54                   |
| TIFDMEM0000108 | -3.0                | 1079                                 | 0.85     | Yes            | Yes        | 48.0                    | 0.100                      |
| TIFDMEM0000109 | -5.0                | 552                                  | 0.52     | Yes            | Yes        | 43.3                    | 0.000932                   |
| TIFDMEM0000110 | -1.0                | 73                                   | 0.74     | No             | Yes        | 38.4                    | 0.0302                     |
| TIFDMEM0000111 | -6.0                | 2105                                 | 0.75     | Yes            | No         | 46.6                    | 0.000846                   |
| TIFDMEM0000112 | -4.0                | 1482                                 | 0.54     | Yes            | Yes        | 50.7                    | 0.311                      |
| TIFDMEM0000113 | -2.0                | 431                                  | 0.80     | Yes            | No         | 49.9                    | 0.500                      |
| TIFDMEM0000114 | -5.0                | 2591                                 | 0.69     | Yes            | No         | 49.4                    | 0.278                      |
| TIFDMEM0000115 | -1.0                | 262                                  | 0.52     | Yes            | Yes        | 50.0                    | 0.525                      |
| TIFDMEM0000116 | -7.0                | 641                                  | 0.40     | Yes            | Yes        | 60.8                    | 2.23e-08                   |
| TIFDMEM0000117 | -6.0                | 1534                                 | 0.47     | No             | Yes        | 51.6                    | 0.105                      |
| TIFDMEM0000118 | -3.0                | 890                                  | 0.62     | Yes            | Yes        | 49.6                    | 0.407                      |
| TIFDMEM0000119 | -5.0                | 668                                  | 0.69     | Yes            | No         | 50.0                    | 0.515                      |
| TIFDMEM0000120 | -5.0                | 1273                                 | 0.54     | No             | Yes        | 50.4                    | 0.411                      |