

nCounter® Mouse PanCancer Pathways Panel - Gene and Probe Details

| Official Symbol | Accession | Alias / Previous Symbol | Official Full Name | Other targets or Isoform Information |
|-----------------|----------------|---|--|---|
| Abl1 | NM_009594.4 | c-Abl, E43008G22Rik | c-abl oncogene 1, non-receptor tyrosine kinase | |
| Acvr1b | NM_007395.3 | Acvr1k4, SKR2, ActR-IB, ActRIB, Alk4 | activin A receptor, type 1B | |
| Acvr1c | NM_001033369.3 | Alk-7, ALK7 | activin A receptor, type 1C | |
| Acvr2a | NM_007396.4 | tActRII, ActRIIa, Acvr2 | activin receptor IIA | |
| Akt1 | NM_001165894.1 | PKB/Akt, PKB, Akt, PKBalpha | thymoma viral proto-oncogene 1 | |
| Akt2 | NM_001110208.1 | PKBbeta, 2410016A19Rik, PKB | thymoma viral proto-oncogene 2 | |
| Akt3 | NM_011785.3 | PKB gamma, D930002M15Rik, Nmf350 | thymoma viral proto-oncogene 3 | |
| Alk | NM_007439.2 | CD246, Trcr | anaplastic lymphoma kinase | |
| Alkbh2 | NM_175016.2 | Abh2, mABH2 | alkB homolog 2, alpha-ketoglutarate-dependent dioxygenase | |
| Alkbh3 | NM_026944.1 | Abh3, 1810020C19Rik, mABH3, 1700108H04Rik | alkB homolog 3, alpha-ketoglutarate-dependent dioxygenase | |
| Amer1 | NM_175179.4 | Amer1, 2810002O09Rik, Wtx, Fam123b | APC membrane recruitment 1 | |
| Amh | NM_007445.2 | Mullerian inhibiting substance, MIS | anti-Mullerian hormone | |
| Angpt1 | NM_009640.3 | 1110046O21Rik, Ang-1, Angiopoietin-1, ang1 | angiopoietin 1 | |
| Angpt2 | NM_007426.3 | Ang2, Ang-2 | angiopoietin 2 | |
| Apc | NM_007462.3 | Min, CC1 | adenomatous polyposis coli | |
| Aph1b | NM_177583.4 | 2310057K14Rik | aph1 homolog B, gamma secretase subunit | |
| Ar | NM_013476.3 | | androgen receptor | |
| Arid1a | NM_001080819.1 | 1110030E03Rik, Smarcf1, Osa1, BAF250a | AT rich interactive domain 1A (SWI-like) | |
| Arid1b | NM_001085355.1 | B230217J03Rik, 9330189K18Rik | AT rich interactive domain 1B (SWI-like) | |
| Arid2 | NM_175251.2 | 1700124K17Rik, zipzap/p200, 4432409D24Rik | AT rich interactive domain 2 (ARID, RFX-like) | |
| Arnt2 | NM_007488.2 | bHLHe1 | aryl hydrocarbon receptor nuclear translocator 2 | |
| Asxl1 | NM_001039939.1 | | additional sex combs like 1 | |
| Atm | NM_007499.2 | C030026E19Rik | ataxia telangiectasia mutated | |
| Atr | NM_019864.1 | | ataxia telangiectasia and Rad3 related | |
| Atrx | NM_009530.2 | DXHXS6677E, HP1-BP38, Rad54, XH2, Xnp, Hp1bp2, 4833408C14Rik | alpha thalassemia/mental retardation syndrome X-linked | |
| Axin1 | NM_001159598.1 | | axin 1 | |
| Axin2 | NM_015732.4 | Conductin, Axil | axin2 | |
| B2m | NM_009735.3 | Ly-m11, beta2-m, beta 2 microglobulin | beta-2 microglobulin | |
| Bad | NM_007522.3 | Bbc2 | BCL2-associated agonist of cell death | |
| Baiap3 | NM_001163270.1 | LOC381076 | BAI1-associated protein 3 | |
| Bambi | NM_026505.2 | 2610003H06Rik | BMP and activin membrane-bound inhibitor | |
| Bap1 | NM_027088.2 | 2300006C11Rik | Brc1 associated protein 1 | |
| Bax | NM_007527.3 | | BCL2-associated X protein | |
| Bcl2 | NM_009741.3 | Bcl-2, D830018M01Rik, C430015F12Rik | B cell leukemia/lymphoma 2 | |
| Bcl2a1a | NM_009742.3 | Bcl2a1, Bfl-1, A1, Hbpa1 | B cell leukemia/lymphoma 2 related protein A1a | also targets Bcl2a1b (NM_007534) Bcl2a1c (NM_007535) and Bcl2a1d (NM_007536) |
| Bcl2l1 | NM_009743.4 | Bcl-XL, BclX, Bcl-Xs, bcl-x, Bcl(X)L | BCL2-like 1 | |
| Bcor | NM_029510.3 | 5830466J11Rik, 8430401K06Rik, D930024N20Rik | BCL6 interacting corepressor | |
| Bdnf | NM_007540.4 | | brain derived neurotrophic factor | |
| Bid | NM_007544.3 | 2700049M22Rik | BH3 interacting domain death agonist | |
| Birc3 | NM_007464.3 | | withdrawn, = Birc2 | |
| Birc7 | NM_001163247.1 | KIAP, ML-IAP, Livin | baculoviral IAP repeat-containing 7 (livin) | |
| Blm | NM_007550.3 | | Bloom syndrome, RecQ helicase-like | |
| Bmp2 | NM_007553.2 | Bmp2a | bone morphogenetic protein 2 | |
| Bmp4 | NM_007554.2 | Bmp2b-1, Bmp2b1, Bmp-4, Bmp2b | bone morphogenetic protein 4 | |
| Bmp5 | NM_007555.3 | | bone morphogenetic protein 5 | |
| Bmp6 | NM_007556.2 | Vgr1, D13Wsu115e | bone morphogenetic protein 6 | |
| Bmp7 | NM_007557.2 | osteogenic protein 1, OP1 | bone morphogenetic protein 7 | |
| Bmp8a | NM_001256019.1 | Bmp7r1, osteogenic protein 2, OP2 | bone morphogenetic protein 8a | |
| Bmpr1b | NM_007560.3 | Acvr1k6, CFK-43a, Alk6, BMPR-IB | bone morphogenetic protein receptor, type 1B | |
| Bnip3 | NM_009760.4 | Nip3 | BCL2/adenovirus E1B interacting protein 3 | may target PREDICTED BCL2/adenovirus E1B like transcripts (XM_889408 XM_904771 XR_031487 XR_034519) |
| Braf | NM_139294.5 | D6Ert631e, 9930012E13Rik, Braf-2, Braf2 | Braf transforming gene | |
| Brc1a | NM_009764.3 | | breast cancer 1, early onset | |
| Brc1b | NM_009765.3 | RAB163, Fancd1 | breast cancer 2, early onset | |
| Brip1 | NM_178309.2 | 803046J03Rik, 3110009N10Rik, BACH1 | BRC1A interacting protein C-terminal helicase 1 | |
| Cacna1c | NM_001159535.1 | L-type Cav1.2, Cav1.2, (alpha)1 subunit, Cchl1a1, D930026N18Rik | calcium channel, voltage-dependent, L type, alpha 1C subunit | |
| Cacna1d | NM_028981.2 | Cchl1a2, Cav1.3alpha1, 8430418G19Rik, Cchl1a, C79217, D-LTCC, Cacn1a2 | calcium channel, voltage-dependent, L type, alpha 1D subunit | |
| Cacna1e | NM_009782.3 | alpha1E, Cchra1, Cav2.3 | calcium channel, voltage-dependent, R type, alpha 1E subunit | |
| Cacna1g | NM_001112813.2 | Cav3.1d, a1G | calcium channel, voltage-dependent, T type, alpha 1G subunit | |
| Cacna1h | NM_021415.4 | T-type Cav3.2, Cav3.2, alpha13.2 | calcium channel, voltage-dependent, T type, alpha 1H subunit | |
| Cacna2d1 | NM_006535618.1 | Cacna2, Ca(v)alpha2delta1, Cchl2a | calcium channel, voltage-dependent, alpha2/delta subunit 1 | |
| Cacna2d2 | NM_020263.3 | a2d2 | calcium channel, voltage-dependent, alpha 2/delta subunit 2 | |
| Cacna2d3 | NM_009785.1 | alpha2delta3, alpha 2 delta-3 | calcium channel, voltage-dependent, alpha2/delta subunit 3 | |
| Cacna2d4 | NM_001033382.2 | 5730412N02Rik | calcium channel, voltage-dependent, alpha 2/delta subunit 4 | |
| Cacnb2 | NM_023116.3 | Cchb2, Cavbeta2 | calcium channel, voltage-dependent, beta 2 subunit | |
| Cacnb3 | NM_007581.2 | Cchb3, Beta3 | calcium channel, voltage-dependent, beta 3 subunit | |
| Cacnb4 | NM_146123.2 | 3110038015Rik, Cchb4 | calcium channel, voltage-dependent, beta 4 subunit | |
| Cacng1 | NM_007582.2 | | calcium channel, voltage-dependent, gamma subunit 1 | |
| Cacng4 | NM_019431.2 | | calcium channel, voltage-dependent, gamma subunit 4 | |
| Cacng6 | NM_133183.1 | 2310033H20Rik | calcium channel, voltage-dependent, gamma subunit 6 | |
| Calml3 | NM_027416.3 | 2310068O22Rik | calmodulin-like 3 | |
| Camk2b | NM_001174053.1 | CaMK II | calcium/calmodulin-dependent protein kinase II, beta | |
| Capn2 | NM_009794.3 | Capa2, Capa-2, m-calpain | calpain 2 | |
| Card11 | NM_175362.2 | 2410011D02Rik, O610008L17Rik, BIMP3, CARMA1 | caspase recruitment domain family, member 11 | |
| Casp12 | NM_009808.4 | | caspase 12 | |
| Casp3 | NM_009810.2 | CPP32, Caspase-3, mldy, Apopain, Yama, AC-3, CC3, A830040C14Rik | caspase 3 | |
| Casp7 | NM_007611.2 | ICE-IAP3, caspase-7, Mch3, CMH-1 | caspase 7 | |
| Casp8 | NM_009812.2 | FLICE, MACH, Caspase-8, Mch5 | caspase 8 | |
| Casp9 | NM_015733.4 | ICE-LAP6, Caspase-9, Mch6 | caspase 9 | |

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|---------|----------------|---|---|
| Cbl | NM_007619.2 | 4732447J05Rik, Cbl-2, c-Cbl | Casitas B-lineage lymphoma |
| Cblc | NM_023224.5 | 2310079L19Rik, Cbl3, 2310076I21Rik | Casitas B-lineage lymphoma c |
| Ccna1 | NM_007628.3 | | cyclin A1 |
| Ccna2 | NM_009828.2 | Cyca, Ccna, Ccn1, Ccn-1, CycA2 | cyclin A2 |
| Ccnb1 | NM_172301.3 | Cyca-4, Ccnb1-rs13 | cyclin B1 |
| Ccnb3 | NM_183015.3 | | cyclin B3 |
| Ccnd1 | NM_007631.1 | Cyl-1, bcl-1, PRAD1, cD1, CycD1 | cyclin D1 |
| Ccnd2 | NM_009829.3 | Vin-1, Vin1, 2600016F06Rik, cD2 | cyclin D2 |
| Ccnd3 | NM_007632.2 | 9230106B05Rik | cyclin D3 |
| Ccne1 | NM_007633.2 | cyclin E, CycE1 | cyclin E1 |
| Ccne2 | NM_001037134.1 | | cyclin E2 |
| Ccno | NM_001081062.1 | Ccnu, Ung2 | cyclin O |
| Ccr7 | NM_007719.2 | CD197, Cmkbr7, Ebi1h, EB11 | chemokine (C-C motif) receptor 7 |
| Cd14 | NM_009841.3 | | CD14 antigen |
| Cd19 | NM_009844.2 | | CD19 antigen |
| Cd40 | NM_011611.2 | | withdrawn, = Tnfrsf5 |
| Cdc14a | NM_001173553.1 | CDC14a1, A830059A17Rik, Cdc14, CDC14A2 | CDC14 cell division cycle 14A |
| Cdc14b | NM_172587.3 | 2810432N10Rik, A530086E13Rik | CDC14 cell division cycle 14B |
| Cdc25a | NM_007658.3 | D9Erdt393e | cell division cycle 25A |
| Cdc25b | NM_001111075.4 | | cell division cycle 25B |
| Cdc25c | NM_009860.2 | Cdc25 | cell division cycle 25C |
| Cdc6 | NM_011799.2 | cell division cycle 18 homolog (S.pombe)-like, CDC18L, CDC18(S.pombe) | cell division cycle 6 |
| Cdc7 | NM_001271566.1 | muCdc7, Cdc7, Cdc7l1 | cell division cycle 7 (S. cerevisiae) |
| Cdh1 | NM_009864.2 | E-cadherin, uvomorulin, UM, L-CAM, Ecad, E-cad | cadherin 1 |
| Cdk4 | NM_016756.4 | A630093N05Rik | cyclin-dependent kinase 2 |
| Cdk4 | NM_009870.3 | Crk3, p34<PSK-J3>/cdk4 | cyclin-dependent kinase 4 |
| Cdk6 | NM_009873.2 | Crk2 | cyclin-dependent kinase 6 |
| Cdkn1a | NM_007669.4 | CDKI, SDI1, p21Cip1, CIP1, p21<WAF1/CIP1>, CAP20, Cdkn1, Waf1, mda6, P21, p21WAF | cyclin-dependent kinase inhibitor 1A (P21) |
| Cdkn1b | NM_009875.4 | p27Kip1, p27 | cyclin-dependent kinase inhibitor 1B |
| Cdkn1c | NM_009876.3 | Kip2, p57Kip2, CDKI | cyclin-dependent kinase inhibitor 1C (P57) |
| Cdkn2a | NM_001040654.1 | INK4a-ARF, Arf, p19<ARF>, p16, ARF-INK4a, Ink4a/Arf, Pctr1, p16INK4a, p19ARF, MTS1 | cyclin-dependent kinase inhibitor 2A |
| Cdkn2b | NM_007670.4 | p15INK4b, p15, MTS2 | cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) |
| Cdkn2c | NM_007671.2 | INK4c, p18INK4c, p18 | cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4) |
| Cdkn2d | NM_009878.2 | p19INK4d, INK4d, INK4d, p19 | cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4) |
| Cebpa | NM_007678.3 | Cebp, C/EBP alpha, C/ebpalpha | CCAAT/enhancer binding protein (C/EBP), alpha |
| Cebpe | NM_207131.1 | C/EBPepsilon, CRP1, LOC239097, C/EBPe | CCAAT/enhancer binding protein (C/EBP), epsilon |
| Chad | NM_007689.4 | SLRR4A | chondroadherin |
| Chk1 | NM_007691.4 | Chk1 | checkpoint kinase 1 |
| Chk2 | NM_016681.3 | CHK2, Rad53 | checkpoint kinase 2 |
| Chuk | NM_001162410.1 | IKK1, IKK[alpha], IKK 1, IkappaB kinase alpha, IKK-1, Chuk1, IKK-alpha, IKK alpha, IKKalpha | conserved helix-loop-helix ubiquitous kinase |
| Cic | NM_027882.3 | 1200010B10Rik | capicua transcriptional repressor |
| Cicf1 | NM_019952.3 | Bsf3, NNT-1/BSF-3, CLC | cardiotrophin-like cytokine factor 1 |
| Cntfr | NM_001146080.1 | Cntfralpha | ciliary neurotrophic factor receptor |
| Col11a1 | NM_007729.2 | C530001D20Rik | collagen, type XI, alpha 1 |
| Col11a2 | NM_009926.1 | | collagen, type XI, alpha 2 |
| Col1a1 | NM_007742.3 | Mov-13, Col1a-1, Cola-1, Cola1 | collagen, type I, alpha 1 |
| Col1a2 | NM_007743.2 | Cola2, Cola-2, Col1a-2 | collagen, type I, alpha 2 |
| Col24a1 | NM_027770.2 | 5430404K19Rik | collagen, type XXIV, alpha 1 |
| Col27a1 | NM_025685.3 | 5730512J02Rik | collagen, type XXVII, alpha 1 |
| Col2a1 | NM_001113515.2 | Lpk, Col2a-1, Rgsc856, Del1, Col2a, M100856, Col2 | collagen, type II, alpha 1 |
| Col3a1 | NM_009930.1 | Col3a-1, Tsk-2, Tsk2 | collagen, type III, alpha 1 |
| Col4a3 | NM_007734.2 | alpha3(IV), tumstatin | collagen, type IV, alpha 3 |
| Col4a4 | NM_007735.2 | [alpha4(IV), E130010M05Rik | collagen, type IV, alpha 4 |
| Col4a5 | NM_001163155.1 | | collagen, type IV, alpha 5 |
| Col4a6 | NM_053185.2 | | collagen, type IV, alpha 6 |
| Col5a1 | NM_015734.2 | | collagen, type V, alpha 1 |
| Col5a2 | NM_007737.2 | 1110014L14Rik | collagen, type V, alpha 2 |
| Col6a6 | NM_001102607.1 | E330026B02Rik | collagen, type VI, alpha 6 |
| Comp | NM_016685.2 | thrombospondin-5, TSP5 | cartilage oligomeric matrix protein |
| Creb3l1 | NM_011957.2 | BBF-2 (drosophila) homolog, Oasis | cAMP responsive element binding protein 3-like 1 |
| Creb3l3 | NM_145365.3 | D10Bur1e, CREB-H | cAMP responsive element binding protein 3-like 3 |
| Creb3l4 | NM_030080.2 | JAL, mJAL, ATCE1, 5330432F22Rik, Tisp40alpha, Tisp40, 1700012K17Rik, Tisp40beta | cAMP responsive element binding protein 3-like 4 |
| Creb5 | NM_172728.2 | D430026C09Rik, Crebpa | cAMP responsive element binding protein 5 |
| Crebbp | NM_001025432.1 | CBP, KAT3A | CREB binding protein |
| Crif2 | NM_001164735.1 | Tsplr, Tpste2, Ly114 | cytokine receptor-like factor 2 |
| Csf1r | NM_001037859.2 | CD115, Fms, Csfmr, Fim-2, M-CSFR, CSF-1R | colony stimulating factor 1 receptor |
| Csf2 | NM_009969.4 | GMCSF, MGI-IGM, Csfgm, Gm-CSf | colony stimulating factor 2 (granulocyte-macrophage) |
| Csf2rb | NM_007780.4 | Csf2rb1, CDw131, IL5rb, AIC2B, Bc, beta c, IL3r, common beta chain, IL3rb1 | colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) |
| Csf3 | NM_009971.1 | Csfg, G-CSF, MGI-IG | colony stimulating factor 3 (granulocyte) |
| Csf3r | NM_001252651.1 | Csfr, G-CSFR, Cd114 | colony stimulating factor 3 receptor (granulocyte) |
| Ctnnb1 | NM_007614.2 | beta-catenin, beta catenin, Catnb | catenin (cadherin associated protein), beta 1 |
| Cul1 | NM_012042.3 | | cullin 1 |
| Cxcl1 | NM_008176.1 | Mgsa, Fsp, KC/GRO-alpha, KC, N51, Gro1, Scyb1 | chemokine (C-X-C motif) ligand 1 |
| Cxcl2 | NM_009140.2 | MIP-2a, Mgsa-b, GROb, Gro2, CINC-2a, MIP-2, Scyb2, Mip2, Scyb | chemokine (C-X-C motif) ligand 2 |
| Cxcl5 | NM_009141.2 | GCP-2, AMCF-II, ENA-78, LIX, Scyb6 | chemokine (C-X-C motif) ligand 5 |
| Cxxc4 | NM_001004367.4 | C030003J12Rik, 9330210J02Rik, Idax | CXXC finger 4 |
| Cyld | NM_001276279.1 | CYLD1, C130039D01Rik, 2900009M21Rik, 2010013M14Rik | cylindromatosis (turban tumor syndrome) |
| Daxx | NM_007829.3 | | Fas death domain-associated protein |
| Ddb2 | NM_028119.5 | p48, 2610043A19Rik | damage specific DNA binding protein 2 |

also targets XM_006543554.1 (LOC102641469) @ 99%

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|----------|----------------|---|---|
| | | chop, CHOP-10, C/EBP homologous protein 10, | |
| Ddit3 | NM_007837.3 | CHOP10, gadd153 | DNA-damage inducible transcript 3 |
| Ddit4 | NM_029083.2 | 5830413E08Rik, Dig2, Rtp801, REDD1 | DNA-damage-inducible transcript 4 |
| Dkk1 | NM_010051.3 | mdkk-1 | dickkopf WNT signaling pathway inhibitor 1 |
| Dkk2 | NM_020265.4 | | dickkopf WNT signaling pathway inhibitor 2 |
| Dkk4 | NM_145592.2 | | dickkopf WNT signaling pathway inhibitor 4 |
| Dll1 | NM_007865.3 | Delta1 | delta-like 1 (Drosophila) |
| Dll3 | NM_007866.2 | | delta-like 3 (Drosophila) |
| Dll4 | NM_019454.2 | Delta4 | delta-like 4 (Drosophila) |
| Dnmt1 | NM_010066.3 | MommeD2, MTase, Dnmt1o, Cxxc9 | DNA methyltransferase (cytosine-5) 1 |
| Dnmt3a | NM_007872.4 | | DNA methyltransferase 3A |
| Dtx1 | NM_008052.3 | Fxit1 | deltex 1, E3 ubiquitin ligase |
| Dtx3 | NM_030714.2 | | deltex 3, E3 ubiquitin ligase |
| Dtx4 | NM_172442.3 | RNF155 | deltex 4, E3 ubiquitin ligase |
| Dusp10 | NM_022019.5 | MKP5, MKP-5, 2610306G15Rik | dual specificity phosphatase 10 |
| Dusp2 | NM_010090.2 | PAC1 | dual specificity phosphatase 2 |
| Dusp4 | NM_176933.4 | E130306H24Rik, MKP2, 2700078F24Rik | dual specificity phosphatase 4 |
| Dusp5 | NM_001085390.1 | LOC240672 | dual specificity phosphatase 5 |
| Dusp6 | NM_026268.2 | MKP3, MKP-3, 1300019I03Rik, PYST1 | dual specificity phosphatase 6 |
| Dusp8 | NM_008748.1 | 5530400B01Rik, Nttp1 | dual specificity phosphatase 8 |
| Dvl1 | NM_010091.3 | | dishevelled segment polarity protein 1 |
| Dvl2 | NM_007888.3 | | dishevelled segment polarity protein 2 |
| Dvl3 | NM_007889.2 | | dishevelled segment polarity protein 3 |
| E2f1 | NM_007891.4 | E2F-1 | E2F transcription factor 1 |
| E2f5 | NM_007892.2 | E2F-5 | E2F transcription factor 5 |
| Efna1 | NM_010107.4 | B61, LERK-1, Eplg1, LerK1, Epl1, EFL-1 | ephrin A1 |
| Efna2 | NM_007909.3 | Ephrin-A2, Cek7-L, Elf-1, Epl6, LERK-6, ephrin A6 | ephrin A2 |
| Efna3 | NM_010108.1 | LERK-3, Epl3, Ehk1-L, EFL-2 | ephrin A3 |
| Efna5 | NM_207654.2 | Ephrin-A5, RAGS, Epl7, LERK-7, EFL-5, AL-1 | ephrin A5 |
| Egf | NM_010113.3 | | epidermal growth factor |
| Egfr | NM_207655.2 | avian erythroblastic leukemia viral (v-erb-b) oncogene homolog, 9030024J15Rik, Erbb, Wa5, Erbb1 | epidermal growth factor receptor |
| Eif4ebp1 | NM_007918.3 | 4e-bp1, PHAS-I | eukaryotic translation initiation factor 4E binding protein 1 |
| Elk1 | NM_007922.4 | Elk-1 | ELK1, member of ETS oncogene family |
| Endog | NM_007931.1 | | endonuclease G |
| Ep300 | NM_177821.6 | KAT3B, p300 | E1A binding protein p300 |
| Epha2 | NM_010139.2 | Sek-2, Myk2, Sek2, Eck | Eph receptor A2 |
| Epo | NM_007942.2 | | erythropoietin |
| Epor | NM_010149.3 | | erythropoietin receptor |
| ErbB2 | NM_001003817.1 | Neu, HER2, c-erbB2, c-neu, Neu oncogene, Erbb-2, HER-2, I11Jus8 | erb-b2 receptor tyrosine kinase 2 |
| ErbB3 | NM_010153.1 | Erbb-3, HER3, Erbb3r | erb-b2 receptor tyrosine kinase 3 |
| Ercc2 | NM_007949.4 | XPD, MhDarco15, RCO015, Ercc-2 | excision repair cross-complementing rodent repair deficiency, complementation group 2 |
| Ercc3 | NM_133658.1 | XPB | excision repair cross-complementing rodent repair deficiency, complementation group 3 |
| Ercc4 | NM_015769.1 | Xpf | excision repair cross-complementing rodent repair deficiency, complementation group 4 |
| Ercc6 | NM_001081221.1 | CSB, CS group B correcting gene, C130058G22Rik | excision repair cross-complementing rodent repair deficiency, complementation group 6 |
| Ets2 | NM_011809.2 | Ets-2 | E26 avian leukemia oncogene 2, 3' domain |
| Etv1 | NM_007960.4 | ER81, Etsrp81 | ets variant 1 |
| Etv4 | NM_008815.2 | Pea3, Pea-3 | ets variant 4 |
| Eya1 | NM_001252192.1 | bor | EYA transcriptional coactivator and phosphatase 1 |
| Ezh2 | NM_007971.2 | Enx1h, Enx-1, KMT6 | enhancer of zeste 2 polycomb repressive complex 2 subunit |
| Faap24 | NM_178643.5 | C230052I12Rik | Fanconi anemia core complex associated protein 24 |
| Fanca | NM_016925.2 | | Fanconi anemia, complementation group A |
| Fancc | NM_001146081.1 | | Fanconi anemia, complementation group B |
| Fance | NM_007985.2 | Facc | Fanconi anemia, complementation group C |
| Fance | NM_001163819.1 | 2810451D06Rik | Fanconi anemia, complementation group E |
| Fancf | NM_001115087.1 | | Fanconi anemia, complementation group F |
| Fancg | NM_053081.1 | Xrcc9 | Fanconi anemia, complementation group G |
| Fanci | NM_025923.3 | gcd, Pog, 2010322C19Rik, B230118H11Rik, Phf9 | Fanconi anemia, complementation group L |
| Fas | NM_007987.2 | Tnfrsf6, APO-1, TNFR6, CD95 | Fas (TNF receptor superfamily member 6) |
| Fasl | NM_010177.3 | | withdrawn, = Tnfsf6 |
| Fbxw11 | NM_134015.2 | BTRC2, BTRCP2, HOS, Fbxw1b, 2310065A07Rik | F-box and WD-40 domain protein 11 |
| Fbxw7 | NM_080428.2 | Fbxo30, AGO, Fbxw6, Cdc4, Fbw7, SEL-10, 1110001A17Rik | F-box and WD-40 domain protein 7 |
| Fen1 | NM_001271614.1 | | flap structure specific endonuclease 1 |
| Fgf1 | NM_010197.3 | Fgf-1, fibroblast growth factor 1 (acidic), Fgfa | fibroblast growth factor 1 |
| Fgf10 | NM_008002.4 | FGF-10, AEY17, Gsfaey17 | fibroblast growth factor 10 |
| Fgf11 | NM_010198.1 | Fhf3 | fibroblast growth factor 11 |
| Fgf12 | NM_001276419.1 | Fhf1 | fibroblast growth factor 12 |
| Fgf13 | NM_010200.2 | Fhf2 | fibroblast growth factor 13 |
| Fgf14 | NM_207667.3 | Fhf4 | fibroblast growth factor 14 |
| Fgf15 | NM_008003.2 | FGF19 | fibroblast growth factor 15 |
| Fgf16 | NM_030614.2 | | fibroblast growth factor 16 |
| Fgf17 | NM_008004.4 | | fibroblast growth factor 17 |
| Fgf18 | NM_008005.1 | FGF-18, D130055P09Rik | fibroblast growth factor 18 |
| Fgf2 | NM_008006.2 | Fgf-2, Fgfb, bFGF | fibroblast growth factor 2 |
| Fgf20 | NM_030610.1 | | fibroblast growth factor 20 |
| Fgf21 | NM_020013.4 | | fibroblast growth factor 21 |
| Fgf22 | NM_023304.1 | 2210414E06Rik | fibroblast growth factor 22 |
| Fgf23 | NM_022657.3 | | fibroblast growth factor 23 |
| Fgf3 | NM_008007.2 | Fgf-3, Int-2, Int-P | fibroblast growth factor 3 |
| Fgf4 | NM_010202.5 | Fgf-4, Fgfk, kFGF, Hstf-1, Hst1 | fibroblast growth factor 4 |
| Fgf5 | NM_001277268.1 | Fgf-5 | fibroblast growth factor 5 |
| Fgf6 | NM_010204.1 | Fgf-6 | fibroblast growth factor 6 |

also targets a predicted Fgf21 transcript, LOC105242481 (XM_011238278)

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|----------|----------------|--|--|
| Fgf7 | NM_008008.4 | Keratinocyte growth factor, Kgf | fibroblast growth factor 7 |
| Fgf8 | NM_001166361.1 | Aigf, Fgf-8 | fibroblast growth factor 8 |
| Fgf9 | NM_013518.3 | glia activating factor, Eks | fibroblast growth factor 9 |
| Fgfr1 | NM_001079908.2 | Hspy, Fgfr-1, Eask, Flt-2 | fibroblast growth factor receptor 1 |
| Fgfr2 | NM_010207.2 | Fgfr7, Fgfr-7, svs, KGFRT, Fgfr-2, Bek | fibroblast growth factor receptor 2 |
| Fgfr3 | NM_008010.3 | Fgfr-3, sam3, HBGFR | fibroblast growth factor receptor 3 |
| Fgfr4 | NM_008011.2 | Fgfr-4 | fibroblast growth factor receptor 4 |
| Figf | NM_010216.1 | VEGF-D, Vegfd | c-fos induced growth factor |
| Flna | NM_010227.2 | Dilp2, filamin-1, ABP-280, GENA 379, actin-binding protein 280, F730004A14Rik, Fln1 | filamin, alpha |
| Flnb | NM_001081185.1 | 1110055E19Rik, actin binding protein 280, Fln2 | filamin C, gamma |
| Flt1 | NM_010228.3 | VEGFR1, vascular endothelial growth factor receptor-1, Flt-1, sFlt1, VEGFR-1 | FMS-like tyrosine kinase 1 |
| Flt3 | NM_010229.2 | Flt-3, CD135, Flk2, Flk-2, wmf1 | FMS-like tyrosine kinase 3 |
| Fn1 | NM_010233.1 | Fn, Fn-1 | fibronectin 1 |
| Fos | NM_010234.2 | cFos, c-fos, D12Rfj1 | FBJ osteosarcoma oncogene |
| Fos1 | NM_010235.2 | Fra1, fra-1 | fos-like antigen 1 |
| Foxl2 | NM_012020.2 | Pfrk | forkhead box L2 |
| Foxo4 | NM_018789.2 | Foxo4, Mlt7, afx, Afxh | forkhead box O4 |
| Fst | NM_008046.1 | | folliculin |
| Fubp1 | NM_057172.2 | FBP, Fubp4, Fubp, 9530027K12Rik | far upstream element (FUSE) binding protein 1 |
| Fut8 | NM_016893.4 | alpha (1,6) fucosyltransferase | fucosyltransferase 8 |
| Fzd10 | NM_175284.3 | Fz-10 | frizzled class receptor 10 |
| Fzd2 | NM_020510.2 | Mfz10a, Mfz10, Fz10 | frizzled class receptor 2 |
| Fzd3 | NM_021458.1 | Fz3, D930050A07Rik | frizzled class receptor 3 |
| Fzd7 | NM_008057.3 | Fz7 | frizzled class receptor 7 |
| Fzd8 | NM_008058.1 | Fz8, mfZ8 | frizzled class receptor 8 |
| Fzd9 | NM_010246.1 | mfz9, frizzled 9 | frizzled class receptor 9 |
| Gadd45a | NM_007836.1 | Ddit1 | growth arrest and DNA-damage-inducible 45 alpha |
| Gadd45b | NM_008655.1 | Myd118 | growth arrest and DNA-damage-inducible 45 beta |
| Gadd45g | NM_011817.1 | CR6, OIG37 | growth arrest and DNA-damage-inducible 45 gamma |
| Gas1 | NM_008086.1 | Gas-1 | growth arrest specific 1 |
| Gata1 | NM_008089.1 | Gata-1, Gf-1 | GATA binding protein 1 |
| Gata2 | NM_008090.4 | Gata-2 | GATA binding protein 2 |
| Gata3 | NM_008091.3 | Gata-3, jal | GATA binding protein 3 |
| Gdf6 | NM_013526.1 | BMP13 | growth differentiation factor 6 |
| Ghr | NM_001048147.1 | GHR/BP, GHBP | growth hormone receptor |
| Gli1 | NM_010296.2 | Zfp5, Zfp-5 | GLI-Kruppel family member GLI1 |
| Gli3 | NM_008130.2 | Bph, brachyphalangy | GLI-Kruppel family member GLI3 |
| Il11ra2 | NM_001099348.1 | Il11ra-ps1, Etl-2, ENSMUSG0000066201, Etl2 | interleukin 11 receptor, alpha chain 2 |
| Gna11 | NM_010301.3 | Dsk7 | guanine nucleotide binding protein, alpha 11 |
| Gnaq | NM_008139.5 | Dsk1, Galphaq, G alpha q, Gq, Gq, 1110005L02Rik, 6230401I02Rik, Dsk10 | guanine nucleotide binding protein, alpha q polypeptide |
| Gnas | NM_010309.3 | XLalphas, neuroendocrine-specific Golgi protein p55 isoform 1, P3, Gs-alpha, Gnasl, C130027O20Rik, Galphas, P1, Nesp, SCG6, Nespl, 5530400H20Rik, Oedsm1, Gs alpha, G alpha s, P2, Nesp55, A930027G11Rik, Gnas1, Gsa | GNAS (guanine nucleotide binding protein, alpha stimulating) complex locus |
| Gng12 | NM_001177559.1 | 2010305F15Rik | guanine nucleotide binding protein (G protein), gamma 12 |
| Gng2 | NM_010315.4 | 1110003P13Rik | guanine nucleotide binding protein (G protein), gamma 2 |
| Gng4 | NM_010317.2 | | 4 guanine nucleotide binding protein (G protein), gamma 4 |
| Gng7 | NM_001038655.1 | | guanine nucleotide binding protein (G protein), gamma 7 |
| Gngt1 | NM_010314.2 | Gng1, G(y)1 | guanine nucleotide binding protein (G protein), gamma transducing activity polypeptide 1 |
| Gpc4 | NM_008150.2 | 9530073D23Rik, K-glypican | glypican 4 |
| Grb2 | NM_008163.3 | | growth factor receptor bound protein 2 |
| Gria3 | NM_016886.3 | Glur3, 2900064119Rik, GluR3, Glur-3, Gluralpha3 NR1, M100174, Rgsc174, NMDAR1, Nmdar, GluRzeta1 | glutamate receptor, ionotropic, AMPA3 (alpha 3) |
| Grin1 | NM_008169.2 | Glur3, 2900064119Rik, GluR3, Glur-3, Gluralpha3 NR1, M100174, Rgsc174, NMDAR1, Nmdar, GluRzeta1 | glutamate receptor, ionotropic, NMDA1 (zeta 1) |
| Grin2a | NM_008170.2 | GluRepsilon1, GluN2A, NMDAR2A, NR2A | glutamate receptor, ionotropic, NMDA2A (epsilon 1) |
| Grin2b | NM_008171.3 | GluRepsilon2, Nmdar2b, NMDAR2B, GluN2B, NR2B | glutamate receptor, ionotropic, NMDA2B (epsilon 2) |
| Gsk3b | NM_019827.3 | GSK-3, 7330414F15Rik, 8430431H08Rik, GSK3, GSK-3beta | glycogen synthase kinase 3 beta |
| Gtf2h3 | NM_181410.3 | BTF2, D5Ert679e, 34kDa, 5033417D07Rik | general transcription factor IIH, polypeptide 3 |
| Gzmb | NM_013542.2 | CCP1, CCP-1/C11, GZB, Ctla1, Ctla-1 | granzyme B |
| H2afx | NM_010436.2 | Hist5-2ax, gammaH2ax, H2A.X, H2ax | H2A histone family, member X |
| H3f3a | NM_008210.4 | H3.3A | H3 histone, family 3A |
| Hdac1 | NM_008228.2 | MommeD5, RPD3, HD1 | histone deacetylase 1 |
| Hdac10 | NM_199198.1 | | histone deacetylase 10 |
| Hdac11 | NM_144919.2 | | histone deacetylase 11 |
| Hdac2 | NM_008229.2 | Yy1bp, D10Wsu179e | histone deacetylase 2 |
| Hdac4 | NM_207225.1 | 4932408F19Rik | histone deacetylase 4 |
| Hdac5 | NM_010412.3 | mHDA1 | histone deacetylase 5 |
| Hdac6 | NM_010413.3 | mHDA2, Sfc6 | histone deacetylase 6 |
| Hells | NM_008234.3 | LSH, E130115I21Rik, Lsh, YFK8, proliferation-associated SNF2-like, PASG | helicase, lymphoid specific |
| Hes1 | NM_008235.2 | Hry, bHLHb39 | hairy and enhancer of split 1 (Drosophila) |
| Hes5 | NM_010419.4 | bHLHb38 | hairy and enhancer of split 5 (Drosophila) |
| Hgf | NM_010427.5 | SF/HGF, NK2, NK1, scatter factor, C230052L06Rik, HGF/SF | hepatocyte growth factor |
| Hhex | NM_008245.2 | Hex1, Prhx, Hhex-rs2, Hex | hematopoietically expressed homeobox |
| Hhip | NM_020259.4 | Hip, Hip1, Hhip1 | Hedgehog-interacting protein |
| Hist1h3b | NM_178203.1 | H3-53 | histone cluster 1, H3b |

also targets Il11ra2 & Gm2002 (NM_010550 & NM_001100596)@100%

non-maximal transcript variant coverage due to non-overlapping variants

XM_889893.6 (H3f3c);XR_168806.1 (LOC101056511);XM_003946413.1 (LOC101056659);NM_183290.2 (4921517D22Rik) @ 96%

also targets multiple histone cluster genes Hist1h3(a-i)@100% as well as Hist2h3c1, Hist2h3b & Hist2h3c2- ps @98%

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| Hist2h3b | NM_178215.1 | H3-616 | histone cluster 2, H3b | also targets multiple histone cluster genes - Hist2h3c2-ps; Hist2h3b & Hist1h3(a-c&e-i)@>92% |
| Hist2h3c2 | NM_054045.3 | H3-614, Hist2h3ca1, Hist2h3c2-ps | histone cluster 2, H3c2 | |
| Hmga1 | NM_001025427.2 | HMGY, Hmga1b, HMG-I(Y), Hmgi, HMGI(Y), Hmga1a, Hmgiy | high mobility group AT-hook 1 | also targets NM_001166477.1 (Hmga1-rs1);NM_001166476.1 (Hmga1-rs1) @ 100% |
| Hmga2 | NM_010441.2 | HMG-I-C, Hmgic, 9430083A20Rik | high mobility group AT-hook 2 | |
| Hnf1a | NM_009327.1 | HNF1-alpha, Hnf1alpha, hepatocyte nuclear factor 1, HNF1[a], HNF1, Tcf1, Hnf-1, LFB1 | HNF1 homeobox A | |
| Hoxa10 | NM_008263.3 | Hoxa-10, Hox-1.8 | homeobox A10 | |
| Hoxa11 | NM_010450.2 | Hoxa-11, Hox-1.9 | homeobox A11 | |
| Hoxa9 | NM_010456.2 | Hox-1.7, D6a9 | homeobox A9 | |
| Hpgd | NM_008278.2 | 15-PGDH | hydroxyprostaglandin dehydrogenase 15 (NAD) | |
| Hras | NM_001130443.1 | H-ras, c-H-ras, Harvey-ras, Hras-1, Hras1, ras, Ha-ras, c-rasHa | Harvey rat sarcoma virus oncogene | |
| Hsp90b1 | NM_011631.1 | GRP94, gp96, Targ2, Tra1, 90 kDa, tumor rejection antigen (gp96) 1, ERp99, endoplasmic, Tra-1 | heat shock protein 90, beta (Grp94), member 1 | |
| Hspa1a | NM_010479.2 | Hsp70.3, Hsp70-3 | heat shock protein 1A | |
| Hspa2 | NM_008301.4 | Hsp70-2, 70kDa | heat shock protein 2 | |
| Hspb1 | NM_013560.2 | Hsp25 | heat shock protein 1 | |
| Ibsp | NM_008318.3 | Bsp2, bone sialoprotein, BSP | integrin binding sialoprotein | |
| Id1 | NM_010495.2 | Idb1, bHLHb24, D2Wsu140e | inhibitor of DNA binding 1 | |
| Id2 | NM_010496.3 | inhibitor of differentiation 2, Idb2, bHLHb26, C78922 | inhibitor of DNA binding 2 | |
| Id4 | NM_031166.2 | Idb4, Id4, bHLHb27 | inhibitor of DNA binding 4 | |
| Idh1 | NM_010497.2 | E030024J03Rik, IDPc, Id-1, Idh-1 | isocitrate dehydrogenase 1 (NADP+), soluble | |
| Idh2 | NM_173011.2 | Idh-2, IDPm | isocitrate dehydrogenase 2 (NADP+), mitochondrial | |
| Ifna1 | NM_010502.2 | Ifa1 | interferon alpha 1 | |
| Ifnar1 | NM_010508.1 | Ifrc, Ifar, IFN-alpha/betaR | interferon (alpha and beta) receptor 1 | |
| Ifnar2 | NM_001110498.1 | Ifnar-2 | interferon (alpha and beta) receptor 2 | |
| Ifnb1 | NM_010510.1 | interferon beta 1, fibroblast, IFN-beta, IFNB, Ifb | interferon beta 1, fibroblast | |
| Ifng | NM_008337.1 | IFN-gamma, Ifg | interferon gamma | |
| Igf1 | NM_001111274.1 | Igf-1, C730016P09Rik, Igf-I | insulin-like growth factor 1 | |
| Igf1r | NM_010513.2 | IGF-1R, CD221, line 186, hyft, A330103N21Rik | insulin-like growth factor I receptor | |
| Igfbp3 | NM_008343.2 | IGFBP-3 | insulin-like growth factor binding protein 3 | |
| Ikkbk | NM_010546.2 | IKK-2, IKK2, IKK-beta, IKK[b], IKKbeta | inhibitor of kappaB kinase beta | |
| Ikkbg | NM_178590.2 | NEMO, 1110037D23Rik, IKK[g] | inhibitor of kappaB kinase gamma | |
| Il10 | NM_010548.1 | cytokine synthesis inhibitory factor, IL-10 | interleukin 10 | |
| Il11 | NM_008350.2 | IL-11 | interleukin 11 | |
| Il11ra1 | NM_010549.3 | IL-11ra, NR1, Il11ra, IL-11ra-alpha | interleukin 11 receptor, alpha chain 1 | |
| Il12a | NM_008351.1 | IL-12p35, p35 | interleukin 12a | |
| Il12b | NM_001303244.1 | IL-12p40, IL-12 p40, IL-12b, IL-23 subunit p40 | interleukin 12b | |
| Il12rb2 | NM_008354.3 | A930027I18Rik, IL-12RB2, Ifnm | interleukin 12 receptor, beta 2 | |
| Il13 | NM_008355.2 | IL-13 | interleukin 13 | |
| Il13ra2 | NM_008356.3 | CD213a2 | interleukin 13 receptor, alpha 2 | |
| Il15 | NM_008357.2 | | interleukin 15 | |
| Il19 | NM_001009940.1 | | interleukin 19 | |
| Il1a | NM_010554.4 | Il-1a | interleukin 1 alpha | also targets predicted gene Gm14023 (NR_040371) @ 100% |
| Il1b | NM_008361.3 | IL-1beta, IL-1B | interleukin 1 beta | |
| Il1r1 | NM_001123382.1 | IL-1 receptor alpha chain, IL-1R, IL1r-1, IL-1R1, CD121a | interleukin 1 receptor, type I | |
| Il1r2 | NM_010555.4 | IL-1 receptor beta chain, CD121b, IL1r-2 | interleukin 1 receptor, type II | |
| Il1rap | NM_134103.2 | IL-1RAcP, 6430709H04Rik, IL-1R AcP | interleukin 1 receptor accessory protein | |
| Il2 | NM_008366.2 | IL-2 | interleukin 2 | |
| Il20ra | NM_172786.2 | | interleukin 20 receptor, alpha | |
| Il20rb | NM_001033543.3 | Il20R2, LOC213208, Fndc6 | interleukin 20 receptor beta | |
| Il22ra1 | NM_178257.1 | Il22r | interleukin 22 receptor, alpha 1 | |
| Il22ra2 | NM_178258.5 | IL-22bp | interleukin 22 receptor, alpha 2 | |
| Il23a | NM_031252.1 | IL-23, p19, IL-23p19 | interleukin 23, alpha subunit p19 | |
| Il23r | NM_144548.1 | | interleukin 23 receptor | |
| Il24 | NM_053095.2 | FISP, Mda-7 | interleukin 24 | |
| Il2ra | NM_008367.2 | IL-2R alpha chain, Ly-43, CD25, Il2r CD122, IL-2Rbeta, IL15Rbeta, IL-15Rbeta, IL-15 | interleukin 2 receptor, alpha chain | |
| Il2rb | NM_008368.3 | receptor beta chain, IL-2/15Rbeta | interleukin 2 receptor, beta chain | |
| Il3 | NM_010556.4 | HCGF, Csfmu, IL-3, BPA, MCGF, PSF | interleukin 3 | |
| Il3ra | NM_008369.1 | CD123, IL-3 receptor alpha chain, SUT-1 | interleukin 3 receptor, alpha chain | |
| Il4 | NM_021283.1 | IL-4 | interleukin 4 | |
| Il5ra | NM_008370.2 | CDw125, CD125, Il5r, IL-5 receptor alpha chain | interleukin 5 receptor, alpha | |
| Il6 | NM_031168.1 | IL-6 | interleukin 6 | |
| Il6ra | NM_010559.2 | IL-6R, Il6r, IL-6 receptor alpha chain, CD126 | interleukin 6 receptor, alpha | |
| Il7 | NM_008371.2 | A630026I06Rik, IL-7, hlb368 | interleukin 7 | |
| Il7r | NM_008372.3 | IL-7Ra1alpha, IL-7 receptor alpha chain, CD127 | interleukin 7 receptor | |
| Inhba | NM_008380.1 | activin beta-A | inhibin beta-A | |
| Inhbb | NM_008381.3 | activin beta-B | inhibin beta-B | |
| Insr | NM_010568.2 | CD220, IR-B, IR-A, D630014A15Rik, IR, 4932439I01Rik | insulin receptor | |
| Irak2 | NM_001113553.1 | 6330415L08Rik, IRAK-2 | interleukin-1 receptor-associated kinase 2 | |
| Irak3 | NM_028679.3 | IRAK-M, 4833428C18Rik | interleukin-1 receptor-associated kinase 3 | |
| Irs1 | NM_010570.4 | IRS-1, G972R | insulin receptor substrate 1 | |
| Itga2 | NM_008396.2 | CD49b, VLA-2 receptor, alpha 2 subunit, DX5 | integrin alpha 2 | |
| Itga3 | NM_013565.2 | alpha3-integrin, VLA-3 alpha 3 | integrin alpha 3 | |
| Itga6 | NM_008397.3 | Cd49f, 5033401O05Rik | integrin alpha 6 | |
| Itga7 | NM_008398.2 | alpha7, [a]7 | integrin alpha 7 | |
| Itga8 | NM_001001309.2 | | integrin alpha 8 | |
| Itga9 | NM_001113514.1 | 2610002H11Rik, 6720458D17Rik, D9Erd428e | integrin alpha 9 | |
| Itgb3 | NM_016780.2 | CD61, platelet glycoprotein IIIa (GP3A) | integrin beta 3 | |
| Itgb4 | NM_001005608.2 | CD104 | integrin beta 4 | |
| Itgb6 | NM_001159564.1 | 4831415H04Rik, 2210409C20Rik | integrin beta 6 | |
| Itgb7 | NM_013566.2 | | integrin beta 7 | |
| Itgb8 | NM_177290.3 | 4832412O06Rik | integrin beta 8 | |

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| Jag1 | NM_013822.2 | ABE2, Serrate-1, Htu, Ozz, Headturner, Gsfabe2 | jagged 1 |
| Jag2 | NM_010588.2 | D12Ggc2e, Serh | jagged 2 |
| Jak1 | NM_146145.2 | C130039L05Rik, BAP004 | Janus kinase 1 |
| Jak2 | NM_008413.2 | C81284 | Janus kinase 2 |
| Jak3 | NM_010589.5 | | Janus kinase 3 |
| Jun | NM_010591.2 | Junc, c-jun | jun proto-oncogene |
| Kat2b | NM_001190846.1 | Pcaf, A930006P13Rik | K(lysine) acetyltransferase 2B |
| Kdm5c | NM_013668.3 | Smcx, D930009K15Rik, Jarid1c | lysine (K)-specific demethylase 5C |
| Kdm6a | NM_009483.1 | Utx | lysine (K)-specific demethylase 6A |
| Kdr | NM_010612.2 | vascular endothelial growth factor receptor- 2, VEGF receptor-2, Flk1, VEGFR-2, VEGFR2, Flk-1 | kinase insert domain protein receptor |
| Kit | NM_001122733.1 | Gsfsc05, Gsfscow3, Dominant white spotting, c-KIT, Tr-kit, SOW3, belly-spot, SC05, SCO1, CD117, Steel Factor Receptor, Gsfsc01 | kit oncogene |
| Kitl | NM_013598.1 | blz, Mgf, SLF, Steel, grizzle-belly, SF, SCF, Steel factor, Kitl, stem cell factor, Sl, Gb | kit ligand |
| Klf4 | NM_010637.3 | EZF, Gkif, Zie | Kruppel-like factor 4 (gut) |
| Kmt2c | NM_001081383.1 | E330008K23Rik, MllB3, HALR | lysine (K)-specific methyltransferase 2C |
| Kmt2d | NM_001033276.1 | MllA4, Mll2, C430014K11Rik | lysine (K)-specific methyltransferase 2D |
| Kras | NM_021284.5 | Kras-2, Kras2, Ki-ras, K-ras | Kirsten rat sarcoma viral oncogene homolog |
| Lama1 | NM_008480.2 | Lama | laminin, alpha 1 |
| Lama3 | NM_010680.1 | nicein, 150kDa, [a]3B | laminin, alpha 3 |
| Lama5 | NM_001081171.2 | | laminin, alpha 5 |
| Lamb3 | NM_008484.2 | nicein, 125kDa | laminin, beta 3 |
| Lamc2 | NM_008485.3 | nicein, 100kDa | laminin, gamma 2 |
| Lamc3 | NM_011836.3 | | laminin gamma 3 |
| Lat | NM_010689.2 | | linker for activation of T cells |
| Lef1 | NM_010703.3 | lymphoid enhancer factor 1, Lef-1 | lymphoid enhancer binding factor 1 |
| Lefty1 | NM_010094.3 | Lefty, lefty-1, Ebafl, Stra3 | left right determination factor 1 |
| Lefty2 | NM_177099.3 | Leftb, 6030463A22Rik, Ebafl | left-right determination factor 2 |
| Lep | NM_008493.3 | | leptin |
| Lepr | NM_010704.2 | obl, Modb1, Leprb, OB-RGRP, LEPROT, leptin receptor gene-related protein, Obr, obese-like | leptin receptor |
| Lfng | NM_008494.3 | lunatic fringe | LFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase |
| Lif | NM_008501.2 | | leukemia inhibitory factor |
| Lifr | NM_001113386.1 | soluble differentiation-stimulating factor receptor, A230075M04Rik | leukemia inhibitory factor receptor |
| Lig4 | NM_176953.3 | 5830471N16Rik, tiny, DNA ligase IV | ligase IV, DNA, ATP-dependent |
| Lrp2 | NM_001081088.1 | D230004K18Rik, b2b1625.2Clo, Gp330, Megalin | low density lipoprotein receptor-related protein 2 |
| Ltbp1 | NM_019919.2 | LTBP-1, 9430031G15Rik, b2b1000Clo | latent transforming growth factor beta binding protein 1 |
| Mad2l2 | NM_027985.2 | G1-453-4, MAD2B, repro22, Z310033C13Rik, REV7 | MAD2 mitotic arrest deficient-like 2 |
| Maml2 | NM_001013813.2 | | mastermind like 2 (Drosophila) |
| Map2k1 | NM_008927.3 | Mek1, Prkmk1, MAP kinase kinase 1 | mitogen-activated protein kinase kinase 1 |
| Map2k2 | NM_023138.4 | Prkmk2, MAP kinase/Erk kinase, MEK2 | mitogen-activated protein kinase kinase 2 |
| Map2k4 | NM_009157.4 | MKK4, Sek1, Serk1, JNKK1 | mitogen-activated protein kinase kinase 4 |
| Map2k6 | NM_011943.2 | Prkmk6, MKK6, SAPKK3, MAP kinase kinase 6 | mitogen-activated protein kinase kinase 6 |
| Map3k1 | NM_011945.2 | MEK1, Mekk | mitogen-activated protein kinase kinase kinase 1 |
| Map3k12 | NM_009582.4 | Zpk, DLK, MUK | mitogen-activated protein kinase kinase kinase 12 |
| Map3k13 | NM_172821.3 | C130026N12Rik | mitogen-activated protein kinase kinase kinase 13 |
| Map3k14 | NM_016896.3 | Nik | mitogen-activated protein kinase kinase kinase 14 |
| Map3k5 | NM_008580.4 | Mekk5, ASK1, ASK, 7420452D20Rik | mitogen-activated protein kinase kinase kinase 5 |
| Map3k7 | NM_009316.1 | transforming growth factor beta-activated kinase 1, TGF-beta activated kinase 1, transforming growth factor-beta-activated kinase 1, TAK1, Tak1 | mitogen-activated protein kinase kinase kinase 7 |
| Map3k8 | NM_007746.2 | Cot/Tpl2, Cot, Tpl2, Tpl-2, c-COT | mitogen-activated protein kinase kinase kinase 8 |
| Mapk1 | NM_011949.3 | 9030612K14Rik, MAPK2, p42mapk, Erk2, Prkm1 | mitogen-activated protein kinase 1 |
| Mapk10 | NM_001081567.1 | p493F12, JNK3, Serk2, C230008H04Rik | mitogen-activated protein kinase 10 |
| Mapk12 | NM_013871.3 | Prkm12, P38gamma, Erk6, Sapk3 | mitogen-activated protein kinase 12 |
| Mapk3 | NM_011952.2 | Erk1, p44 MAP kinase, Mtap2k, p44erk1, p44mapk, Esrk1, Erk-1, Prkm3 | mitogen-activated protein kinase 3 |
| Mapk8 | NM_016700.3 | JNK1, Prkm8, c-Jun N-terminal kinase | mitogen-activated protein kinase 8 |
| Mapk8ip1 | NM_001202445.1 | IB1, mjip-2a, MAPK8IP1, Prkm8ip, Skip, JIP-1, Jip1 | mitogen-activated protein kinase 8 interacting protein 1 |
| Mapk8ip2 | NM_021921.2 | Jip2, 3230402N03Rik, JNK-interacting protein, IB2 | mitogen-activated protein kinase 8 interacting protein 2 |
| Mapk9 | NM_001163672.1 | JNK/SAPK alpha, JNK2, Prkm9 | mitogen-activated protein kinase 9 |
| Mapt | NM_001038609.2 | Tau, Mtap | microtubule-associated protein tau |
| Mcm2 | NM_008564.2 | Mcmd2, BM28, CDCL1 | minichromosome maintenance complex component 2 |
| Mcm4 | NM_008565.3 | 19G, Cdc21, Mcmd4, mCdc21 | minichromosome maintenance complex component 4 |
| Mcm5 | NM_008566.2 | Mcmd5, mCD46, Cdc46 | minichromosome maintenance complex component 5 |
| Mcm7 | NM_008568.2 | mCDC47, Mcmd7 | minichromosome maintenance complex component 7 |
| Mdc1 | NM_001010833.2 | NFBD1 | mediator of DNA damage checkpoint 1 |
| Mdm2 | NM_010786.3 | Mdmn-2, 1700007J15Rik | transformed mouse 3T3 cell double minute 2 |
| Mecom | NM_007963.2 | Evi1, Mds1, ZNFPR1B1, Prdm3, Jbo, D630039M04Rik, MDS1-EV11, Evi-1 | MDS1 and EVI1 complex locus |
| Med12 | NM_021521.2 | Trap230, Mopa, OPA-1, Tnrc11 | mediator complex subunit 12 |
| Men1 | NM_008583.2 | menin | multiple endocrine neoplasia 1 |
| Met | NM_008591.1 | Par4, HGF receptor, c-Met | met proto-oncogene |
| Mfng | NM_008595.2 | manic fringe | MFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase |
| Mgmt | NM_008598.2 | Agat, AGT | O-6-methylguanine-DNA methyltransferase |
| Mlf1 | NM_001039543.2 | HL57 | myeloid leukemia factor 1 |
| Mlh1 | NM_026810.2 | colon cancer, nonpolyposis type 2, 1110035C23Rik | mutL homolog 1 (E. coli) |
| Mllt3 | NM_027326.3 | 3830408D16Rik, D4Erd321e, Af9, 2210011H10Rik, 2610012I03Rik | myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 3 |
| Mllt4 | NM_010806.1 | 5033403D15Rik, AF6, S-afadin, I-afadin, Afadin | myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 4 |
| Mmp3 | NM_010809.1 | STR-1, Str1, stromelysin-1, Stmy1, stromelysin 1, progelatinase, SLN-1, SLN1 | matrix metalloproteinase 3 |
| Mmp7 | NM_010810.4 | MAT, matrilysin | matrix metalloproteinase 7 |

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| Mmp9 | NM_013599.2 | B/MMP9, MMP-9, Gel B, gelatinase B, Clg4b, Gelatinase B | matrix metalloproteinase 9 |
| Mnat1 | NM_008612.2 | MAT1, E130115E11Rik | menage a trois 1 |
| Mpl | NM_001122949.1 | TPO-R, c-mpl-I, thrombopoietin receptor, c-mpl, c-mpl-II, CD110, hlb219 | myeloproliferative leukemia virus oncogene |
| Mpo | NM_010824.2 | | myeloperoxidase |
| Msh2 | NM_008628.2 | | mutS homolog 2 (E. coli) |
| Msh6 | NM_010830.1 | Msh6, Gtmbp, GTBP | mutS homolog 6 (E. coli) |
| Mtor | NM_020009.2 | RAP1, RAFT1, Frap1, 2610315D21Rik, flat, FKBP-rapamycin-associated protein FRAP | mechanistic target of rapamycin (serine/threonine kinase) |
| Mutyh | NM_001159581.1 | Mutyhalpha, Mutyha, Mutyhb, Myh, Mutyhc, 5730495A01Rik, Mutyhbeta | mutY homolog (E. coli) |
| Myb | NM_010848.3 | c-myb | myeloblastosis oncogene |
| Myc | NM_010849.4 | Myc2, Nird, c-myc, bHLHe39, Niard | myelocytomatosis oncogene |
| Mycn | NM_008709.3 | Nmyc-1, N-myc, Nmyc1, bHLHe37, Nmyc | v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian) |
| Myd88 | NM_010851.2 | | myeloid differentiation primary response gene 88 |
| Nasp | NM_001081475.1 | D4Ertd767e, Epcs32, 5033430J04Rik, Nasp-T | nuclear autoantigenic sperm protein (histone-binding) |
| Nbn | NM_013752.3 | Nbs1 | nibrin |
| Ncor1 | NM_011308.2 | Rxrip13, 5730405M06Rik, N-CoR, A230020K14Rik | nuclear receptor co-repressor 1 |
| Nf1 | NM_010897.2 | Dsk9, neurofibromin, Mhdadsk9, NF-1 | neurofibromatosis 1 |
| Nf2 | NM_001252252.1 | schwannomin, moesin-ezrin-radixin-like protein, merlin | neurofibromatosis 2 |
| Nfatc1 | NM_016791.4 | 2210017P03Rik, NF-ATc, NFAT2, NFATc | nuclear factor of activated T cells, cytoplasmic, calcineurin dependent 1 |
| Nfe2l2 | NM_010902.3 | Nrf2 | nuclear factor, erythroid derived 2, like 2 |
| Nfkb1 | NM_008689.2 | p50/p105, NF-kappaB, p50 subunit of NF kappaB, NF-kappaB p50, NF kappaB1, nuclear factor kappaB p50, p50 | nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 |
| Nfkbia | NM_010907.1 | Nfkbj, (Kappa)B(alpha), IkappaBalpha, I-kappaBalpha | nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, alpha |
| Nfkbiz | NM_030612.1 | Mail | nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, zeta |
| Ngf | NM_001112698.1 | Ngfb | nerve growth factor |
| Ngfr | NM_033217.3 | LNGFR, p75NGFR, p75, Tnfrsf16, p75NTR, p75 neurotrophin receptor | nerve growth factor receptor (TNFR superfamily, member 16) |
| Nkd1 | NM_027280.3 | 2810434J10Rik, 9030215G15Rik | naked cuticle 1 homolog (Drosophila) |
| Nodal | NM_013611.4 | Tg.413d | nodal |
| Nog | NM_008711.2 | | noggin |
| Nos3 | NM_008713.4 | 2310065A03Rik, eNOS, Nos-3, ecNOS | nitric oxide synthase 3, endothelial cell |
| Notch1 | NM_008714.2 | Mis6, lin-12, 9930111A19Rik, Tan1, Motch A, N1 | notch 1 |
| Notch2 | NM_010928.1 | Motch B, N2 | notch 2 |
| Notch3 | NM_008716.2 | N3, hpbk | notch 3 |
| Npm1 | NM_008722.2 | NO38, B23, nucleolar protein NO38 | nucleophosmin 1 |
| Npm2 | NM_181345.3 | | nucleophosmin/nucleoplasmin 2 |
| Nr4a1 | NM_010444.1 | N10, Hmr, Gfrp, NGFI-B, TIS1, Nur77, Hbr1, GFRP1, NP10, Hbr-1, TR3 | nuclear receptor subfamily 4, group A, member 1 |
| Nr4a3 | NM_015743.3 | NOR-1, Nor1, TEC, MINOR | nuclear receptor subfamily 4, group A, member 3 |
| Nras | NM_010937.2 | N-ras | neuroblastoma ras oncogene |
| Nsd1 | NM_008739.3 | KMT3B | nuclear receptor-binding SET-domain protein 1 |
| Ntf3 | NM_008742.2 | NT3, Ntf-3, NT-3 | neurotrophin 3 |
| Nth1 | NM_008743.2 | Nth1 | nth (endonuclease III)-like 1 (E.coli) |
| Ntrk1 | NM_001033124.1 | Tkr, TrkA | neurotrophic tyrosine kinase, receptor, type 1 |
| Ntrk2 | NM_001025074.1 | C030027L06Rik, Tkrb, trkB | neurotrophic tyrosine kinase, receptor, type 2 |
| Numbl | NM_010950.2 | nbl | numb-like |
| Nupr1 | NM_019738.1 | Com1, 2310032H04Rik, p8 | nuclear protein transcription regulator 1 |
| Osm | NM_001013365.2 | OncoM | oncostatin M |
| Pak3 | NM_001195046.1 | PAK-3 | p21 protein (Cdc42/Rac)-activated kinase 3 |
| Pak7 | NM_172858.2 | 2900083L08Rik, Pak5 | p21 protein (Cdc42/Rac)-activated kinase 7 |
| Pax3 | NM_001159520.1 | Splchl2, Pax-3 | paired box 3 |
| Pax5 | NM_008782.2 | EBB-1, Pax-5 | paired box 5 |
| Pax8 | NM_011040.4 | Pax-8 | paired box 8 |
| Pbrm1 | NM_001081251.1 | BAF180, 2310032M22Rik, 2610016F04Rik, Pb1 | polybromo 1 |
| Pbx1 | NM_008783.2 | Pbx-1, D230003C07Rik, Pbx1a, 2310056B04Rik, Pbx1b | pre B cell leukemia homeobox 1 |
| Pbx3 | NM_016768.1 | | pre B cell leukemia homeobox 3 |
| Pck1 | NM_011044.2 | PEPCK, Pck-1 | phosphoenolpyruvate carboxykinase 1, cytosolic |
| Pcna | NM_011045.2 | | proliferating cell nuclear antigen |
| Pdgfa | NM_008808.3 | | platelet derived growth factor, alpha |
| Pdgfb | NM_011057.3 | Sis, PDGF-B | platelet derived growth factor, B polypeptide |
| Pdgfc | NM_019971.2 | 1110064L01Rik, PDGF-C | platelet-derived growth factor, C polypeptide |
| Pdgfd | NM_027924.2 | 1110003I09Rik | platelet-derived growth factor, D polypeptide |
| Pdgfra | NM_001083316.1 | Pdgfr-2, CD140a | platelet derived growth factor receptor, alpha polypeptide |
| Pdgfrb | NM_008809.1 | CD140b, Pdgfr | platelet derived growth factor receptor, beta polypeptide |
| Pgf | NM_008827.2 | placenta growth factor, PLGF, PIGF | placental growth factor |
| Phf6 | NM_027642.1 | 2700007B13Rik, 4931428F02Rik | PHD finger protein 6 |
| Pias1 | NM_019663.3 | Ddxbp1, GBP, 2900068C24Rik | protein inhibitor of activated STAT 1 |
| Pik3ca | NM_008839.1 | 6330412C24Rik, caPI3K, p110alpha | phosphatidylinositol 3-kinase, catalytic, alpha polypeptide |
| Pik3cb | NM_029094.3 | 1110001J02Rik, p110beta | phosphatidylinositol 3-kinase, catalytic, beta polypeptide |
| Pik3cd | XM_003945690.1 | 2610208K16Rik, 2410099E07Rik, p110delta | phosphatidylinositol 3-kinase catalytic delta polypeptide |
| Pik3cg | NM_020272.2 | 5830428L06Rik, PI3K<gamma>, p110gamma, PI(3)Kgamma, PI3Kgamma | phosphoinositide-3-kinase, catalytic, gamma polypeptide |
| Pik3r1 | NM_001024955.1 | p50alpha, p55alpha, p85alpha, PI3K | phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 1 (p85 alpha) |
| Pik3r2 | NM_008841.2 | p85beta | phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 2 (p85 beta) |
| Pik3r3 | NM_181585.5 | p55pik | phosphatidylinositol 3 kinase, regulatory subunit, polypeptide 3 (p55) |
| Pik3r5 | NM_177320.2 | F730038I15Rik | phosphoinositide-3-kinase, regulatory subunit 5, p101 |
| Pim1 | NM_008842.3 | Pim-1 | proviral integration site 1 |

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| Pitx2 | NM_001042502.1 | Brx1a, Ptx2, Munc30, solurshin, Pitx2c, Pitx2a, Brx1b, Otx2, Brx1, Rieg, Pitx2b | paired-like homeodomain transcription factor 2 |
| Pkmyt1 | NM_023058.3 | Myt1 | protein kinase, membrane associated tyrosine/threonine 1 |
| Pla1a | NM_134102.2 | | withdrawn, = Lypla1 |
| Pla2g10 | NM_011987.2 | mGXsPLA2, PLA2GX, GX sPLA2 | phospholipase A2, group X |
| Pla2g2a | NM_001082531.1 | modifier of Min1, EF, Enhancing factor | phospholipase A2, group IIA (platelets, synovial fluid) |
| Pla2g3 | NM_172791.2 | 9130003P18Rik | phospholipase A2, group III |
| Pla2g4a | NM_008869.2 | cytosolic phospholipase A2, cytosolic PLA2, Type IV PLA2, cPLA2, Pla2g4, cPLA2alpha | phospholipase A2, group IVA (cytosolic, calcium-dependent) |
| Pla2g4c | NM_001168504.1 | CPLA2-gamma | phospholipase A2, group IVC (cytosolic, calcium-independent) |
| Pla2g4e | NM_177845.4 | 2310026J01Rik, Pla2epsilon | phospholipase A2, group IVE |
| Pla2g4f | NM_001024145.2 | Pla2zeta, 4732472I07Rik | phospholipase A2, group IVF |
| Pla2g5 | NM_001122954.1 | sPLA2 | phospholipase A2, group V |
| Plat | NM_008872.1 | t-PA, tPA, D8Erd2e | plasminogen activator, tissue |
| Plau | NM_008873.2 | urokinase-type plasminogen activator, u-PA, uPA | plasminogen activator, urokinase |
| Plcb1 | NM_019677.1 | 3110043I21Rik | phospholipase C, beta 1 |
| Plcb4 | NM_013829.2 | C230058B11Rik, A930039J07Rik | phospholipase C, beta 4 |
| Plce1 | NM_019588.2 | PLCEpsilon, 4933403A21Rik | phospholipase C, epsilon 1 |
| Plcg2 | NM_172285.1 | Plcg-2, PLCgamma2 | phospholipase C, gamma 2 |
| Pld1 | NM_001164056.1 | Pld1a, Pld1b | phospholipase D1 |
| Pml | NM_008884.5 | 1200009E24Rik, Trim19 | promyelocytic leukemia |
| Polb | NM_011130.2 | Pol beta, A430088C08Rik | polymerase (DNA directed), beta |
| Pold1 | NM_011131.3 | 125kDa | polymerase (DNA directed), delta 1, catalytic subunit |
| Pold4 | NM_027196.3 | DNA polymerase delta smallest subunit p12, p12, 2410012M21Rik | polymerase (DNA-directed), delta 4 |
| Pole2 | NM_011133.2 | DNA polymerase epsilon small subunit | DNA polymerase (DNA directed), epsilon 2 (p59 subunit) |
| Poir2d | NM_027002.3 | 2310002G05Rik, HSRBP4, RBP4, 2610028L19Rik | polymerase (RNA II) (DNA directed) polypeptide D |
| Poir2h | NM_145632.2 | | polymerase (RNA II) (DNA directed) polypeptide H |
| Poir2j | NM_011293.2 | Rpo2-4, Rpb11a, 14.5kDa, RNA polymerase II subunit RPB14 | polymerase (RNA II) (DNA directed) polypeptide J |
| Pparg | NM_011146.1 | PPARGgamma2, PPARgamma, PPAR-gamma, Ppar-gamma2, Nr1c3 | peroxisome proliferator activated receptor gamma |
| Ppargc1a | NM_008904.2 | Gm1133, A830037N07Rik, Pgc1, PPAR Gamma Coactivator-1, Pgc-1alpha, Pgc1, Pgc-1alphaa | peroxisome proliferative activated receptor, gamma, coactivator 1 alpha |
| Ppp2cb | NM_017374.3 | PP2Ac, D8Erd766e | protein phosphatase 2 (formerly 2A), catalytic subunit, beta isoform |
| Ppp2r1a | NM_016891.3 | protein phosphatase PP2A, PP2A, PR65, 6330556D22Rik | protein phosphatase 2, regulatory subunit A, alpha |
| Ppp2r2b | NM_028392.3 | 6330404L05Rik, SCA12, PP2A-PR55B, 2900026H06Rik, PR55-BETA, E130009M08Rik | protein phosphatase 2, regulatory subunit B, beta |
| Ppp2r2c | NM_172994.2 | IMYPN01, PR52, 6330548O06Rik | protein phosphatase 2, regulatory subunit B, gamma |
| Ppp3ca | NM_008913.4 | PP2BA alpha, PP2B alpha 1, Caln, CnA, 2900074D19Rik, CN, Calna | protein phosphatase 3, catalytic subunit, alpha isoform |
| Ppp3cb | NM_008914.1 | Cnab, PP2BA beta, 1110063J16Rik, Calnb, CnAbeta | protein phosphatase 3, catalytic subunit, beta isoform |
| Ppp3cc | NM_008915.2 | Calnc, PP2BA gamma | protein phosphatase 3, catalytic subunit, gamma isoform |
| Ppp3r1 | NM_024459.2 | PP2B beta 1, CaNB1, Cnb1 | protein phosphatase 3, regulatory subunit B, alpha isoform (calcineurin B, type I) |
| Ppp3r2 | NM_001004025.4 | PP2B beta 2, CnB2, CaNB2 | protein phosphatase 3, regulatory subunit B, alpha isoform (calcineurin B, type II) |
| Prdm1 | NM_007548.3 | PRDI-BF1, b2b1765Clo, Blimp-1, Blimp1 | PR domain containing 1, with ZNF domain |
| Prkaa2 | NM_178143.1 | AMPKalpha2, 2310008I11Rik | protein kinase, AMP-activated, alpha 2 catalytic subunit |
| Prkaca | NM_008854.3 | C alpha, Cs, PKA, Pkaca | protein kinase, cAMP dependent, catalytic, alpha |
| Prkacb | NM_011100.3 | Pkacb, cAMP-dependent protein kinase C beta | protein kinase, cAMP dependent, catalytic, beta |
| Prkar1b | NM_008923.2 | Ribeta | protein kinase, cAMP dependent regulatory, type I beta |
| Prkar2a | NM_008924.2 | Rii(alpha), 1110061A24Rik | protein kinase, cAMP dependent regulatory, type II alpha |
| Prkar2b | NM_011158.3 | Rii(beta), PKARIIbeta, Pkarb2 | protein kinase, cAMP dependent regulatory, type II beta |
| Prkca | NM_011101.3 | Pkca | protein kinase C, alpha |
| Prkcb | NM_008855.2 | A130082F03Rik, PKC-Beta, Prkcb2, Prkcb1, Pkcb | protein kinase C, beta |
| Prkcg | NM_011102.3 | Pkcc, PKCgamma, Prkcc | protein kinase C, gamma |
| Prkdc | NM_011159.2 | slip, DNA-PKcs, XRCC7, DNAPDcs, DOXNPH, DNA-PK, dxnph | protein kinase, DNA activated, catalytic polypeptide |
| Prkx | NM_016979.1 | Pkare | protein kinase, X-linked |
| Prl | NM_011164.1 | Prl, Prl1a1 | prolactin |
| Prlr | NM_011169.5 | Prlr-rs1, Pr-1 | prolactin receptor |
| Prmt8 | NM_201371.1 | Hrmt113, Hrmt114 | protein arginine N-methyltransferase 8 |
| Prom1 | NM_001163577.1 | Prom-1, CD133, AC133, Prom, 4932416E19Rik | prominin 1 |
| Ptch1 | NM_008957.2 | Patched 1, Ptc1, Ptc, A230106A15Rik | patched homolog 1 |
| Ptcr1 | NM_011195.2 | pTalpha, pT-alpha, pT[a] | pre T cell antigen receptor alpha |
| Pten | NM_008960.2 | A130070J02Rik, TEP1, B430203M17Rik, MMAC1, 2310035O07Rik | phosphatase and tensin homolog |
| Ptk2 | NM_007982.2 | FRNK, Fadh, FAK | PTK2 protein tyrosine kinase 2 |
| Ptpn11 | NM_011202.3 | PTP1D, SH-PTP2, 2700084A17Rik, Syp, PTP2C, Shp2, SHP-2, SH2 domain-containing protein tyrosine phosphatase-2 | protein tyrosine phosphatase, non-receptor type 11 |
| Ptpn5 | NM_001163565.1 | Step | protein tyrosine phosphatase, non-receptor type 5 |
| Ptprr | NM_011217.2 | RTPPRR, PTPBR7, PTP-SL | protein tyrosine phosphatase, receptor type, R |
| Rac1 | NM_009007.2 | D5Erdt559e | RAS-related C3 botulinum substrate 1 |
| Rac2 | NM_009008.3 | | RAS-related C3 botulinum substrate 2 |
| Rac3 | NM_133223.4 | Rac1B | RAS-related C3 botulinum substrate 3 |
| Rad21 | NM_009009.4 | SCC1 | RAD21 cohesin complex component |
| Rad50 | NM_009012.2 | Mrell, Rad50I | RAD50 homolog (S. cerevisiae) |
| Rad51 | NM_011234.4 | Rad51a, Reca | RAD51 homolog |
| Rad52 | NM_001166381.1 | | RAD52 homolog (S. cerevisiae) |
| Raf1 | NM_029780.3 | c-Raf, 6430402F14Rik, Raf-1, v-Raf, sarcoma 3611 oncogene, Crafl | v-raf-leukemia viral oncogene 1 |
| Rasa4 | NM_001039103.2 | | RAS p21 protein activator 4 |
| Rasa1 | NM_013832.4 | MRASAL | RAS protein activator like 1 (GAP1 like) |
| Rasgrf1 | NM_011245.2 | Grf1, CDC25Mm, Grfbeta, CDC25 | RAS protein-specific guanine nucleotide-releasing factor 1 |
| Rasgrf2 | NM_009027.3 | 6330417G04Rik, Grf2 | RAS protein-specific guanine nucleotide-releasing factor 2 |

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| Rasgrp1 | NM_011246.2 | | RAS guanyl releasing protein 1 |
| Rasgrp2 | NM_011242.2 | Caldaggef1, CalDAG-GEFI | RAS, guanyl releasing protein 2 |
| Rb1 | NM_009029.2 | pRb, Rb-1, Rb | retinoblastoma 1 |
| Rbx1 | NM_019712.3 | 1500002P15Rik, ROC1 | ring-box 1 |
| Rel | NM_009044.2 | c-Rel | reticuloendotheliosis oncogene |
| Rela | NM_009045.4 | p65 NF kappaB, p65 | v-rel reticuloendotheliosis viral oncogene homolog A (avian) |
| Reln | NM_011261.2 | | reelin |
| Ret | NM_001080780.1 | RET9, c-Ret, RET51 | ret proto-oncogene |
| Rfc3 | NM_027009.2 | 38kDa, 38kDa, 2810416I22Rik, Recc3 | replication factor C (activator 1) 3 |
| Rfc4 | NM_145480.1 | RFC37, A1 | replication factor C (activator 1) 4 |
| Rhoa | NM_016802.4 | Arha1, Arha, Arha2, RhoA | ras homolog gene family, member A |
| Rin1 | NM_145495.2 | | Ras and Rab interactor 1 |
| Rnf43 | NM_172448.3 | 4732452J19Rik | ring finger protein 43 |
| Rpa3 | NM_026632.4 | C330026P08Rik, 14kDa | replication protein A3 |
| Rps27a | NM_024277.2 | 0610006J14Rik | ribosomal protein S27A |
| Rps6ka5 | NM_153587.2 | 6330404E13Rik, MSK1, 3110005L17Rik | ribosomal protein S6 kinase, polypeptide 5 |
| Rps6ka6 | NM_025949.2 | RSK4, 2610524K04Rik | ribosomal protein S6 kinase polypeptide 6 |
| Rras2 | NM_025846.2 | 2610016H24Rik, TC21 | related RAS viral (r-ras) oncogene homolog 2 |
| Runx1 | NM_001111021.1 | runt domain, alpha subunit 2, Cbfa2, AML1, Pebp2a2 | runt related transcription factor 1 runt-related transcription factor 1; translocated to, 1 (cyclin D-related) |
| Runx1t1 | NM_001111026.1 | ETO, MTG8, Cbfa2t1h | |
| Rxrg | NM_001159731.1 | Nr2b3 | retinoid X receptor gamma |
| Setbp1 | NM_053099.2 | Seb | SET binding protein 1 |
| Setd2 | NM_001081340.2 | 4921524K10Rik, KMT3A | SET domain containing 2 |
| Sf3b1 | NM_031179.2 | Prp10, SAP155, Targ4, SF3b155, 2810001M05Rik | splicing factor 3b, subunit 1 |
| Sfn | NM_018754.2 | Er, 14-3-3 sigma, Ywhas, MME1 | stratifin |
| Sfrp1 | NM_013834.2 | sFRP-1, 2210415K03Rik | secreted frizzled-related protein 1 |
| Sfrp2 | NM_009144.2 | Sdf5 | secreted frizzled-related protein 2 |
| Sfrp4 | NM_016687.2 | | secreted frizzled-related protein 4 |
| Sgk2 | NM_001291152.1 | | serum/glucocorticoid regulated kinase 2 |
| Shc1 | NM_011368.4 | p66shc, p66, ShcA | src homology 2 domain-containing transforming protein C1 |
| Shc2 | NM_001024539.1 | ShcB, Sli | SHC (Src homology 2 domain containing) transforming protein 2 |
| Shc3 | NM_009167.3 | Rai, ShcC, N-Shc | src homology 2 domain-containing transforming protein C3 |
| Shc4 | NM_199022.2 | 6230417E10Rik, 9930029B02Rik, LOC271849 | SHC (Src homology 2 domain containing) family, member 4 |
| Sin3a | NM_001110350.1 | mSin3A, Sin3 | transcriptional regulator, SIN3A (yeast) |
| Sirt4 | XM_485674.5 | 4930596O17Rik | sirtuin 4 |
| Six1 | NM_009189.2 | | sine oculis-related homeobox 1 |
| Skp1a | NM_011543.4 | 2610043E24Rik, 2610206H23Rik, p19Skp1, Teeb1 | S-phase kinase-associated protein 1A |
| Skp2 | NM_013787.2 | FBXL1 | S-phase kinase-associated protein 2 (p45) |
| Smad1 | NM_008539.3 | Madr1, Smad 1, Madh1 | SMAD family member 1 |
| Smad2 | NM_010754.4 | Madh2, Madr2, 7120426M23Rik, Smad 2 | SMAD family member 2 |
| Smad3 | NM_016769.3 | Madh3, Smad 3 | SMAD family member 3 |
| Smad4 | NM_008540.2 | Smad 4, DPC4, D18Wsu70e, Dpc4, Madh4 | SMAD family member 4 |
| Smad9 | NM_019483.4 | SMAD8B, MADH6, SMAD8A, Madh9 | SMAD family member 9 |
| Smarca4 | NM_011417.2 | b2b508.1Clo, b2b692Clo, Brg1, SW1/SNF, SNF2beta | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4 |
| Smarca4 | NM_011417.2 | SNF5/INI1, Snf5, Ini1, Baf47, integrase interactor 1 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1 |
| Smarca4 | NM_011417.2 | Smc11l, SMCB, Smc1, SB1.8, 5830426I24Rik, Smc1alpha | structural maintenance of chromosomes 1A |
| Smarca4 | NM_011417.2 | Smc12, SMC1beta | structural maintenance of chromosomes 1B |
| Smarca4 | NM_011417.2 | Mimp1, SmcD, Bamacan, Cspg6 | structural maintenance of chromosomes 3 |
| Smarca4 | NM_011417.2 | E130215L21Rik | smoothed, frizzled class receptor |
| Smarca4 | NM_011417.2 | Cish7, JAK-binding protein, JAK2-binding protein, SSI-1, STAT-induced STAT inhibitor 1, SOCS-1, JAB, Cish1 | suppressor of cytokine signaling 1 |
| Smarca4 | NM_011417.2 | JAB, CIS2, SSI-2, STAT-induced STAT inhibitor 2, SOCS-2, cytokine-inducible SH2 protein 2, Cish2, D130043N08Rik | suppressor of cytokine signaling 2 |
| Smarca4 | NM_011417.2 | Cish3, EF-10, cytokine-inducible SH2 protein 3, E2a-Pbx1 target gene in fibroblasts 10, CIS3, SSI-3, STAT-induced STAT inhibitor 3, SOCS-3 | suppressor of cytokine signaling 3 |
| Sos1 | NM_009231.2 | 4430401P03Rik | son of sevenless homolog 1 (Drosophila) |
| Sos2 | NM_001135559.1 | | son of sevenless homolog 2 (Drosophila) |
| Sost | NM_024449.4 | 5430411E23Rik | sclerostin |
| Sox17 | NM_011441.4 | | SRY (sex determining region Y)-box 17 |
| Sox9 | NM_011448.4 | 2010306G03Rik | SRY (sex determining region Y)-box 9 |
| Sp1 | NM_013672.2 | Sp1-1, 1110003E12Rik | trans-acting transcription factor 1 |
| Spop | NM_025287.2 | TEF2, Pcf1f | speckle-type POZ protein |
| Spp1 | NM_009263.3 | Opnl, Ric, minopontin, ETA-1, BNSP, 2ar, Apl-1, bone sialoprotein 1, OP, osteopontin-like protein, 44kDa bone phosphoprotein, osteopontin, Spp-1, Opn | secreted phosphoprotein 1 |
| Spry1 | NM_011896.2 | sprouty1, sprouty 1 | sprouty homolog 1 (Drosophila) |
| Spry2 | NM_011897.3 | sprouty2 | sprouty homolog 2 (Drosophila) |
| Spry4 | NM_011898.2 | sprouty4, A030006O18Rik | sprouty homolog 4 (Drosophila) |
| Srsf2 | NM_011358.2 | MRF-1, SC35, Sfrs10, D11Wsu175e, Sfrs2 | serine/arginine-rich splicing factor 2 |
| Stag2 | NM_001077712.1 | nuclear protein SA2, SA-2, 9230105L23Rik, SAP2, B230112I07Rik | stromal antigen 2 |
| Stat1 | NM_009283.3 | 2010005J02Rik | signal transducer and activator of transcription 1 |
| Stat3 | NM_213659.2 | Aprrf, 1110034C02Rik | signal transducer and activator of transcription 3 |
| Stat4 | NM_011487.4 | | signal transducer and activator of transcription 4 |
| Stk11 | NM_011492.3 | Lkb1, Par-4 | serine/threonine kinase 11 |
| Stk4 | NM_021420.3 | Kas-2, sterile 20-like kinase 1, Ysk3, Mst1 | serine/threonine kinase 4 |
| Stmn1 | NM_019641.3 | PP18, PR22, oncoprotein18, pig, SMN, metablastin, op18, leukemia associated phosphoprotein p18, prosolin, p18, Lap18, p19, Lag, PP17, 19K | stathmin 1 |
| Sufu | NM_001025391.1 | 2810026F04Rik, b2b273Clo, Su(Fu) | suppressor of fused homolog (Drosophila) |

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|---------------------------|----------------|--|---------------------------|--|
| Suv39h2 | NM_022724.3 | KMT1B, 4930507K23Rik, D2Erd544e, Suv39h | histone methyltransferase | suppressor of variegation 3-9 homolog 2 (Drosophila) |
| Syk | NM_011518.2 | Sykb | | spleen tyrosine kinase |
| Tbl1xr1 | NM_030732.3 | C21, A630076E03Rik, 8030499H02Rik, C23008912Rik, Ira1, TBLR1, DC42 | | transducin (beta)-like 1X-linked receptor 1 |
| Tcf3 | NM_001164147.1 | ALF2 | | transcription factor 3 |
| Tcf7l1 | NM_001079822.2 | Tcf3 | | transcription factor 7 like 1 (T cell specific, HMG box) |
| Tet2 | NM_001040400.2 | E130014J05Rik, Ayu17-449 | | tet methylcytosine dioxygenase 2 |
| Tfdp1 | NM_009361.2 | Dp1, Drif1 | | transcription factor Dp 1 |
| Tgfb1 | NM_011577.1 | TGFbeta1, Tgfb, TGF-beta 1, Tgfb-1, TGF-beta1 | | transforming growth factor, beta 1 |
| Tgfb2 | NM_009367.1 | Tgfb-2, Tgf-beta2 | | transforming growth factor, beta 2 |
| Tgfb3 | NM_009368.2 | Tgfb-3 | | transforming growth factor, beta 3 |
| Tgfb1r1 | NM_009370.2 | TbetaR-I, TbetaRI, Alk-5, ALK5 | | transforming growth factor, beta receptor I |
| Tgfb2r2 | NM_009371.2 | TbetaR-II, TBR-II, TbetaRII, 1110020H15Rik | | transforming growth factor, beta receptor II |
| Thbs1 | NM_011580.3 | TSP1, TSP-1, Thbs-1, tbsp1 | | thrombospondin 1 |
| Thbs4 | NM_011582.3 | TSP-4, TSP4 | | thrombospondin 4 |
| Them4 | NM_029431.1 | 2700077M13Rik, 4921507I02Rik | | thioesterase superfamily member 4 |
| Tiam1 | NM_009384.2 | D16lum10, D16lum10e | | T cell lymphoma invasion and metastasis 1 |
| Tlr2 | NM_011905.2 | Ly105 | | toll-like receptor 2 |
| Tlr4 | NM_021297.2 | Ras12-8, Lps, lipopolysaccharide response | | toll-like receptor 4 |
| Tlx1 | NM_021901.3 | Hox-11, Hox11 | | T cell leukemia, homeobox 1 |
| Tmprss2 | NM_015775.2 | D16Erd61e, epitheliasin | | transmembrane protease, serine 2 |
| Tnc | NM_011607.1 | TN-C, cytactin, tenascin-C, Hxb, C130033P17Rik, hexabrachion, TN | | tenascin C |
| Tnf | NM_013693.1 | TNFalpha, Tnfa, TNF-alpha, Tnfs1a, tumor | | tumor necrosis factor |
| Tnfaip3 | NM_009397.2 | A20, zinc finger protein A20, Tnfp3 | | tumor necrosis factor, alpha-induced protein 3 |
| Tnfrsf10b | NM_020275.3 | TRICK2A, KILLER, TRAIL-R2, TRICKB, TRAILR2, TRICK2B, DR5, Killer/Dr5, Ly98, Trail Receptor | | tumor necrosis factor receptor superfamily, member 10b |
| Tnfsf10 | NM_009425.2 | APO-2L, A330042I21Rik, Trail | | tumor necrosis factor (ligand) superfamily, member 10 |
| Tnn | NM_177839.2 | tenascin-W, Tnw | | tenascin N |
| Tnr | NM_022312.3 | janusin, TN-R, restrictin, J1-tenascin | | tenascin R |
| Top2a | NM_011623.2 | Top-2, DNA Topoisomerase II alpha | | topoisomerase (DNA) II alpha |
| Tpo | NM_009417.2 | | | thyroid peroxidase |
| Traf7 | NM_153792.1 | RFWD1 | | TNF receptor-associated factor 7 |
| Trp53 | NM_011640.1 | p44, p53 | | transformation related protein 53 |
| Tsc1 | NM_022887.3 | hamartin | | tuberous sclerosis 1 |
| Tsc2 | NM_001039363.1 | tuberin, Nafld | | tuberous sclerosis 2 |
| Tshr | NM_00113404.1 | hypothyroid, pet, hyt | | thyroid stimulating hormone receptor |
| Tslp | NM_021367.1 | | | thymic stromal lymphopoietin |
| Tspan7 | NM_019634.2 | Tm4sf2, 1200014P11Rik, A15, PE31, Cd231, TALLA | | tetraspanin 7 |
| Ttk | NM_009445.2 | Mps1, Esk1 | | Ttk protein kinase |
| U2af1 | NM_001163769.1 | 35kDa, 2010107D16Rik | | U2 small nuclear ribonucleoprotein auxiliary factor (U2AF) 1 |
| Ubb | NM_011664.3 | Ubb2 | | ubiquitin B |
| Ube2t | NM_001278115.1 | 2700084L22Rik | | ubiquitin-conjugating enzyme E2T |
| Uty | NM_009484.2 | Hydb | | ubiquitously transcribed tetratricopeptide repeat gene, Y chromosome |
| Vegfa | NM_001025250.3 | Vegf, VEGF120, VEGF188, VEGF-A, VPF, VEGF164 | | vascular endothelial growth factor A |
| Vegfb | NM_011697.2 | Vrf, VEGF-B | | vascular endothelial growth factor B |
| Vegfc | NM_009506.2 | VEGF-C | | vascular endothelial growth factor C |
| Vhl | NM_009507.3 | Vhlh, pVHL | | von Hippel-Lindau tumor suppressor |
| Wee1 | NM_009516.3 | Wee1A | | WEE 1 homolog 1 (S. pombe) |
| Whsc1 | NM_001081102.2 | Whsc1l, D930023B08Rik, 5830445G22Rik, C130020C13Rik, 9430010A17Rik, D030027O06Rik | | Wolf-Hirschhorn syndrome candidate 1 (human) |
| Whsc1l1 | NM_001001735.1 | WHISTLE | | Wolf-Hirschhorn syndrome candidate 1-like 1 (human) |
| Wif1 | NM_011915.1 | WIF-1 | | Wnt inhibitory factor 1 |
| Wnt1 | NM_021279.4 | Int-1, Wnt-1 | | wingless-type MMTV integration site family, member 1 |
| Wnt10a | NM_009518.1 | | | wingless-type MMTV integration site family, member 10A |
| Wnt10b | NM_011718.1 | Wnt12 | | wingless-type MMTV integration site family, member 10B |
| Wnt11 | NM_001285792.1 | | | wingless-type MMTV integration site family, member 11 |
| Wnt16 | NM_053116.3 | E130309119Rik | | wingless-type MMTV integration site family, member 16 |
| Wnt2 | NM_023653.4 | Mirp, lrp, Wnt-2, 2610510E18Rik, Wnt2a, Int111, m-irp | | wingless-type MMTV integration site family, member 2 |
| Wnt2b | NM_009520.3 | Wnt13 | | wingless-type MMTV integration site family, member 2B |
| Wnt3 | NM_009521.2 | Wnt-3, Int-4 | | wingless-type MMTV integration site family, member 3 |
| Wnt3a | NM_009522.2 | Wnt-3a | | wingless-type MMTV integration site family, member 3A |
| Wnt4 | NM_009523.1 | Wnt-4 | | wingless-type MMTV integration site family, member 4 |
| Wnt5a | NM_009524.2 | 8030457G12Rik, Wnt-5a | | wingless-type MMTV integration site family, member 5A |
| Wnt5b | NM_009525.3 | Wnt-5b | | wingless-type MMTV integration site family, member 5B |
| Wnt6 | NM_009526.3 | Wnt-6 | | wingless-type MMTV integration site family, member 6 |
| Wnt7a | NM_009527.3 | Wnt-7a, tw | | wingless-type MMTV integration site family, member 7A |
| Wnt7b | NM_009528.2 | Wnt-7b | | wingless-type MMTV integration site family, member 7B |
| Wt1 | NM_144783.2 | Wt-1, D630046I19Rik | | Wilms tumor 1 homolog |
| Xpa | NM_011728.2 | Xpac | | xeroderma pigmentosum, complementation group A |
| Xpc | NM_009531.2 | | | xeroderma pigmentosum, complementation group C |
| Xrcc4 | NM_028012.4 | 2310057B22Rik | | X-ray repair complementing defective repair in Chinese hamster cells 4 |
| Zak | NM_023057.5 | MLTKalpha, B230120H23Rik, MLTKbeta | | sterile alpha motif and leucine zipper containing kinase AZK |
| Zbtb16 | NM_001033324.2 | PLZF, Green's luxoid, Zfp145 | | zinc finger and BTB domain containing 16 |
| Zbtb32 | NM_021397.2 | 4930524C15Rik, Tzfp, PLZF, Rog | | zinc finger and BTB domain containing 32 |
| Zic2 | NM_009574.3 | GENA 29, odd-paired homolog, Ku | | zinc finger protein of the cerebellum 2 |
| Internal Reference | | | | |
| Genes | | | | |
| Abcf1 | NM_013854.1 | GCN20, D17Wsu166e, Abc50 | | ATP-binding cassette, sub-family F (GCN20), member 1 |
| Alas1 | NM_020559.2 | Alas-1, ALAS-N, succinyl-CoA: glycine C-succinyl transferase, 5-aminolevulinic acid synthase | | aminolevulinic acid synthase 1 |
| Edc3 | NM_153799.3 | Lsm16, Yjdc | | enhancer of mRNA decapping 3 |
| Eef1g | NM_026007.4 | EF1G, 2610301D06Rik | | eukaryotic translation elongation factor 1 gamma |
| Eif2b4 | NM_001127355.1 | Eif2b | | eukaryotic translation initiation factor 2B, subunit 4 delta |

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| G6pdx | NM_008062.2 | G28A, G6pd, Gpdx | glucose-6-phosphate dehydrogenase X-linked | |
| Gusb | NM_010368.1 | Gut, Gus-s, asd, g, adipose storage deficiency, | glucuronidase, beta | |
| Hdac3 | NM_010411.2 | Gus-r, Gus, Gus-u, Gur, Gus-t | histone deacetylase 3 | |
| Hprt | NM_013556.2 | Hprt1 | hypoxanthine guanine phosphoribosyl transferase | |
| Nubp1 | NM_011955.2 | | nucleotide binding protein 1 | |
| Oaz1 | NM_008753.4 | Antizyme, AZ-1, AZ1, antizyme 1 | ornithine decarboxylase antizyme 1 | also targets Oaz1-pseudogene NR_027656 @100% |
| Polr1b | NM_009086.2 | RPA116, RPA2, Rpo1-2, 128kDa, D630020H17Rik | polymerase (RNA) I polypeptide B | |
| Polr2a | NM_009089.2 | Rpo2-1, 220kDa | polymerase (RNA) II (DNA directed) polypeptide A | |
| Ppia | NM_008907.1 | Cphn, CyP-18, cyclophilin A, CypA | peptidylprolyl isomerase A | also targets predicted gene Gm9234 (XM_001002180 & XM_003086639) @96% |
| Rpl19 | NM_009078.2 | | ribosomal protein L19 | |
| Sap130 | NM_172965.2 | 2610304F09Rik | Sin3A associated protein | |
| Sdha | NM_023281.1 | SDH2, 2310034D06Rik, FP, SDHF | succinate dehydrogenase complex, subunit A, flavoprotein (Fp) | |
| Sf3a3 | NM_029157.3 | 4930512K19Rik, 60kDa | splicing factor 3a, subunit 3 | |
| Tbp | NM_013684.3 | Gtf2d | TATA box binding protein | |
| Tubb5 | NM_011655.4 | B130022C14Rik | tubulin, beta 5 class I | |