

## EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name          | Gene Description                    | <a href="#">Locus Link</a> | Hu Chr#         | Mouse Symbol | M Chr        | AccID                       |
|------------|-------------------------|-------------------------------------|----------------------------|-----------------|--------------|--------------|-----------------------------|
| 1          | <a href="#">ADPRT</a>   | ribosyltransferase (NAD+; poly(ADP- | <a href="#">142</a>        | 1 (q41-q42)     | Adprt1       | 1 (98.6 cM)  | <a href="#">MGI:1340806</a> |
| 1          | <a href="#">ATF3</a>    | transcription factor 3              | <a href="#">467</a>        | 1 (q32.3)       | Atf3         | 1 (H6)       | <a href="#">MGI:109384</a>  |
| 1          | <a href="#">BCL2</a>    | B-cell CLL/lymphoma 2               | <a href="#">596</a>        | 18 (q21.3)      | Bcl2         | 1 (59.8 cM)  | <a href="#">MGI:88138</a>   |
| 1          | <a href="#">ERCC5</a>   | cross-complementing                 | <a href="#">2073</a>       | 13 (q22)        | Ercc5        | 1 (26.6 cM)  | <a href="#">MGI:103582</a>  |
| 1          | <a href="#">ESRRG</a>   | Estrogen-related receptor gamma     | <a href="#">2104</a>       | 1 (q41)         | Esrrg        | 1 (H5)       | <a href="#">MGI:1347056</a> |
| 1          | <a href="#">EXO1</a>    | Exonuclease 1                       | <a href="#">9156</a>       | 1 (q42-q43)     | Exo1         | 1 (97.0 cM)  | <a href="#">MGI:1349427</a> |
| 1          | <a href="#">IGFBP2</a>  | factor binding protein 2, 36kDa     | <a href="#">3485</a>       | 2 (q33-q34)     | Igfbp2       | 1 (36.1 cM)  | <a href="#">MGI:96437</a>   |
| 1          | <a href="#">IGFBP5</a>  | factor binding protein 5            | <a href="#">3488</a>       | 2 (q33-q36)     | Igfbp5       | 1 (36.1 cM)  | <a href="#">MGI:96440</a>   |
| 1          | <a href="#">MCM3</a>    | minichromosome maintenance          | <a href="#">4172</a>       | 6 (p12)         | Mcm3         | 1 (A3-A5)    | <a href="#">MGI:101845</a>  |
| 1          | <a href="#">MCM6</a>    | minichromosome maintenance          | <a href="#">4175</a>       | 2 (q21)         | Mcm6         | 1 (66.6 cM)  | <a href="#">MGI:1298227</a> |
| 1          | <a href="#">MDM4</a>    | 3T3 cell double minute 4, p53       | <a href="#">4194</a>       | 1 (q32)         | Mdm4         | 1 (70.0 cM)  | <a href="#">MGI:107934</a>  |
| 1          | <a href="#">MGST3</a>   | glutathione S-transferase 3         | <a href="#">4259</a>       | 1 (q23)         | Mgst3        | 1 (H2)       | <a href="#">MGI:1913697</a> |
| 1          | <a href="#">ORC2L</a>   | complex, subunit 2-like (yeast)     | <a href="#">4999</a>       | 2 (q33)         | Orc2l        | 1 (syntenic) | <a href="#">MGI:1328306</a> |
| 1          | <a href="#">PLA2G4A</a> | group IVA (cystosolic, calcium-     | <a href="#">5321</a>       | 1 (q25)         | Pla2g4a      | 1 (76.0 cM)  | <a href="#">MGI:1195256</a> |
| 1          | <a href="#">PMS1</a>    | segregation increased 1 (S.         | <a href="#">5378</a>       | 2q31-q33        |              | chr 1        |                             |
| 1          | <a href="#">PTGS2</a>   | endoperoxide synthase 2             | <a href="#">5743</a>       | 1 (q25.2-q25.3) | Ptgs2        | 1 (76.2 cM)  | <a href="#">MGI:97798</a>   |

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| 1          | <a href="#">TGFB2</a>  | growth factor, beta 2                    | <a href="#">7042</a>       | 1 (q41)          | Tgfb2        | 1 (101.5 cM) | <a href="#">MGI:98726</a>   |
| 2          | <a href="#">API5</a>   | Apoptosis inhibitor 5                    | <a href="#">8539</a>       | 11 (p12-q12)     | Api5         | 2 (syntenic) | <a href="#">MGI:1888993</a> |
| 2          | <a href="#">BLVRA</a>  | Biliverdin reductase A                   | <a href="#">644</a>        | 7 (p14-cen)      | Blvra        | 2 (62.0 cM)  | <a href="#">MGI:88170</a>   |
| 2          | <a href="#">CDC25B</a> | Cell division cycle 25B                  | <a href="#">994</a>        | 20 (p13)         | Cdc25b       | 2 (73.9 cM)  | <a href="#">MGI:99701</a>   |
| 2          | <a href="#">CDK9</a>   | kinase 9 (CDC2-related kinase)           | <a href="#">1025</a>       | 9 (q34.1)        | Cdk9         | 2 (syntenic) | <a href="#">MGI:1328368</a> |
| 2          | <a href="#">CHST1</a>  | (keratan sulfate Gal-6) sulfotransferase | <a href="#">8534</a>       | 11 (p11.2-p11.1) | Chst1        | 2 (D-E1)     | <a href="#">MGI:1924219</a> |
| 2          | <a href="#">CTNND1</a> | associated protein), delta 1             | <a href="#">1500</a>       | 11 (q11)         | Catns        | 2 (47.8 cM)  | <a href="#">MGI:105100</a>  |
| 2          | <a href="#">DDB2</a>   | DNA binding protein 2, 48kDa             | <a href="#">1643</a>       | 11 (p12-p11)     | Ddb2         | 2 (E1)       | <a href="#">MGI:1355314</a> |
| 2          | <a href="#">E2F1</a>   | E2F transcription factor 1               | <a href="#">1869</a>       | 20 (q11.2)       | E2f1         | 2 (84.0 cM)  | <a href="#">MGI:101941</a>  |
| 2          | <a href="#">EDN3</a>   | Endothelin 3                             | <a href="#">1908</a>       | 20 (q13.2-q13.3) | Edn3         | 2 (104.0 cM) | <a href="#">MGI:95285</a>   |
| 2          | <a href="#">GAD1</a>   | decarboxylase 1 (brain, 67kDa)           | <a href="#">2571</a>       | 2 (q31)          | Gad1         | 2 (43.0 cM)  | <a href="#">MGI:95632</a>   |
| 2          | <a href="#">GAD2</a>   | decarboxylase 2 (pancreatic islets       | <a href="#">2572</a>       | 10 (p11.23)      | Gad2         | 2 (9.0 cM)   | <a href="#">MGI:95634</a>   |
| 2          | <a href="#">MYBPC3</a> | Myosin binding protein C, cardiac        | <a href="#">4607</a>       | 11 (p11.2)       | Mybpc3       | 2 (E1)       | <a href="#">MGI:102844</a>  |
| 2          | <a href="#">ORC4L</a>  | colon cancer, nonpolyposis type 1        | <a href="#">4436</a>       | 2 (q22-q23)      | Orc4l        | 2 (syntenic) | <a href="#">MGI:1347043</a> |
| 2          | <a href="#">PAX1</a>   | Paired box gene 1                        | <a href="#">5075</a>       | 20 (p11.2)       | Pax1         | 2 (82.0 cM)  | <a href="#">MGI:97485</a>   |
| 2          | <a href="#">PCNA</a>   | Proliferating cell nuclear antigen       | <a href="#">5111</a>       | 20 (pter-p12)    | Pcna         | 2 (75.0 cM)  | <a href="#">MGI:97503</a>   |

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| 2          | <a href="#">RAD51</a>   | (RecA homolog, E. coli) (S. cerevisiae) | <a href="#">5888</a>       | 15 (q15.1)     | Rad51        | 2 (66.8 cM)  | <a href="#">MGI:97890</a>   |
| 2          | <a href="#">RAG1</a>    | Recombination activating gene 1         | <a href="#">5896</a>       | 11 (p13)       | Rag1         | 2 (56.0 cM)  | <a href="#">MGI:97848</a>   |
| 2          | <a href="#">TAF4</a>    | polymerase II, TATA box binding         | <a href="#">6874</a>       | 20 (q13.33)    | Taf4a        | 2 (H4)       | <a href="#">MGI:2152346</a> |
| 2          | <a href="#">TNFRSF5</a> | factor receptor superfamily,            | <a href="#">958</a>        | 20 (q12-q13.2) | Tnfrsf5      | 2 (97.0 cM)  | <a href="#">MGI:88336</a>   |
| 2          | <a href="#">WT1</a>     | Wilms tumor 1                           | <a href="#">7490</a>       | 11 (p13)       | Wt1          | 2 (58.0 cM)  | <a href="#">MGI:98968</a>   |
| 3          | <a href="#">ARNT</a>    | receptor nuclear translocator           | <a href="#">405</a>        | 1 (q21)        | Arnt         | 3 (47.9 cM)  | <a href="#">MGI:88071</a>   |
| 3          | <a href="#">CASP6</a>   | apoptosis-related cysteine protease     | <a href="#">839</a>        | 4 (q25)        | Casp6        | 3 (H1)       | <a href="#">MGI:1312921</a> |
| 3          | <a href="#">CCNA2</a>   | Cyclin A2                               | <a href="#">890</a>        | 4 (q25-q31)    | Ccna2        | 3 (19.2 cM)  | <a href="#">MGI:108069</a>  |
| 3          | <a href="#">CDC14A</a>  | cycle 14 homolog A (S. cerevisiae)      | <a href="#">8556</a>       | 1 (p21)        | Cdc14a       | 3 (syntenic) | <a href="#">MGI:2442676</a> |
| 3          | <a href="#">CYR61</a>   | angiogenic inducer, 61                  | <a href="#">3491</a>       | 1 (p31-p22)    | Cyr61        | 3 (72.9 cM)  | <a href="#">MGI:88613</a>   |
| 3          | <a href="#">E2F5</a>    | factor 5, p130-binding                  | <a href="#">1875</a>       | 8 (q21.2)      | E2f5         | 3 (syntenic) | <a href="#">MGI:105091</a>  |
| 3          | <a href="#">EGF</a>     | factor (beta-urogastrone)               | <a href="#">1950</a>       | 4 (q25)        | Egf          | 3 (65.2 cM)  | <a href="#">MGI:95290</a>   |
| 3          | <a href="#">GCLM</a>    | ligase, modifier subunit                | <a href="#">2730</a>       | 1 (p22.1)      | Gclm         | 3 (53.5 cM)  | <a href="#">MGI:104995</a>  |
| 3          | <a href="#">MGST2</a>   | glutathione S-transferase 2             | <a href="#">4258</a>       | 4 (q28.3)      | Mgst2        | 3 (syntenic) | <a href="#">MGI:2448481</a> |
| 3          | <a href="#">MSH4</a>    | mutS homolog 4 (E. coli)                | <a href="#">4438</a>       | 1 (p31)        | Msh4         | 3 (syntenic) | <a href="#">MGI:1860077</a> |
| 3          | <a href="#">MUC1</a>    | Mucin 1, transmembrane                  | <a href="#">4582</a>       | 1 (q21)        | Muc1         | 3 (44.8 cM)  | <a href="#">MGI:97231</a>   |

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| 3          | <a href="#">NFKB1</a>   | kappa light polypeptide gene             | <a href="#">4790</a>       | 4 (q24)         | Nfkb1        | 3 (68.9 cM)  | <a href="#">MGI:97312</a>   |
| 3          | <a href="#">NRAS</a>    | viral (v-ras) oncogene homolog           | <a href="#">4893</a>       | 1 (p13.2)       | Nras         | 3 (48.5 cM)  | <a href="#">MGI:97376</a>   |
| 3          | <a href="#">PKLR</a>    | Pyruvate kinase, liver and RBC           | <a href="#">5313</a>       | 1 (q21)         | Pklr         | 3 (44.0 cM)  | <a href="#">MGI:97604</a>   |
| 3          | <a href="#">PPID</a>    | isomerase D (cyclophilin D)              | <a href="#">5481</a>       | 4 (q31.3)       | Ppid         | 3 (F1)       | <a href="#">MGI:1914988</a> |
| 3          | <a href="#">SPRR1A</a>  | Small proline-rich protein 1A            | <a href="#">6698</a>       | 1 (q21-q22)     | Sprr1a       | 3 (45.2 cM)  | <a href="#">MGI:106660</a>  |
| 3          | <a href="#">SPRR1B</a>  | Small proline-rich protein 1B (cornifin) | <a href="#">6699</a>       | 1 (q21-q22)     | Sprr1b       | 3 (45.2 cM)  | <a href="#">MGI:106659</a>  |
| 4          | <a href="#">ALAD</a>    | Aminolevulinate, delta-, dehydratase     | <a href="#">210</a>        | 9 (q33.1)       | Alad         | 4 (30.6 cM)  | <a href="#">MGI:96853</a>   |
| 4          | <a href="#">CASP9</a>   | apoptosis-related cysteine protease      | <a href="#">842</a>        | 1 (p36.3-p36.1) | Casp9        | 4 (E1)       | <a href="#">MGI:1277950</a> |
| 4          | <a href="#">CDC42</a>   | 42 (GTP binding protein, 25kDa)          | <a href="#">998</a>        | 1 (p36.1)       | Cdc42        | 4 (66.75 cM) | <a href="#">MGI:106211</a>  |
| 4          | <a href="#">CDKN2A</a>  | kinase inhibitor 2A (melanoma, p16,      | <a href="#">1029</a>       | 9 (p21)         | Cdkn2a       | 4 (42.7 cM)  | <a href="#">MGI:104738</a>  |
| 4          | <a href="#">CDKN2B</a>  | kinase inhibitor 2B (p15, inhibits CDK4) | <a href="#">1030</a>       | 9 (p21)         | Cdkn2b       | 4 (42.7 cM)  | <a href="#">MGI:104737</a>  |
| 4          | <a href="#">CDKN2C</a>  | kinase inhibitor 2C (p18, inhibits CDK4) | <a href="#">1031</a>       | 1 (p32)         | Cdkn2c       | 4 (24.7 cM)  | <a href="#">MGI:105388</a>  |
| 4          | <a href="#">CTNNAL1</a> | associated protein), alpha-like 1        | <a href="#">8727</a>       | 9 (q31.2)       | Catnal1      | 4 (C1)       | <a href="#">MGI:1859649</a> |
| 4          | <a href="#">CYP2J2</a>  | family 2, subfamily J, polypeptide 2     | <a href="#">1573</a>       | 1 (p31.3-p31.2) | Cyp2j6       | 4 (46.5 cM)  | <a href="#">MGI:1270148</a> |
| 4          | <a href="#">E2F2</a>    | E2F transcription factor 2               | <a href="#">1870</a>       | 1 (p36)         | E2f2         | 4 (D3)       | <a href="#">MGI:1096341</a> |
| 4          | <a href="#">EDN2</a>    | Endothelin 2                             | <a href="#">1907</a>       | 1 (p34)         | Edn2         | 4 (syntenic) | <a href="#">MGI:95284</a>   |

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| 4          | <a href="#">JUN</a>      | 17 oncogene homolog (avian)                | <a href="#">3725</a>       | 1 (p32-p31)     | Jun          | 4 (44.6 cM)  | <a href="#">MGI:96646</a>   |
| 4          | <a href="#">MLP</a>      | MARCKS-like protein                        | <a href="#">65108</a>      | 1 (p35.1)       | Mlp          | 4 (59.0 cM)  | <a href="#">MGI:97143</a>   |
| 4          | <a href="#">MTHFR</a>    | methylenetetrahydr ofolate reductase       | <a href="#">4524</a>       | 1 (p36.3)       | Mthfr        | 4 (76.4 cM)  | <a href="#">MGI:106639</a>  |
| 4          | <a href="#">MUTYH</a>    | mutY homolog (E. coli)                     | <a href="#">4595</a>       | 1 (p34.3-p32.1) | Mutyh        | 4 (C7)       | <a href="#">MGI:1917853</a> |
| 4          | <a href="#">NBS1</a>     | Nijmegen breakage syndrome 1 (nibrin)      | <a href="#">4683</a>       | 8 (q21)         | Nbn          | 4 (A)        | <a href="#">MGI:1351625</a> |
| 4          | <a href="#">ORC3L</a>    | complex, subunit 4-like (yeast)            | <a href="#">5000</a>       | 6 (q14.3-q16.1) | Orc3l        | 4 (A3)       | <a href="#">MGI:1354944</a> |
| 4          | <a href="#">PLA2G2A</a>  | group IIA (platelets, synovial fluid)      | <a href="#">5320</a>       | 1 (p35)         | Pla2g2a      | 4 (68.0 cM)  | <a href="#">MGI:104642</a>  |
| 4          | <a href="#">PLA2G5</a>   | Phospholipase A2, group V                  | <a href="#">5322</a>       | 1 (p36-p34)     | Pla2g5       | 4 (68.0 cM)  | <a href="#">MGI:101899</a>  |
| 4          | <a href="#">PLK3</a>     | Polo-like kinase 3 (Drosophila)            | <a href="#">1263</a>       | 1 (p34.1)       | Plk3         | 4 (syntenic) | <a href="#">MGI:109604</a>  |
| 4          | <a href="#">PTCH2</a>    | Patched homolog 2 (Drosophila)             | <a href="#">8643</a>       | 1 (p33-p34)     | Ptch2        | 4 (56.5 cM)  | <a href="#">MGI:1095405</a> |
| 4          | <a href="#">RAD23B</a>   | RAD23 homolog B (S. cerevisiae)            | <a href="#">5887</a>       | 9 (q31.2)       | Rad23b       | 4 (B3)       | <a href="#">MGI:105128</a>  |
| 4          | <a href="#">TAF12</a>    | polymerase II, TATA box binding            | <a href="#">6883</a>       | 1 (p35.3)       | Taf12        | 4 (syntenic) | <a href="#">MGI:1913714</a> |
| 4          | <a href="#">TGFB1</a>    | growth factor, beta receptor I (activin A) | <a href="#">7046</a>       | 9 (q22)         | Tgfb1        | 4 (19.3 cM)  | <a href="#">MGI:98728</a>   |
| 4          | <a href="#">TNFRSF14</a> | factor receptor superfamily,               | <a href="#">8764</a>       | 1 (p36.3-p36.2) | Tnfrsf14     | 4 (syntenic) | <a href="#">MGI:2675303</a> |
| 4          | <a href="#">TNFRSF1B</a> | factor receptor superfamily,               | <a href="#">7133</a>       | 1 (p36.3-p36.2) | Tnfrsf1b     | 4 (75.5 cM)  | <a href="#">MGI:1314883</a> |
| 4          | <a href="#">TNFRSF25</a> | factor superfamily, member 25)             | <a href="#">8718</a>       | 1 (p36.2)       | Tnfrsf25     | 4 (E1)       | <a href="#">MGI:1934667</a> |

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| 4          | <a href="#">TNFRSF8</a> | factor receptor superfamily,            | <a href="#">943</a>        | 1 (p36)     | Tnfrsf8      | 4 (75.5 cM)     | <a href="#">MGI:99908</a>   |
| 4          | <a href="#">TNFRSF9</a> | factor receptor superfamily,            | <a href="#">3604</a>       | 1 (p36)     | Tnfrsf9      | 4 (75.5 cM)     | <a href="#">MGI:1101059</a> |
| 4          | <a href="#">TXN</a>     | Thioredoxin                             | <a href="#">7295</a>       | 9 (q31)     | Txn1         | 4 (24.6 cM)     | <a href="#">MGI:98874</a>   |
| 4          | <a href="#">XPA</a>     | pigmentosum, complementation            | <a href="#">7507</a>       | 9 (q22.3)   | Xpa          | 4 (21.5 cM)     | <a href="#">MGI:99135</a>   |
| 5          | <a href="#">ACTB</a>    | Actin, beta                             | <a href="#">60</a>         | 7 (p15-p12) | Actb         | 5 (80.0 cM)     | <a href="#">MGI:87904</a>   |
| 5          | <a href="#">AREG</a>    | (schwannoma-derived growth              | <a href="#">374</a>        | 4 (q13-q21) | Areg         | 5 (51.0 cM)     | <a href="#">MGI:88068</a>   |
| 5          | <a href="#">BRCA2</a>   | Breast cancer 2, early onset            | <a href="#">675</a>        | 13 (q12.3)  | Brca2        | 5 (84.0 cM)     | <a href="#">MGI:109337</a>  |
| 5          | <a href="#">CCNG2</a>   | Cyclin G2                               | <a href="#">901</a>        | 4 (q21.1)   | Ccng2        | 5 (E3.3-F1.3)   | <a href="#">MGI:1095734</a> |
| 5          | <a href="#">CCNI</a>    | Cyclin I                                | <a href="#">10983</a>      | 4 (q21.1)   | Ccni         | 5 (E3.3 - F1.3) | <a href="#">MGI:1341077</a> |
| 5          | <a href="#">CDC7</a>    | cycle 7 (S. cerevisiae)                 | <a href="#">8317</a>       | 1 (p22)     | Cdc7         | 5 (E)           | <a href="#">MGI:1309511</a> |
| 5          | <a href="#">CDK6</a>    | Cyclin-dependent kinase 6               | <a href="#">1021</a>       | 7 (q21-q22) | Cdk6         | 5 (0.0 cM)      | <a href="#">MGI:1277162</a> |
| 5          | <a href="#">FGFR3</a>   | factor receptor 3 (achondroplasia,      | <a href="#">2261</a>       | 4 (p16.3)   | Fgfr3        | 5 (20.0 cM)     | <a href="#">MGI:95524</a>   |
| 5          | <a href="#">GCKR</a>    | (hexokinase 4) regulatory protein       | <a href="#">2646</a>       | 2 (p23)     | Gckr         | 5 (18.1 cM)     | <a href="#">MGI:1096345</a> |
| 5          | <a href="#">GTF2H3</a>  | transcription factor IIH, polypeptide 3 | <a href="#">2967</a>       | 12 (q24.31) | Gtf2h3       | 5 (68.0 cM)     | <a href="#">MGI:1277143</a> |
| 5          | <a href="#">HGF</a>     | factor (hepapoietin A; scatter factor)  | <a href="#">3082</a>       | 7 (q21.1)   | Hgf          | 5 (4.0 cM)      | <a href="#">MGI:96079</a>   |
| 5          | <a href="#">IGFBP7</a>  | factor binding protein 7                | <a href="#">3490</a>       | 4 (q12)     | Igfbp7       | 5 (syntenic)    | <a href="#">MGI:1352480</a> |

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| 5          | <a href="#">NOS1</a>    | synthase 1 (neuronal)                 | <a href="#">4842</a>       | 12 (q24.2-q24.31) | Nos1         | 5 (65.0 cM)  | <a href="#">MGI:97360</a>   |
| 5          | <a href="#">PLA2G1B</a> | Phospholipase A2, group IB (pancreas) | <a href="#">5319</a>       | 12 (q23-q24.1)    | Pla2g1b      | 5 (F1-G1.1)  | <a href="#">MGI:101842</a>  |
| 5          | <a href="#">POLE</a>    | Polymerase (DNA directed), epsilon    | <a href="#">5426</a>       | 12 (q24.3)        | Pole         | 5 (56.0 cM)  | <a href="#">MGI:1196391</a> |
| 5          | <a href="#">RFC1</a>    | (activator 1) 1, 145kDa               | <a href="#">5981</a>       | 4 (p14-p13)       | Recc1        | 5 (39.0 cM)  | <a href="#">MGI:97891</a>   |
| 5          | <a href="#">RFC2</a>    | (activator 1) 2 (40kD)                | <a href="#">5982</a>       | 7 (q11.23)        | Rfc2         | 5 (74.0 cM)  | <a href="#">MGI:1341868</a> |
| 5          | <a href="#">RFC3</a>    | (activator 1) 3 (38kD)                | <a href="#">5983</a>       | 13 (q12.3-q13)    | Rfc3         | 5 (G3)       | <a href="#">MGI:1916513</a> |
| 5          | <a href="#">RFC5</a>    | (activator 1) 5, 36.5kDa              | <a href="#">5985</a>       | 12 (q24.2-q24.3)  | Rfc5         | 5 (F)        | <a href="#">MGI:1919401</a> |
| 5          | <a href="#">SHH</a>     | homolog (Drosophila)                  | <a href="#">6469</a>       | 7 (q36)           | Shh          | 5 (16.0 cM)  | <a href="#">MGI:98297</a>   |
| 5          | <a href="#">STE</a>     | Sultotransferase, estrogen-preferring | <a href="#">6783</a>       | 4 (q13.1)         | Sult1e1      | 5 (44.0 cM)  | <a href="#">MGI:98431</a>   |
| 5          | <a href="#">TAF2E</a>   | polymerase II, TATA box binding       | <a href="#">6878</a>       | 7 (q22.1)         | Taf6         | 5 (syntenic) | <a href="#">MGI:109129</a>  |
| 5          | <a href="#">UNG</a>     | Uracil-DNA glycosylase                | <a href="#">7374</a>       | 12 (q23-q24.1)    | Ung          | 5 (F)        | <a href="#">MGI:109352</a>  |
| 5          | <a href="#">XRCC2</a>   | complementing defective repair in     | <a href="#">7516</a>       | 7 (q36.1)         | Xrcc2        | 5 (A3)       | <a href="#">MGI:1927345</a> |
| 6          | <a href="#">BID</a>     | domain death agonist                  | <a href="#">637</a>        | 22 (q11.1)        | Bid          | 6 (54.0 cM)  | <a href="#">MGI:108093</a>  |
| 6          | <a href="#">CASP2</a>   | apoptosis-related cysteine protease   | <a href="#">835</a>        | 7 (q34-q35)       | Casp2        | 6 (20.5 cM)  | <a href="#">MGI:97295</a>   |
| 6          | <a href="#">CCND2</a>   | Cyclin D2                             | <a href="#">894</a>        | 12 (p13)          | Ccnd2        | 6 (61.1 cM)  | <a href="#">MGI:88314</a>   |
| 6          | <a href="#">CDKN1B</a>  | kinase inhibitor 1B (p27, Kip1)       | <a href="#">1027</a>       | 12 (p13.1-p12)    | Cdkn1b       | 6 (62.0 cM)  | <a href="#">MGI:104565</a>  |

## EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name          | Gene Description                    | <a href="#">Locus Link</a> | Hu Chr#          | Mouse Symbol | M Chr        | AccID                       |
|------------|-------------------------|-------------------------------------|----------------------------|------------------|--------------|--------------|-----------------------------|
| 6          | <a href="#">FGF23</a>   | Fibroblast growth factor 23         | <a href="#">8074</a>       | 12 (p13.3)       | Fgf23        | 6 (syntenic) | <a href="#">MGI:1891427</a> |
| 6          | <a href="#">FGF6</a>    | Fibroblast growth factor 6          | <a href="#">2251</a>       | 12 (p13)         | Fgf6         | 6 (61.1 cM)  | <a href="#">MGI:95520</a>   |
| 6          | <a href="#">GADD45A</a> | DNA-damage-inducible, alpha         | <a href="#">1647</a>       | 1 (p31.2-p31.1)  | Gadd45a      | 6 (syntenic) | <a href="#">MGI:107799</a>  |
| 6          | <a href="#">GAPD</a>    | phosphate dehydrogenase             | <a href="#">2597</a>       | 12 (p13)         | Gapd         | 6 (56.0 cM)  | <a href="#">MGI:95640</a>   |
| 6          | <a href="#">HK2</a>     | Hexokinase 2                        | <a href="#">3099</a>       | 2 (p13)          | Hk2          | 6 (34.5 cM)  | <a href="#">MGI:1315197</a> |
| 6          | <a href="#">MBD4</a>    | Methyl-CpG binding domain protein 4 | <a href="#">8930</a>       | 3 (q21-q22)      | Mbd4         | 6 (50.3 cM)  | <a href="#">MGI:1333850</a> |
| 6          | <a href="#">MCM2</a>    | minichromosome maintenance          | <a href="#">4171</a>       | 3 (q21)          | Mcm2         | 6 (syntenic) | <a href="#">MGI:105380</a>  |
| 6          | <a href="#">MGST1</a>   | glutathione S-transferase 1         | <a href="#">4257</a>       | 12 (p12.3-p12.1) | Mgst1        | 6 (G1)       | <a href="#">MGI:1913850</a> |
| 6          | <a href="#">OGG1</a>    | 8-oxoguanine DNA glycosylase        | <a href="#">4968</a>       | 3 (p26.2)        | Ogg1         | 6 (48.0 cM)  | <a href="#">MGI:1097693</a> |
| 6          | <a href="#">RAD52</a>   | RAD52 homolog (S. cerevisiae)       | <a href="#">5893</a>       | 12 (p13-p12.2)   | Rad52        | 6 (55.0 cM)  | <a href="#">MGI:101949</a>  |
| 6          | <a href="#">RAF1</a>    | leukemia viral oncogene homolog     | <a href="#">5894</a>       | 3 (p25)          | Raf1         | 6 (52.5 cM)  | <a href="#">MGI:97847</a>   |
| 6          | <a href="#">TNFRSF7</a> | factor receptor superfamily,        | <a href="#">939</a>        | 12 (p13)         | Tnfrsf7      | 6 (60.35 cM) | <a href="#">MGI:88326</a>   |
| 6          | <a href="#">XPC</a>     | pigmentosum, complementation        | <a href="#">7508</a>       | 3 (p25)          | Xpc          | 6 (D)        | <a href="#">MGI:103557</a>  |
| 7          | <a href="#">AKT2</a>    | thymoma viral oncogene homolog      | <a href="#">208</a>        | 19 (q13.1-q13.2) | Akt2         | 7 (6.5 cM)   | <a href="#">MGI:104874</a>  |
| 7          | <a href="#">BAX</a>     | BCL2-associated X protein           | <a href="#">581</a>        | 19 (q13.3-q13.4) | Bax          | 7 (23.0 cM)  | <a href="#">MGI:99702</a>   |
| 7          | <a href="#">BLVRB</a>   | B (flavin reductase (NADPH))        | <a href="#">645</a>        | 19 (q13.1-q13.2) | Blvrbb       | 7 (syntenic) | <a href="#">MGI:2385271</a> |



## EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name          | Gene Description                        | <a href="#">Locus Link</a> | Hu Chr#          | Mouse Symbol | M Chr        | AccID                       |
|------------|-------------------------|---|----------------------------|------------------|--------------|--------------|-----------------------------|
| 7          | <a href="#">CCND1</a>   | parathyroid adenomatosis 1)             | <a href="#">595</a>        | 11 (q13)         | Ccnd1        | 7 (72.3 cM)  | <a href="#">MGI:88313</a>   |
| 7          | <a href="#">CCNE1</a>   | Cyclin E1                               | <a href="#">898</a>        | 19 (q12)         | Ccne1        | 7 (16.0 cM)  | <a href="#">MGI:88316</a>   |
| 7          | <a href="#">ERCC1</a>   | Excision repair cross-                  | <a href="#">2067</a>       | 19 (q13.2-q13.3) | Ercc1        | 7 (4.0 cM)   | <a href="#">MGI:95412</a>   |
| 7          | <a href="#">ERCC2</a>   | cross-complementing                     | <a href="#">2068</a>       | 19 (q13.3)       | Ercc2        | 7 (4.0 cM)   | <a href="#">MGI:95413</a>   |
| 7          | <a href="#">GPI</a>     | Glucose phosphate isomerase             | <a href="#">2821</a>       | 19 (q13.1)       | Gpi1         | 7 (11.0 cM)  | <a href="#">MGI:95797</a>   |
| 7          | <a href="#">GTF2H1</a>  | transcription factor IIH, polypeptide 1 | <a href="#">2965</a>       | 11 (p15.1-p14)   | Gtf2h1       | 7 (syntenic) | <a href="#">MGI:1277216</a> |
| 7          | <a href="#">IGF1R</a>   | Insulin-like growth factor 1 receptor   | <a href="#">3480</a>       | 15 (q26.3)       | Igf1r        | 7 (33.0 cM)  | <a href="#">MGI:96433</a>   |
| 7          | <a href="#">LIG1</a>    | Ligase I, DNA, ATP-dependent            | <a href="#">3978</a>       | 19 (q13.2-q13.3) | Lig1         | 7 (4.0 cM)   | <a href="#">MGI:101789</a>  |
| 7          | <a href="#">PLA2G4C</a> | group IVC (cytosolic, calcium-          | <a href="#">8605</a>       | 19 (q13.3)       | D7Ert445e    | 7 (4.0 cM)   | <a href="#">MGI:1196403</a> |
| 7          | <a href="#">PNKP</a>    | Polynucleotide kinase 3'-phosphate      | <a href="#">11284</a>      | 19 (q13.3-q13.4) | Pnkp         | 7 (B2)       | <a href="#">MGI:1891698</a> |
| 7          | <a href="#">POLD1</a>   | directed), delta 1, catalytic subunit   | <a href="#">5424</a>       | 19 (q13.3)       | Pold1        | 7 (23.0 cM)  | <a href="#">MGI:97741</a>   |
| 7          | <a href="#">POLG</a>    | Polymerase (DNA directed), gamma        | <a href="#">5428</a>       | 15 (q25)         | Polg         | 7 (E)        | <a href="#">MGI:1196389</a> |
| 7          | <a href="#">SEI1</a>    | CDK4-binding protein p34SEI1            | <a href="#">29950</a>      | 19 (q13.1-q13.2) | Sertad1      | 7 (syntenic) | <a href="#">MGI:1913438</a> |
| 7          | <a href="#">TAF2H</a>   | POLYMERASE II, TATA box binding         | <a href="#">6881</a>       | 11 (p15.3)       | Taf10        | 7 (F1)       | <a href="#">MGI:1346320</a> |
| 7          | <a href="#">XRCC1</a>   | complementing defective repair in       | <a href="#">7515</a>       | 19 (q13.2)       | Xrcc1        | 7 (5.5 cM)   | <a href="#">MGI:99137</a>   |
| 7          | <a href="#">ZFP36</a>   | 36, C3H type, homolog (mouse)           | <a href="#">7538</a>       | 19 (q13.1)       | Zfp36        | 7 (10.2 cM)  | <a href="#">MGI:99180</a>   |

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| Mouse Chr# | Hugo Gene Name          | Gene Description                    | <a href="#">Locus Link</a> | Hu Chr#           | Mouse Symbol | M Chr        | AccID                       |
|------------|-------------------------|-------------------------------------|----------------------------|-------------------|--------------|--------------|-----------------------------|
| 8          | <a href="#">APRT</a>    | phosphoribosyltransferase           | <a href="#">353</a>        | 16 (q24)          | Aprt         | 8 (67.0 cM)  | <a href="#">MGI:88061</a>   |
| 8          | <a href="#">ASNA1</a>   | transporter, ATP-binding, homolog 1 | <a href="#">439</a>        | 19 (q13.3)        | Asna1        | 8 (C3-D1)    | <a href="#">MGI:1928379</a> |
| 8          | <a href="#">CASP3</a>   | apoptosis-related cysteine protease | <a href="#">836</a>        | 4 (q34)           | Casp3        | 8 (26.0 cM)  | <a href="#">MGI:107739</a>  |
| 8          | <a href="#">CDC16</a>   | cycle 16 homolog (S. cerevisiae)    | <a href="#">8881</a>       | 13 (q34)          | Cdc16        | 8 (A2)       | <a href="#">MGI:1917207</a> |
| 8          | <a href="#">E2F4</a>    | factor 4, p107/p130-binding         | <a href="#">1874</a>       | 16 (q21-q22)      | E2f4         | 8 (syntenic) | <a href="#">MGI:103012</a>  |
| 8          | <a href="#">EDNRA</a>   | Endothelin receptor type A          | <a href="#">1909</a>       | 4 (q31.22-q31.23) | Ednra        | 8 (C2)       | <a href="#">MGI:105923</a>  |
| 8          | <a href="#">FANCA</a>   | complementation group A             | <a href="#">2175</a>       | 16 (q24.3)        | Fanca        | 8 (syntenic) | <a href="#">MGI:1341823</a> |
| 8          | <a href="#">FGF20</a>   | Fibroblast growth factor 20         | <a href="#">26281</a>      | 8 (p22-p21.3)     | Fgf20        | 8 (B1.2)     | <a href="#">MGI:1891346</a> |
| 8          | <a href="#">FGFR1</a>   | factor receptor 1 (fms-related)     | <a href="#">2260</a>       | 8 (p11.2-p11.1)   | Fgfr1        | 8 (10.0 cM)  | <a href="#">MGI:95522</a>   |
| 8          | <a href="#">GCSH</a>    | system protein H (aminomethyl)      | <a href="#">2653</a>       | 16q23.2           |              | <b>chr 8</b> |                             |
| 8          | <a href="#">GSR</a>     | Glutathione reductase               | <a href="#">2936</a>       | 8 (p21.1)         | Gsr          | 8 (18.0 cM)  | <a href="#">MGI:95804</a>   |
| 8          | <a href="#">HCNP</a>    | HCNP protein; XPA-binding protein 2 | <a href="#">56949</a>      | 19 (p13.2)        | Xab2         | 8 (syntenic) | <a href="#">MGI:1914689</a> |
| 8          | <a href="#">HSD17B2</a> | beta) dehydrogenase 2               | <a href="#">3294</a>       | 16 (q24.1-q24.2)  | Hsd17b2      | 8 (syntenic) | <a href="#">MGI:1096386</a> |
| 8          | <a href="#">JUNB</a>    | jun B proto-oncogene                | <a href="#">3726</a>       | 19 (p13.2)        | Junb         | 8 (38.6 cM)  | <a href="#">MGI:96647</a>   |
| 8          | <a href="#">LIG4</a>    | Ligase IV, DNA, ATP-dependent       | <a href="#">3981</a>       | 13 (q33-q34)      | Lig4         | 8 (syntenic) | <a href="#">MGI:1335098</a> |
| 8          | <a href="#">MCM5</a>    | minichromosome maintenance          | <a href="#">4174</a>       | 22 (q13.1)        | Mcm5         | 8 (syntenic) | <a href="#">MGI:103197</a>  |

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| Mouse Chr# | Hugo Gene Name         | Gene Description                    | <a href="#">Locus Link</a> | Hu Chr#         | Mouse Symbol | M Chr        | AccID                       |
|------------|------------------------|-------------------------------------|----------------------------|-----------------|--------------|--------------|-----------------------------|
| 8          | <a href="#">MMP2</a>   | metalloproteinase 2 (gelatinase A,  | <a href="#">4313</a>       | 16 (q13-q21)    | Mmp2         | 8 (44.0 cM)  | <a href="#">MGI:97009</a>   |
| 8          | <a href="#">NAT1</a>   | 1 (arylamine N-acetyltransferase)   | <a href="#">9</a>          | 8 (p23.1-p21.3) | Nat1         | 8 (31.0 cM)  | <a href="#">MGI:97279</a>   |
| 8          | <a href="#">NAT2</a>   | 2 (arylamine N-acetyltransferase)   | <a href="#">10</a>         | 8 (p22)         | Nat2         | 8 (31.0 cM)  | <a href="#">MGI:109201</a>  |
| 8          | <a href="#">NQO1</a>   | dehydrogenase, quinone 1            | <a href="#">1728</a>       | 16 (q22.1)      | Nqo1         | 8 (53.3 cM)  | <a href="#">MGI:103187</a>  |
| 8          | <a href="#">POLB</a>   | Polymerase (DNA directed), beta     | <a href="#">5423</a>       | 8 (p11.2)       | Polb         | 8 (8.0 cM)   | <a href="#">MGI:97740</a>   |
| 8          | <a href="#">RAD23A</a> | RAD23 homolog A (S. cerevisiae)     | <a href="#">5886</a>       | 19 (p13.2)      | Rad23a       | 8 (C3)       | <a href="#">MGI:105126</a>  |
| 8          | <a href="#">TAF1C</a>  | protein (TBP)-associated factor,    | <a href="#">9013</a>       | 16 (q24)        | Taf1c        | 8 (E1)       | <a href="#">MGI:109576</a>  |
| 8          | <a href="#">TFDP1</a>  | Transcription factor Dp-1           | <a href="#">7027</a>       | 13 (q34)        | Tfdp1        | 8 (A1-A3)    | <a href="#">MGI:101934</a>  |
| 8          | <a href="#">WRN</a>    | Werner syndrome                     | <a href="#">7486</a>       | 8 (p12-p11.2)   | Wrn          | 8 (20.0 cM)  | <a href="#">MGI:109635</a>  |
| 9          | <a href="#">ATM</a>    | telangiectasia mutated (includes    | <a href="#">472</a>        | 11 (q22-q23)    | Atm          | 9 (30.0 cM)  | <a href="#">MGI:107202</a>  |
| 9          | <a href="#">BIRC3</a>  | Baculoviral IAP repeat-containing 3 | <a href="#">330</a>        | 11 (q22)        | Birc3        | 9 (A2)       | <a href="#">MGI:1197007</a> |
| 9          | <a href="#">BNIP2</a>  | E1B 19kDa interacting protein 2     | <a href="#">663</a>        | 15 (q22.2)      | Bnip2        | 9 (syntenic) | <a href="#">MGI:109327</a>  |
| 9          | <a href="#">CCK</a>    | Cholecystokinin                     | <a href="#">885</a>        | 3 (p22-p21.3)   | Cck          | 9 (71.0 cM)  | <a href="#">MGI:88297</a>   |
| 9          | <a href="#">CDC25A</a> | Cell division cycle 25A             | <a href="#">993</a>        | 3 (p21)         | Cdc25a       | 9 (62.0 cM)  | <a href="#">MGI:103198</a>  |
| 9          | <a href="#">CHEK1</a>  | homolog (S. pombe)                  | <a href="#">1111</a>       | 11 (q24-q24)    | Chek1        | 9 (A5.3)     | <a href="#">MGI:1202065</a> |
| 9          | <a href="#">CTNNB1</a> | associated protein), beta 1, 88kDa  | <a href="#">1499</a>       | 3 (p21)         | Catnb        | 9 (72.0 cM)  | <a href="#">MGI:88276</a>   |

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| Mouse Chr# | Hugo Gene Name         | Gene Description                       | <a href="#">Locus Link</a> | Hu Chr#         | Mouse Symbol | M Chr        | AccID                       |
|------------|------------------------|--|----------------------------|-----------------|--------------|--------------|-----------------------------|
| 9          | <a href="#">GCLC</a>   | ligase, catalytic subunit              | <a href="#">2729</a>       | 6 (p12)         | Gclc         | 9 (42.0 cM)  | <a href="#">MGI:104990</a>  |
| 9          | <a href="#">GPX1</a>   | Glutathione peroxidase 1               | <a href="#">2876</a>       | 3 (p21.3)       | Gpx1         | 9 (57.0 cM)  | <a href="#">MGI:104887</a>  |
| 9          | <a href="#">HSPB2</a>  | Heat shock 27kDa protein 2             | <a href="#">3316</a>       | 11 (q22-q23)    | Hspb2        | 9 (29.0 cM)  | <a href="#">MGI:1916503</a> |
| 9          | <a href="#">MLH1</a>   | colon cancer, nonpolyposis type 2      | <a href="#">4292</a>       | 3 (p21.3)       | Mlh1         | 9 (62.0 cM)  | <a href="#">MGI:101938</a>  |
| 9          | <a href="#">MLL</a>    | mixed-lineage leukemia (trithorax      | <a href="#">4297</a>       | 11 (q23)        | Mll          | 9 (26.0 cM)  | <a href="#">MGI:96995</a>   |
| 9          | <a href="#">MMP1</a>   | metalloproteinase 1 (interstitial      | <a href="#">4312</a>       | 11 (q22.3)      | Mmp1a        | 9 (A1-A2)    | <a href="#">MGI:1933846</a> |
| 9          | <a href="#">MMP10</a>  | metalloproteinase 10 (stromelysin 2)   | <a href="#">4319</a>       | 11 (q22.3)      | Mmp10        | 9 (syntenic) | <a href="#">MGI:97007</a>   |
| 9          | <a href="#">MMP13</a>  | metalloproteinase 13 (collagenase 3)   | <a href="#">4322</a>       | 11 (q22.3)      | Mmp13        | 9 (A1-A2)    | <a href="#">MGI:1340026</a> |
| 9          | <a href="#">MMP20</a>  | metalloproteinase 20 (enamelysin)      | <a href="#">9313</a>       | 11 (q22.3)      | Mmp20        | 9 (syntenic) | <a href="#">MGI:1353466</a> |
| 9          | <a href="#">MRE11A</a> | recombination 11 homolog A (S.         | <a href="#">4361</a>       | 11 (q21)        | Mre11a       | 9 (syntenic) | <a href="#">MGI:1100512</a> |
| 9          | <a href="#">NEIL1</a>  | nei endonuclease VIII-like 1 (E. coli) | <a href="#">79661</a>      | 15 (q23)        | Neil1        | 9 (C)        | <a href="#">MGI:1920024</a> |
| 9          | <a href="#">PGR</a>    | Progesterone receptor                  | <a href="#">5241</a>       | 11 (q22-q23)    | Pgr          | 9 (syntenic) | <a href="#">MGI:97567</a>   |
| 9          | <a href="#">PKM2</a>   | Pyruvate kinase, muscle                | <a href="#">5315</a>       | 15 (q22)        | Pkm2         | 9 (52.0 cM)  | <a href="#">MGI:97591</a>   |
| 9          | <a href="#">TFDP2</a>  | Dp-2 (E2F dimerization partner         | <a href="#">7029</a>       | 3 (q23)         | Tfdp2        | 9 (E4)       | <a href="#">MGI:107167</a>  |
| 9          | <a href="#">TGFB2</a>  | growth factor, beta receptor II        | <a href="#">7048</a>       | 3 (p22)         | Tgfbr2       | 9 (69.0 cM)  | <a href="#">MGI:98729</a>   |
| 9          | <a href="#">TREX1</a>  | Three prime repair exonuclease 1       | <a href="#">11277</a>      | 3 (p21.3-p21.2) | Trex1        | 9 (syntenic) | <a href="#">MGI:1328317</a> |

EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name          | Gene Description                      | <a href="#">Locus Link</a> | Hu Chr#          | Mouse Symbol | M Chr         | AccID                       |
|------------|-------------------------|---------------------------------------|----------------------------|------------------|--------------|---------------|-----------------------------|
| 10         | <a href="#">CDC2</a>    | G1 to S and G2 to M                   | <a href="#">983</a>        | 10 (q21.1)       | Cdc2a        | 10 (38.0 cM)  | <a href="#">MGI:88351</a>   |
| 10         | <a href="#">CDC34</a>   | Cell division cycle 34                | <a href="#">997</a>        | 19 (p13.3)       | Cdc34        | 10 (43.0 cM)  | <a href="#">MGI:102657</a>  |
| 10         | <a href="#">CDK2</a>    | Cyclin-dependent kinase 2             | <a href="#">1017</a>       | 12 (q13)         | Cdk2         | 10 (D3)       | <a href="#">MGI:104772</a>  |
| 10         | <a href="#">CDK4</a>    | Cyclin-dependent kinase 4             | <a href="#">1019</a>       | 12 (q14)         | Cdk4         | 10 (D3)       | <a href="#">MGI:88357</a>   |
| 10         | <a href="#">CYP27B1</a> | family 27, subfamily B, polypeptide 1 | <a href="#">1594</a>       | 12 (q13.1-q13.3) | Cyp27b1      | 10 (syntenic) | <a href="#">MGI:1098274</a> |
| 10         | <a href="#">ELA2</a>    | Elastase 2, neutrophil                | <a href="#">1991</a>       | 19 (p13.3)       | Ela2         | 10 (syntenic) | <a href="#">MGI:95316</a>   |
| 10         | <a href="#">ESR1</a>    | Estrogen receptor 1                   | <a href="#">2099</a>       | 6 (q25.1)        | Esr1         | 10 (12.0 cM)  | <a href="#">MGI:1352467</a> |
| 10         | <a href="#">FGF22</a>   | Fibroblast growth factor 22           | <a href="#">27006</a>      | 19 (p13.3)       | Fgf22        | 10 (syntenic) | <a href="#">MGI:1914362</a> |
| 10         | <a href="#">GADD45B</a> | DNA-damage-inducible, beta            | <a href="#">4616</a>       | 19 (p13.3)       | Gadd45b      | 10 (60.5 cM)  | <a href="#">MGI:107776</a>  |
| 10         | <a href="#">GPX4</a>    | peroxidase 4 (phospholipid)           | <a href="#">2879</a>       | 19 (p13.3)       | Gpx4         | 10 (43.0 cM)  | <a href="#">MGI:104767</a>  |
| 10         | <a href="#">IGF1</a>    | factor 1 (somatomedin C)              | <a href="#">3479</a>       | 12 (q22-q23)     | Igf1         | 10 (48.0 cM)  | <a href="#">MGI:96432</a>   |
| 10         | <a href="#">MCM3AP</a>  | minichromosome maintenance            | <a href="#">8888</a>       | 21 (q22.3)       | Mcm3ap       | 10 (syntenic) | <a href="#">MGI:1930089</a> |
| 10         | <a href="#">MDM2</a>    | 3T3 cell double minute 2, p53         | <a href="#">4193</a>       | 12 (q14.3-q15)   | Mdm2         | 10 (66.0 cM)  | <a href="#">MGI:96952</a>   |
| 10         | <a href="#">MMP19</a>   | metalloproteinase 19                  | <a href="#">4327</a>       | 12 (q14)         | Mmp19        | 10 (70.0 cM)  | <a href="#">MGI:1927899</a> |
| 10         | <a href="#">OPRM1</a>   | complex, subunit 3-like (yeast)       | <a href="#">23595</a>      | 6 (q24-q25)      | Oprm1        | 10 (8.0 cM)   | <a href="#">MGI:97441</a>   |
| 10         | <a href="#">PAWR</a>    | PRKC, apoptosis, WT1, regulator       | <a href="#">5074</a>       | 12 (q21)         | Pawr         | 10 (D1)       | <a href="#">MGI:2149961</a> |

## EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name         | Gene Description                     | <a href="#">Locus Link</a> | Hu Chr#          | Mouse Symbol | M Chr         | AccID                       |
|------------|------------------------|--------------------------------------|----------------------------|------------------|--------------|---------------|-----------------------------|
| 10         | <a href="#">REV3L</a>  | subunit of DNA polymerase zeta       | <a href="#">5980</a>       | 6 (q21)          | Rev3l        | 10 (syntenic) | <a href="#">MGI:1337131</a> |
| 10         | <a href="#">STAT2</a>  | and activator of transcription 2,    | <a href="#">6773</a>       | 12 (q13.3)       | Stat2        | 10 (70.0 cM)  | <a href="#">MGI:103039</a>  |
| 10         | <a href="#">TDG</a>    | Thymine-DNA glycosylase              | <a href="#">6996</a>       | 12 (q24.1)       | Tdg          | 10 (43.0 cM)  | <a href="#">MGI:108247</a>  |
| 11         | <a href="#">BRCA1</a>  | susceptibility gene 1, early onset   | <a href="#">672</a>        | 17 (q21)         | Brca1        | 11 (60.5 cM)  | <a href="#">MGI:104537</a>  |
| 11         | <a href="#">CDC27</a>  | Cell division cycle 27               | <a href="#">996</a>        | 17 (q12-17q23.2) | Cdc27        | 11 (63.0 cM)  | <a href="#">MGI:102685</a>  |
| 11         | <a href="#">CDC6</a>   | homolog (S. cerevisiae)              | <a href="#">990</a>        | 17 (q21.3)       | Cdc6         | 11 (D)        | <a href="#">MGI:1345150</a> |
| 11         | <a href="#">CDK5R1</a> | kinase 5, regulatory subunit 1 (p35) | <a href="#">8851</a>       | 17 (q11.2)       | Cdk5r1       | 11 (46.5 cM)  | <a href="#">MGI:101764</a>  |
| 11         | <a href="#">DDC</a>    | decarboxylase (aromatic L-amino      | <a href="#">1644</a>       | 7 (p11)          | Ddc          | 11 (7.0 cM)   | <a href="#">MGI:94876</a>   |
| 11         | <a href="#">EGFR</a>   | factor receptor (erythroblastic      | <a href="#">1956</a>       | 7 (p12)          | Egfr         | 11 (9.0 cM)   | <a href="#">MGI:95294</a>   |
| 11         | <a href="#">ERBB2</a>  | erythroblastic leukemia viral        | <a href="#">2064</a>       | 17 (q21.1)       | Erb2         | 11 (57.0 cM)  | <a href="#">MGI:95410</a>   |
| 11         | <a href="#">FGF11</a>  | Fibroblast growth factor 11          | <a href="#">2256</a>       | 17 (p13.1)       | Fgf11        | 11 (B4)       | <a href="#">MGI:109167</a>  |
| 11         | <a href="#">GPX3</a>   | peroxidase 3 (plasma)                | <a href="#">2878</a>       | 5 (q23)          | Gpx3         | 11 (B3-B5)    | <a href="#">MGI:105102</a>  |
| 11         | <a href="#">HUS1</a>   | homolog (S. pombe)                   | <a href="#">3364</a>       | 7 (p13-p12)      | Hus1         | 11 (3.0 cM)   | <a href="#">MGI:1277962</a> |
| 11         | <a href="#">IGFBP1</a> | factor binding protein 1             | <a href="#">3484</a>       | 7 (p13-p12)      | Igfbp1       | 11 (1.3 cM)   | <a href="#">MGI:96436</a>   |
| 11         | <a href="#">IGFBP4</a> | factor binding protein 4             | <a href="#">3487</a>       | 17 (q12-q21.1)   | Igfbp4       | 11            | <a href="#">MGI:96439</a>   |
| 11         | <a href="#">LIG3</a>   | Ligase III, DNA, ATP-dependent       | <a href="#">3980</a>       | 17 (q11.2-q12)   | Lig3         | 11 (48.0 cM)  | <a href="#">MGI:109152</a>  |

EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name          | Gene Description                       | <a href="#">Locus Link</a> | Hu Chr#          | Mouse Symbol | M Chr         | AccID                       |
|------------|-------------------------|--|----------------------------|------------------|--------------|---------------|-----------------------------|
| 11         | <a href="#">LPO</a>     | Lactoperoxidase                        | <a href="#">4025</a>       | 17 (q23.1)       | Lpo          | 11 (C)        | <a href="#">MGI:1923363</a> |
| 11         | <a href="#">MPG</a>     | N-methylpurine-DNA glycosylase         | <a href="#">4350</a>       | 16 (p13.3)       | Mpg          | 11 (16.0 cM)  | <a href="#">MGI:97073</a>   |
| 11         | <a href="#">POLD2</a>   | directed), delta 2, regulatory subunit | <a href="#">5425</a>       | 7 (p13)          | Pold2        | 11 (A2)       | <a href="#">MGI:1097163</a> |
| 11         | <a href="#">PPIA</a>    | isomerase A (cyclophilin A)            | <a href="#">5478</a>       | 7 (p13-p11.2)    | Ppia         | 11 (1.0 cM)   | <a href="#">MGI:97749</a>   |
| 11         | <a href="#">RAD51C</a>  | RAD51 homolog C (S. cerevisiae)        | <a href="#">5889</a>       | 17 (q22-q23)     | Rad51c       | 11 (49.0 cM)  | <a href="#">MGI:2150020</a> |
| 11         | <a href="#">RAD51L3</a> | RAD51-like 3 (S. cerevisiae)           | <a href="#">5892</a>       | 17 (q11)         | Rad51l3      | 11 (48.5 cM)  | <a href="#">MGI:1261809</a> |
| 11         | <a href="#">RPA1</a>    | Replication protein A1, 70kDa          | <a href="#">6117</a>       | 17 (p13.3)       | Rpa1         | 11 (44.0 cM)  | <a href="#">MGI:1915525</a> |
| 11         | <a href="#">TAF15</a>   | polymerase II, TATA box binding        | <a href="#">8148</a>       | 17 (q11.1-q11.2) | Taf15        | 11 (B5)       | <a href="#">MGI:1917689</a> |
| 12         | <a href="#">CCNK</a>    | Cyclin K                               | <a href="#">8812</a>       | 14 (q32)         | Ccnk         | 12 (52.0 cM)  | <a href="#">MGI:1276106</a> |
| 12         | <a href="#">CDKL1</a>   | kinase-like 1 (CDC2-related kinase)    | <a href="#">8814</a>       | 14 (q21.3)       | Cdkl1        | 12 (syntenic) | <a href="#">MGI:1918341</a> |
| 12         | <a href="#">DNCH1</a>   | cytoplasmic, heavy polypeptide 1       | <a href="#">1778</a>       | 14 (q32)         | Dnchc1       | 12 (55.0 cM)  | <a href="#">MGI:103147</a>  |
| 12         | <a href="#">FOS</a>     | osteosarcoma viral oncogene homolog    | <a href="#">2353</a>       | 14 (q24.3)       | Fos          | 12 (40.0 cM)  | <a href="#">MGI:95574</a>   |
| 12         | <a href="#">GPX2</a>    | peroxidase 2 (gastrointestinal)        | <a href="#">2877</a>       | 14 (q24.1)       | Gpx2         | 12 (36.0 cM)  | <a href="#">MGI:106609</a>  |
| 12         | <a href="#">GSTZ1</a>   | transferase zeta 1 (maleylacetoacetate | <a href="#">2954</a>       | 14 (q24.3)       | Gstz1        | 12 (E)        | <a href="#">MGI:1341859</a> |
| 12         | <a href="#">MNAT1</a>   | (CAK assembly factor)                  | <a href="#">4331</a>       | 14 (q23)         | Mnat1        | 12 (C3)       | <a href="#">MGI:106207</a>  |
| 12         | <a href="#">TGFB3</a>   | growth factor, beta 3                  | <a href="#">7043</a>       | 14 (q24)         | Tgfb3        | 12 (41.0 cM)  | <a href="#">MGI:98727</a>   |

## EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name          | Gene Description                   | <a href="#">Locus Link</a> | Hu Chr#         | Mouse Symbol | M Chr         | AccID                       |
|------------|-------------------------|------------------------------------|----------------------------|-----------------|--------------|---------------|-----------------------------|
| 12         | <a href="#">XRCC3</a>   | complementing defective repair in  | <a href="#">7517</a>       | 14 (q32.3)      | Xrcc3        | 12 (syntenic) | <a href="#">MGI:1921585</a> |
| 13         | <a href="#">CCNB1</a>   | Cyclin B1                          | <a href="#">891</a>        | 5 (q12)         | Ccnb1        | 13 (56.0 cM)  | <a href="#">MGI:88302</a>   |
| 13         | <a href="#">CCNH</a>    | Cyclin H                           | <a href="#">902</a>        | 5 (q13.3-q14)   | Ccnh         | 13 (syntenic) | <a href="#">MGI:1913921</a> |
| 13         | <a href="#">CCRK</a>    | Cell cycle related kinase          | <a href="#">23552</a>      | 9 (q22.1)       | Ccrk         | 13 (syntenic) | <a href="#">MGI:2145349</a> |
| 13         | <a href="#">CDC14B</a>  | cycle 14 homolog B (S. cerevisiae) | <a href="#">8555</a>       | 9 (q22.33)      | Cdc14b       | 13 (syntenic) | <a href="#">MGI:2441808</a> |
| 13         | <a href="#">CDC2L5</a>  | like 5 (cholinesterase-            | <a href="#">8621</a>       | 7 (p13)         | Cdc2l5       | 13 (A3.1)     | <a href="#">MGI:1916812</a> |
| 13         | <a href="#">CDK7</a>    | kinase 7 (MO15 homolog, Xenopus    | <a href="#">1022</a>       | 5 (q12.1)       | Cdk7         | 13 (55.0 cM)  | <a href="#">MGI:102956</a>  |
| 13         | <a href="#">CKN1</a>    | syndrome 1 (classical)             | <a href="#">1161</a>       | 5 (q12.1)       | Ckn1         | 13 (D)        | <a href="#">MGI:1919241</a> |
| 13         | <a href="#">CKS2</a>    | CDC28 protein kinase 2             | <a href="#">1164</a>       | 9 (q22)         | Cks2         | 13 (syntenic) | <a href="#">MGI:1913447</a> |
| 13         | <a href="#">E2F3</a>    | E2F transcription factor 3         | <a href="#">1871</a>       | 6 (p22)         | E2f3         | 13 (A3.3)     | <a href="#">MGI:1096340</a> |
| 13         | <a href="#">EDN1</a>    | Endothelin 1                       | <a href="#">1906</a>       | 6 (p24.1)       | Edn1         | 13 (26.0 cM)  | <a href="#">MGI:95283</a>   |
| 13         | <a href="#">FANCC</a>   | complementation group C            | <a href="#">2176</a>       | 9 (q22.3)       | Fancc        | 13 (36.0 cM)  | <a href="#">MGI:95480</a>   |
| 13         | <a href="#">FGF10</a>   | Fibroblast growth factor 10        | <a href="#">2255</a>       | 5 (p13-p12)     | Fgf10        | 13 (75.0 cM)  | <a href="#">MGI:1099809</a> |
| 13         | <a href="#">GADD45G</a> | DNA-damage-inducible, gamma        | <a href="#">10912</a>      | 9 (q22.1-q22.2) | Gadd45g      | 13 (A5-B)     | <a href="#">MGI:1346325</a> |
| 13         | <a href="#">HSD17B3</a> | beta) dehydrogenase 3              | <a href="#">3293</a>       | 9 (q22)         | Hsd17b3      | 13 (B3)       | <a href="#">MGI:107177</a>  |
| 13         | <a href="#">MSH3</a>    | mutS homolog 3 (E. coli)           | <a href="#">4437</a>       | 5 (q11-q12)     | Msh3         | 13 (51.0 cM)  | <a href="#">MGI:109519</a>  |



EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name          | Gene Description                       | <a href="#">Locus Link</a> | Hu Chr#         | Mouse Symbol | M Chr         | AccID                       |
|------------|-------------------------|--|----------------------------|-----------------|--------------|---------------|-----------------------------|
| 13         | <a href="#">POLK</a>    | Polymerase (DNA directed), kappa       | <a href="#">51426</a>      | 5 (q13)         | Polk         | 13 (D1)       | <a href="#">MGI:1349767</a> |
| 13         | <a href="#">RAD17</a>   | RAD17 homolog (S. pombe)               | <a href="#">5884</a>       | 5 (q13)         | Rad17        | 13 (syntenic) | <a href="#">MGI:1333807</a> |
| 13         | <a href="#">SLC6A3</a>  | 6 (neurotransmitter transporter,       | <a href="#">6531</a>       | 5 (p15.3)       | Slc6a3       | 13 (41.0 cM)  | <a href="#">MGI:94862</a>   |
| 13         | <a href="#">SRD5A1</a>  | reductase, alpha polypeptide 1 (3-oxo  | <a href="#">6715</a>       | 5 (p15)         | Srd5a1       | 13 (39.0 cM)  | <a href="#">MGI:98400</a>   |
| 13         | <a href="#">TAF9</a>    | polymerase II, TATA box binding        | <a href="#">6880</a>       | 5 (q11.2-q13.1) | Taf9         | 13 (syntenic) | <a href="#">MGI:1888697</a> |
| 13         | <a href="#">TGFB1</a>   | growth factor, beta induced, 68kD      | <a href="#">7045</a>       | 5 (q31)         | Tgfb1        | 13 (38.0 cM)  | <a href="#">MGI:99959</a>   |
| 14         | <a href="#">ADPRTL2</a> | ribosyltransferase (NAD+; poly(ADP-    | <a href="#">10038</a>      | 14 (q11.2-q12)  | Adprtl2      | 14 (19.5 cM)  | <a href="#">MGI:1341112</a> |
| 14         | <a href="#">APEX</a>    | (multifunctional DNA repair enzyme)    | <a href="#">328</a>        | 14 (q11.2-q12)  | Apex1        | 14 (18.5 cM)  | <a href="#">MGI:88042</a>   |
| 14         | <a href="#">CDKN3</a>   | kinase inhibitor 3 (CDK2-associated    | <a href="#">1033</a>       | 14 (q22)        | Cdkn3        | 14 (C1)       | <a href="#">MGI:1919641</a> |
| 14         | <a href="#">CHC1L</a>   | Chromosome condensation 1-like         | <a href="#">1102</a>       | 13 (q14.3)      | Chc1l        | 14            | <a href="#">MGI:1917200</a> |
| 14         | <a href="#">CLU</a>     | (complement lysis inhibitor, SP-40,40, | <a href="#">1191</a>       | 8 (p21-p12)     | Clu          | 14 (28.0 cM)  | <a href="#">MGI:88423</a>   |
| 14         | <a href="#">DAD1</a>    | Defender against cell death 1          | <a href="#">1603</a>       | 14 (q11-q12)    | Dad1         | 14 (24.0 cM)  | <a href="#">MGI:101912</a>  |
| 14         | <a href="#">EDNRB</a>   | Endothelin receptor type B             | <a href="#">1910</a>       | 13 (q22)        | Ednrb        | 14 (51.0 cM)  | <a href="#">MGI:102720</a>  |
| 14         | <a href="#">ERCC6</a>   | cross-complementing                    | <a href="#">2074</a>       | 10 (q11)        | Ercc6        | 14 (syntenic) | <a href="#">MGI:1100494</a> |
| 14         | <a href="#">FGF17</a>   | Fibroblast growth factor 17            | <a href="#">8822</a>       | 8 (p21)         | Fgf17        | 14 (38.0 cM)  | <a href="#">MGI:1202401</a> |
| 14         | <a href="#">FGF9</a>    | factor 9 (glia-activating factor)      | <a href="#">2254</a>       | 13 (q11-q12)    | Fgf9         | 14 (21.0 cM)  | <a href="#">MGI:104723</a>  |

EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name            | Gene Description                     | <a href="#">Locus Link</a> | Hu Chr#           | Mouse Symbol | M Chr         | AccID                       |
|------------|---------------------------|--------------------------------------|----------------------------|-------------------|--------------|---------------|-----------------------------|
| 14         | <a href="#">ITM2B</a>     | Integral membrane protein 2B         | <a href="#">9445</a>       | 13 (q14.3)        | Iitm2b       | 14 (32.5 cM)  | <a href="#">MGI:1309517</a> |
| 14         | <a href="#">NEIL2</a>     | nei like 2 (E. coli)                 | <a href="#">252969</a>     | 8 (p23.1)         | Neil2        | 14 (syntenic) | <a href="#">MGI:2686058</a> |
| 14         | <a href="#">RB1</a>       | (including osteosarcoma)             | <a href="#">5925</a>       | 13 (q14.2)        | Rb1          | 14 (41.0 cM)  | <a href="#">MGI:97874</a>   |
| 15         | <a href="#">ARSA</a>      | Arylsulfatase A                      | <a href="#">410</a>        | 22 (q13.33)       | Arsa         | 15 (E)        | <a href="#">MGI:88077</a>   |
| 15         | <a href="#">BIK</a>       | killer (apoptosis-inducing)          | <a href="#">638</a>        | 22 (q13.31)       | Biklk        | 15 (syntenic) | <a href="#">MGI:1206591</a> |
| 15         | <a href="#">BZRP</a>      | receptor (peripheral)                | <a href="#">706</a>        | 22 (q13.31)       | Bzrp         | 15 (43.3 cM)  | <a href="#">MGI:88222</a>   |
| 15         | <a href="#">DAP</a>       | Death-associated protein             | <a href="#">1611</a>       | 5 (p15.2)         | Dap          | 15 (syntenic) | <a href="#">MGI:1918190</a> |
| 15         | <a href="#">DIA1</a>      | (cytochrome b-5 reductase)           | <a href="#">1727</a>       | 22 (q13.2-q13.31) | Dia1         | 15 (45.2 cM)  | <a href="#">MGI:94893</a>   |
| 15         | DMC1                      | suppressor of mck1 homolog, meiosis- | <a href="#">11144</a>      | 22 (q13.1)        | Dmc1h        | 15 (47.5 cM)  | <a href="#">MGI:105393</a>  |
| 15         | <a href="#">ELA1</a>      | Elastase 1, pancreatic               | <a href="#">1990</a>       | 12 (q13)          | Ela1         | 15 (56.8 cM)  | <a href="#">MGI:95314</a>   |
| 15         | <a href="#">IGFBP6</a>    | factor binding protein 6             | <a href="#">3489</a>       | 12 (q13)          | Igfbp6       | 15 (syntenic) | <a href="#">MGI:96441</a>   |
| 15         | <a href="#">MYC</a>       | myelocytomatosis viral oncogene      | <a href="#">4609</a>       | 8 (q24.12-q24.13) | Myc          | 15 (32.0 cM)  | <a href="#">MGI:97250</a>   |
| 15         | <a href="#">PLA2G6</a>    | group VI (cytosolic, calcium-        | <a href="#">8398</a>       | 22 (q13.1)        | Pla2g6       | 15 (syntenic) | <a href="#">MGI:1859152</a> |
| 15         | <a href="#">RAD21</a>     | RAD21 homolog (S. pombe)             | <a href="#">5885</a>       | 8 (q24)           | Rad21        | 15 (D3)       | <a href="#">MGI:108016</a>  |
| 15         | <a href="#">SMUG1</a>     | selective monofunctional             | <a href="#">23583</a>      | 12 (q13.11-q13.3) | Smug1        | 15 (syntenic) | <a href="#">MGI:1918976</a> |
| 15         | <a href="#">TNFRSF11B</a> | factor receptor superfamily,         | <a href="#">4982</a>       | 8 (q24)           | Tnfrsf11b    | 15 (syntenic) | <a href="#">MGI:109587</a>  |

## EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name           | Gene Description                  | <a href="#">Locus Link</a> | Hu Chr#           | Mouse Symbol | M Chr         | AccID                       |
|------------|--------------------------|-----------------------------------|----------------------------|-------------------|--------------|---------------|-----------------------------|
| 15         | <a href="#">VDR</a>      | dihydroxyvitamin D3) receptor     | <a href="#">7421</a>       | 12 (q12-q14)      | Vdr          | 15 (syntenic) | <a href="#">MGI:103076</a>  |
| 16         | <a href="#">CDC45L</a>   | cycle 45-like (S. cerevisiae)     | <a href="#">8318</a>       | 22 (q11.21)       | Cdc45l       | 16 (11.7 cM)  | <a href="#">MGI:1338073</a> |
| 16         | <a href="#">COMT</a>     | Catechol-O-methyltransferase      | <a href="#">1312</a>       | 22 (q11.21)       | Comt         | 16 (11.2 cM)  | <a href="#">MGI:88470</a>   |
| 16         | <a href="#">ERCC4</a>    | cross-complementing               | <a href="#">2072</a>       | 16 (p13.3-p13.11) | Ercc4        | 16 (syntenic) | <a href="#">MGI:1354163</a> |
| 16         | <a href="#">HMOX2</a>    | Heme oxygenase (decycling) 2      | <a href="#">3163</a>       | 16 (p13.3)        | Hmox2        | 16 (2.6 cM)   | <a href="#">MGI:109373</a>  |
| 16         | <a href="#">MCM4</a>     | minichromosome maintenance        | <a href="#">4173</a>       | 8 (q11.2)         | Mcm4         | 16 (9.2 cM)   | <a href="#">MGI:103199</a>  |
| 16         | <a href="#">PRKDC</a>    | activated, catalytic polypeptide  | <a href="#">5591</a>       | 8 (q11)           | Prkdc        | 16 (9.2 cM)   | <a href="#">MGI:104779</a>  |
| 16         | <a href="#">RFC4</a>     | (activator 1) 4 (37kD)            | <a href="#">5984</a>       | 3 (q27)           | Rfc4         | 16 (syntenic) | <a href="#">MGI:2146571</a> |
| 16         | <a href="#">SNN</a>      | Stannin                           | <a href="#">8303</a>       | 16 (p13)          | Snn          | 16 (A2)       | <a href="#">MGI:1276549</a> |
| 16         | <a href="#">TNFRSF17</a> | factor receptor superfamily,      | <a href="#">608</a>        | 16 (p13.1)        | Tnfrsf17     | 16 (B3)       | <a href="#">MGI:1343050</a> |
| 16         | <a href="#">UMPS</a>     | monophosphate synthetase (orotate | <a href="#">7372</a>       | 3 (q13)           | Umps         | 16 (syntenic) | <a href="#">MGI:1298388</a> |
| 17         | <a href="#">BAK1</a>     | BCL2-antagonist/killer 1          | <a href="#">578</a>        | 6 (p21.3)         | Bak1         | 17 (B)        | <a href="#">MGI:1097161</a> |
| 17         | <a href="#">BNIP1</a>    | E1B 19kDa interacting protein 1   | <a href="#">662</a>        | 5 (q33-q34)       | Bnip1        | 17 (syntenic) | <a href="#">MGI:109328</a>  |
| 17         | <a href="#">CCND3</a>    | Cyclin D3                         | <a href="#">896</a>        | 6 (p21)           | Ccnd3        | 17 (28.8 cM)  | <a href="#">MGI:88315</a>   |
| 17         | <a href="#">CDC5L</a>    | cycle 5-like (S. pombe)           | <a href="#">988</a>        | 6 (p21)           | Cdc5l        | 17 (syntenic) | <a href="#">MGI:1918952</a> |
| 17         | <a href="#">CDKN1A</a>   | kinase inhibitor 1A (p21, Cip1)   | <a href="#">1026</a>       | 6 (p21.2)         | Cdkn1a       | 17 (15.23 cM) | <a href="#">MGI:104556</a>  |

EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name         | Gene Description                        | <a href="#">Locus Link</a> | Hu Chr#         | Mouse Symbol | M Chr          | AccID                       |
|------------|------------------------|---|----------------------------|-----------------|--------------|----------------|-----------------------------|
| 17         | <a href="#">CYP1B1</a> | family 1, subfamily B, polypeptide 1    | <a href="#">1545</a>       | 2 (p21)         | Cyp1b1       | 17 (syntenic)  | <a href="#">MGI:88590</a>   |
| 17         | <a href="#">GLP1R</a>  | Glucagon-like peptide 1 receptor        | <a href="#">2740</a>       | 6 (p21)         | Glp1r        | 17 (18.0 cM)   | <a href="#">MGI:99571</a>   |
| 17         | <a href="#">GTF2H4</a> | transcription factor IIH, polypeptide 4 | <a href="#">2968</a>       | 6 (p21.3)       | Gtf2h4       | 17 (syntenic)  | <a href="#">MGI:1338799</a> |
| 17         | <a href="#">IGF2R</a>  | Insulin-like growth factor 2 receptor   | <a href="#">3482</a>       | 6 (q26)         | Igf2r        | 17 (7.35 cM)   | <a href="#">MGI:96435</a>   |
| 17         | <a href="#">LTA</a>    | (TNF superfamily, member 1)             | <a href="#">4049</a>       | 6 (p21.3)       | Lta          | 17 (19.059 cM) | <a href="#">MGI:104797</a>  |
| 17         | <a href="#">LTB</a>    | (TNF superfamily, member 3)             | <a href="#">4050</a>       | 6 (p21.3)       | Ltb          | 17 (19.061 cM) | <a href="#">MGI:104796</a>  |
| 17         | <a href="#">MSH2</a>   | colon cancer, nonpolyposis type 1       | <a href="#">4436</a>       | 2 (p22-p21)     | Msh2         | 17 (45.9 cM)   | <a href="#">MGI:101816</a>  |
| 17         | <a href="#">MSH6</a>   | mutS (E. coli) homolog 6                | <a href="#">2956</a>       | 2 (p16)         | Msh6         | 17 (47.0 cM)   | <a href="#">MGI:1343961</a> |
| 17         | <a href="#">NTHL1</a>  | nth endonuclease III-like 1 (E.coli)    | <a href="#">4913</a>       | 16 (p13.3)      | Nthl1        | 17 (A3)        | <a href="#">MGI:1313275</a> |
| 17         | <a href="#">PKMYT1</a> | associated tyrosine- and threonine-     | <a href="#">9088</a>       | 16 (p13.3)      | AW209059     | 17 (syntenic)  | <a href="#">MGI:2137630</a> |
| 17         | <a href="#">POLH</a>   | Polymerase (DNA directed), eta          | <a href="#">5429</a>       | 6 (p21.1)       | Polh         | 17 (C)         | <a href="#">MGI:1891457</a> |
| 17         | <a href="#">PPARD</a>  | proliferative activated receptor,       | <a href="#">5467</a>       | 6 (p21.2-p21.1) | Ppard        | 17 (13.5 cM)   | <a href="#">MGI:101884</a>  |
| 17         | <a href="#">PRKR</a>   | interferon-inducible double stranded    | <a href="#">5610</a>       | 2 (p22-p21)     | Prkr         | 17 (40.0 cM)   | <a href="#">MGI:1353449</a> |
| 17         | <a href="#">SOD2</a>   | dismutase 2, mitochondrial              | <a href="#">6648</a>       | 6 (q25.3)       | Sod2         | 17 (7.6 cM)    | <a href="#">MGI:98352</a>   |
| 17         | <a href="#">TAF11</a>  | polymerase II, TATA box binding         | <a href="#">6882</a>       | 6 (p21.31)      | Taf11        | 17 (syntenic)  | <a href="#">MGI:1916026</a> |
| 17         | <a href="#">TNF</a>    | factor (TNF superfamily,                | <a href="#">7124</a>       | 6 (p21.3)       | Tnf          | 17 (19.06 cM)  | <a href="#">MGI:104798</a>  |

EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name           | Gene Description                     | <a href="#">Locus Link</a> | Hu Chr#    | Mouse Symbol | M Chr         | AccID                       |
|------------|--------------------------|--------------------------------------|----------------------------|------------|--------------|---------------|-----------------------------|
| 18         | <a href="#">CDC23</a>    | cycle 23, yeast, homolog)            | <a href="#">8697</a>       | 5 (q31)    | Cdc23        | 18 (17.0 cM)  | <a href="#">MGI:1098815</a> |
| 18         | <a href="#">CDC25C</a>   | Cell division cycle 25C              | <a href="#">995</a>        | 5 (q31)    | Cdc25c       | 18 (15.0 cM)  | <a href="#">MGI:88350</a>   |
| 18         | <a href="#">DTR</a>      | receptor (heparin-binding epidermal  | <a href="#">1839</a>       | 5 (q23)    | Dtr          | 18 (15.0 cM)  | <a href="#">MGI:96070</a>   |
| 18         | <a href="#">ERCC3</a>    | cross-complementing                  | <a href="#">2071</a>       | 2 (q21)    | Ercc3        | 18 (B3)       | <a href="#">MGI:95414</a>   |
| 18         | <a href="#">FGF1</a>     | Fibroblast growth factor 1 (acidic)  | <a href="#">2246</a>       | 5 (q31)    | Fgf1         | 18 (19.0 cM)  | <a href="#">MGI:95515</a>   |
| 18         | <a href="#">NR3C1</a>    | subfamily 3, group C, member 1       | <a href="#">2908</a>       | 5 (q31)    | Nr3c1        | 18 (20.0 cM)  | <a href="#">MGI:95824</a>   |
| 18         | <a href="#">POLI</a>     | Polymerase (DNA directed) iota       | <a href="#">11201</a>      | 18 (q21.1) | Poli         | 18 (E2)       | <a href="#">MGI:1347081</a> |
| 19         | <a href="#">ALDH1A1</a>  | dehydrogenase 1 family, member A1    | <a href="#">216</a>        | 9 (q21.13) | Aldh1a1      | 19 (12.0 cM)  | <a href="#">MGI:1353450</a> |
| 19         | <a href="#">CDC42EP2</a> | protein (RHO GTPase binding) 2       | <a href="#">10435</a>      | 11 (q13)   | Cdc42ep2     | 19 (0.0 cM)   | <a href="#">MGI:1929744</a> |
| 19         | <a href="#">CYP2C8</a>   | family 2, subfamily C, polypeptide 8 | <a href="#">1558</a>       | 10q23.33   |              | <b>chr 19</b> |                             |
| 19         | <a href="#">DCLRE1A</a>  | repair 1A (PSO2 homolog, S.          | <a href="#">9937</a>       | 10 (q25.1) | Dclre1a      | 19 (syntenic) | <a href="#">MGI:1930042</a> |
| 19         | <a href="#">FAU</a>      | murine sarcoma virus (FBR-MuSV)      | <a href="#">2197</a>       | 11 (q13)   | Fau          | 19 (3.0 cM)   | <a href="#">MGI:102547</a>  |
| 19         | <a href="#">FEN1</a>     | specific endonuclease 1              | <a href="#">2237</a>       | 11 (q12)   | Fen1         | 19 (syntenic) | <a href="#">MGI:102779</a>  |
| 19         | <a href="#">FGF8</a>     | factor 8 (androgen-induced)          | <a href="#">2253</a>       | 10 (q24)   | Fgf8         | 19 (45.0 cM)  | <a href="#">MGI:99604</a>   |
| 19         | <a href="#">GSTP1</a>    | Glutathione S-transferase pi         | <a href="#">2950</a>       | 11 (q13)   | Gstp2        | 19 (0.0 cM)   | <a href="#">MGI:95864</a>   |
| 19         | <a href="#">HTATIP</a>   | interactive protein, 60kDa           | <a href="#">10524</a>      | 11 (q13)   | Htatip       | 19 (syntenic) | <a href="#">MGI:1932051</a> |

EGP Human Gene Mouse Orthologs

| Mouse Chr# | Hugo Gene Name           | Gene Description                         | <a href="#">Locus Link</a> | Hu Chr#          | Mouse Symbol | M Chr         | AccID                       |
|------------|--------------------------|--|----------------------------|------------------|--------------|---------------|-----------------------------|
| 19         | <a href="#">LIPF</a>     | Lipase, gastric                          | <a href="#">8513</a>       | 10 (q23.31)      | Lipf         | 19 (syntenic) | <a href="#">MGI:1914967</a> |
| 19         | <a href="#">POLL</a>     | Polymerase (DNA directed), lambda        | <a href="#">27343</a>      | 10 (q23)         | Poll         | 19 (syntenic) | <a href="#">MGI:1889000</a> |
| 19         | <a href="#">RAD9A</a>    | RAD9 homolog A (S. pombe)                | <a href="#">5883</a>       | 11 (q13.1-q13.2) | Rad9         | 19 (A)        | <a href="#">MGI:1328356</a> |
| 19         | <a href="#">REQ</a>      | response zinc finger gene                | <a href="#">5977</a>       | 11 (q13)         | Dpf2         | 19 (2.0 cM)   | <a href="#">MGI:109529</a>  |
| 19         | <a href="#">TNFRSF6</a>  | factor receptor superfamily,             | <a href="#">355</a>        | 10 (q24.1)       | Tnfrsf6      | 19 (23.0 cM)  | <a href="#">MGI:95484</a>   |
| X          | <a href="#">FGF13</a>    | Fibroblast growth factor 13              | <a href="#">2258</a>       | X (q26.3)        | Fgf13        | X (18.0 cM)   | <a href="#">MGI:109178</a>  |
| X          | <a href="#">HPRT1</a>    | phosphoribosyltransferase 1 (Lesch-      | <a href="#">3251</a>       | X (q26.1)        | Hprt1        | X (17.0 cM)   | <a href="#">MGI:96217</a>   |
| X          | <a href="#">POLA</a>     | Polymerase (DNA directed), alpha         | <a href="#">5422</a>       | X (p22.1-p21.3)  | Pola1        | X (34.0 cM)   | <a href="#">MGI:99660</a>   |
| X          | <a href="#">TAF1</a>     | polymerase II, TATA box binding          | <a href="#">6872</a>       | X (q13.1)        | Taf1         | X (38.0 cM)   | <a href="#">MGI:1336878</a> |
| UN         | <a href="#">CDKN2D</a>   | kinase inhibitor 2D (p19, inhibits CDK4) | <a href="#">1032</a>       | 19 (p13)         | Cdkn2d       | UN            | <a href="#">MGI:105387</a>  |
| UN         | <a href="#">POLS</a>     | Polymerase (DNA directed) sigma          | <a href="#">11044</a>      | 5 (p15)          | Pols         | UN            | <a href="#">MGI:2682295</a> |
|            | <a href="#">CYP2C9</a>   | family 2, subfamily C, polypeptide 9     | <a href="#">1559</a>       | 10q24            |              |               |                             |
|            | <a href="#">HSU24186</a> | A complex 34 kd subunit homolog          | <a href="#">29935</a>      | Xq21.33          |              |               |                             |