



Cancer Gene List - VI

Mark Herbert

World Development Institute
 39-06 Main Street, Flushing, Queens, New York 11354, USA, ma708090@gmail.com

Abstract: There are thousands of genes that are related to the cancer development. This asreticle gives 1400 genes that are supposed as cancer genes. This is cancer gene list part 6.

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Cell proliferation is regulated during the body growth and the cancer could happen if the regulation is out of control. Viruses can be used to introduce the reprogramming factors into adult cells. However, there is a risk that the virus used to introduce the stem cell factors sometimes possibly causes cancers. Controlling genes on and off is central to the biological process. The most serious medical conditions, such as cancer and birth defects, are due to abnormal cell division and differentiation. Cancer cell lines can be used to find potential anti-tumor drugs. To control the differentiation of stem cell precisely is important in the drug development (Ma, et al, 2014).

There are thousands of genes that are related to the cancer development. Here it gives 1400 genes that are supposed as cancer genes (Table 1) (Atlas of Genetics and Cytogenetics in Oncology and Haematology., 2015). HGNC is responsible for

approving unique symbols and names for human loci, including protein coding genes, ncRNA genes and pseudogenes, to allow unambiguous scientific communication. The HUGO Gene Nomenclature Committee is the only worldwide authority that assigns standardised nomenclature to human genes. The HGNC approves both a short-form abbreviation known as a gene symbol, and also a longer and more descriptive name. Each symbol is unique and the committee ensures that each gene is only given one approved gene symbol. This allows for clear and unambiguous reference to genes in scientific communications, and facilitates electronic data retrieval from databases and publications. In preference, symbols also maintain parallel construction for different members of a gene family and can also be used for orthologous genes in other vertebrate species (HGNC, 2015).

Table 1. Cancer gene list (6)

Gene	Location	HGNC (Hugo) Name
OBCAM (Alias)	11q25	OPCML
OBF1 (Oct binding factor 1) (Alias)	11q23.1	POU2AF1
OCA1A (Alias)	11q14.3	TYR
OCA-B (Alias)	11q23.1	POU2AF1
OCAIA (Alias)	11q14.3	TYR
OCI-5 (Alias)	Xq26.2	GPC3
OCIF (Alias)	8q24.12	TNFRSF11B
OCIM (Alias)	11q13.3	MYEOV
OCT7 (Alias)	6q16.1	POU3F2
Oct-T1 (Alias)	13q31.1	POU4F1
Oculorhombin (Alias)	11p13	PAX6
ODED (Alias)	2p24.3	MYCN
OEATC-1 (Alias)	15q22.31	KIAA0101
OEATC1 (Alias)	15q22.31	KIAA0101
OFC11 (Alias)	14q22.2	BMP4
OFC8 (Alias)	3q28	TP63

OGR-1 (Alias)	14q32.11	GPR68
OGR1 (Alias)	14q32.11	GPR68
OI15 (Alias)	12q13.12	WNT1
OI4 (Alias)	7q21.3	COL1A2
OIP3 (Alias)	15q23	PKM
OIP-4 (Alias)	22q11.22	PRAME
OIP4 (Alias)	22q11.22	PRAME
OIT2 (Alias)	19q13.12	FXYD5
OKL38 (Alias)	16q23.3	OSGIN1
OK/SW-cl.81 (Alias)	12q24.33	RAN
OKT-9 (Alias)	3q29	TFRC
OlfD (Alias)	13q14.3	OLFM4
OLFM4	13q14.3	OLFM4 (olfactomedin 4)
Olg-2 (Alias)	21q22.11	OLIG2
OLIG2	21q22.11	OLIG2 (oligodendrocyte lineage transcription factor)
OLM4 (Alias)	13q14.3	OLFM4
OMI (Alias)	2p13.1	HTRA2
Oncogene GLI (Alias)	12q13.3	GLI1
OP18 (Alias)	1p36.11	STMN1
OPCM (Alias)	11q25	OPCML
OPCML	11q25	OPCML (opioid binding protein/cell adhesion molecule-like)
OPG (Alias)	8q24.12	TNFRSF11B
OPHN1L (Alias)	5q31.3	ARHGAP26
OPN (Alias)	4q22.1	SPP1
OPPG (Alias)	11q13.2	LRP5
OPS (Alias)	11q13.2	LRP5
OPTA1 (Alias)	11q13.2	LRP5
ORAI3	16p11.2	ORAI3 (ORAI calcium release-activated calcium modulator 3)
ORAOV1	11q13.3	ORAOV1 (oral cancer overexpressed 1)
ORB3 (Alias)	17q12	MIEN1
ORF480 (Alias)	10q26.13	HTRA1
ORW1 (Alias)	9q34.11	ENG
ORW2 (Alias)	12q13.13	ACVRL1
ORW (Alias)	9q34.11	ENG
OS1 (Alias)	2q32.1	FRZB
OSA1 (Alias)	1p36.11	ARID1A
OSF2 (Alias)	6p21.1	RUNX2
OSGIN1	16q23.3	OSGIN1 (oxidative stress induced growth inhibitor 1)
OSP-L (Alias)	13q32.1	CLDN10
Osteoprotegerin (Alias)	8q24.12	TNFRSF11B
OTF-7 (Alias)	6q16.1	POU3F2
OTF7 (Alias)	6q16.1	POU3F2
OTTHUMP00000011647 (Alias)	1p22.3	BCL10
OTTHUMP00000017258 (Alias)	6q23.3	MYB
OTTHUMP00000021084 (Alias)	9p22.2	SH3GL2
OTTHUMP00000021182 (Alias)	9p21.1	TOPORS

OTTHUMP00000021184 (Alias)	9p21.1	TOPORS
OTTHUMP00000021601 (Alias)	9q21.33	CTSL
OTTHUMP00000021602 (Alias)	9q21.33	CTSL
OTTHUMP00000021622 (Alias)	9q22.2	SEMA4D
OTTHUMP00000021803 (Alias)	9q31.1	ALDOB
OTTHUMP00000022333 (Alias)	9q34.11	PPP2R4
OTTHUMP00000022727 (Alias)	9p24.1	PTPRD
OTTHUMP00000029289 (Alias)	6p21.32	DAXX
OTTHUMP00000029290 (Alias)	6p21.32	DAXX
OTTHUMP00000030661 (Alias)	20q11.22	E2F1
OTTHUMP00000031719 (Alias)	20q13.12	MYBL2
OTTHUMP00000035409 (Alias)	1q21.3	SHC1
OTTHUMP00000035471 (Alias)	1q21.3	SHC1
OTTHUMP00000036080 (Alias)	1p22.3	BCL10
OTTHUMP00000039358 (Alias)	6p22.3	SOX4
OTTHUMP00000045227 (Alias)	9p21.1	TOPORS
OTTHUMP00000063566 (Alias)	9q21.33	CTSL
OTTHUMP00000160473 (Alias)	4q13.3	AREG
OTTHUMP00000164806 (Alias)	3p21.31	PLXNB1
OTTHUMP00000184912 (Alias)	7q32.2	NRF1
OTTHUMP00000196469 (Alias)	Xq11.2	AMER1
OTT (one twenty-two) (Alias)	1p13.3	RBM15
OTUD7C (Alias)	6q23.3	TNFAIP3
OTX2	14q22.3	OTX2 (orthodenticle homeobox 2)
OX-2 (Alias)	3q13.2	CD200
OXTES1 (Alias)	Xq28	PASD1
OZF (Alias)	19q13.12	ZNF146

P110DELTA (Alias)	1p36.22	PIK3CD
P120CAS (Alias)	11q12.1	CTNND1
P120CTN (Alias)	11q12.1	CTNND1
P130 (Alias)	16q12.2	RBL2
P130Cas (Alias)	16q23.1	BCAR1
P14 (Alias)	1q21.3	S100A9
P15 (Alias)	9p21.3	CDKN2B
P160 (Alias)	17p13.2	MYBBP1A
P167 (Alias)	10q26.11	EIF3A
P19 (Alias)	12q13.3	IL23A
P1-CDC46 (Alias)	22q12.3	MCM5
P24 (Alias)	12p13.31	CD9
P270 (Alias)	1p36.11	ARID1A
P27KIP1 (Alias)	12p13.1	CDKN1B
P2RX7	12q24.31	P2RX7 (purinergic receptor P2X, ligand-gated ion channel, 7)
P2X7 (Alias)	12q24.31	P2RX7
P2Z (Alias)	12q24.31	P2RX7
P300 (Alias)	22q13.2	EP300
P3.58 (Alias)	19p13.2	ICAM1
P37 (Alias)	4q21.22	HNRNPD
P40 (Alias)	1q22	ARHGEF2
P42 (Alias)	9q22.1	CDK20

P42MAPK (Alias)	22q11.21	MAPK1
P44ERK1 (Alias)	16p11.2	MAPK3
P44MAPK (Alias)	16p11.2	MAPK3
P450C2A (Alias)	19q13.2	CYP2A6
P-450HP (Alias)	1p33	CYP4B1
P450(I) (Alias)	19q13.2	CYP2A6
P450PB (Alias)	19q13.2	CYP2A6
P45 (Alias)	11q22.3	CASP1
P53BP2 (Alias)	1q41	TP53BP2
P53BP3 (Alias)	9p21.1	TOPORS
P53CSV (Alias)	12q24.31	TRIAP1
P53 (Protein 53 kDa) (Alias)	17p13.1	TP53
P54 (Alias)	6p21.31	FKBP5
P55CDC-LSB (Alias)	1p34.2	CDC20
P56-LCK LSK (T cell-specific protein-tyrosine kinase) (Alias)	1p35.1	LCK
P59 (Alias)	11p15.4	ILK
P64H1 (Alias)	1p36.11	CLIC4
P65-PAK (Alias)	11q13.5	PAK1
P67EIF2 (Alias)	12q22	METAP2
P8 (Alias)	1q21.3	S100A8
P9KA (Alias)	1q21.3	S100A4
PA2G4	12q13.2	PA2G4 (proliferation-associated 2G4, 38kDa)
PAC1 (Alias)	10p15.1	KLF6
PACAP (Alias)	18p11.32	ADCYAP1
PACE (Alias)	15q26.1	FURIN
PAEG (Alias)	9q34.3	PAEP
PAEP	9q34.3	PAEP (progesterone-associated endometrial protein)
PAF1	19q13.2	PAF1 (Paf1, RNA polymerase II associated factor, homolog (S. cerevisiae))
PA-FABP (Alias)	8q21.13	FABP5
PAFABP (Alias)	8q21.13	FABP5
PAF (Alias)	15q22.31	KIAA0101
PAG2 (Alias)	8q24.21	ASAP1
PAG (Alias)	1p34.1	PRDX1
PAGA (Proliferation Associated Gene A) (Alias)	1p34.1	PRDX1
Paired box homeotic gene 9 (Alias)	14q13.3	PAX9
PAK-1 (Alias)	11q13.5	PAK1
PAK1	11q13.5	PAK1 (p21/Cdc42/Rac1-activated kinase 1 (STE20 homolog, yeast))
PAK2	3q29	PAK2 (p21 protein (Cdc42/Rac)-activated kinase 2)
PAK65 (Alias)	3q29	PAK2
PAKalpha (Alias)	11q13.5	PAK1
PAKgamma (Alias)	3q29	PAK2
PAP2 (Alias)	17p13.2	MYBBP1A
PAP (Alias)	8q24.21	ASAP1
PAPRS (Alias)	10q24.31	PAX2

PAQR1 (Alias)	1q32.1	ADIPOR1
PAR4 (Alias)	12q21.2	PAWR
Par-4 (Prostate apoptosis gene 4) (Alias)	12q21.2	PAWR
PARK13 (Alias)	2p13.1	HTRA2
PARP-5a (Alias)	8p23.1	TNKS
PARP5A (Alias)	8p23.1	TNKS
PARPL (Alias)	8p23.1	TNKS
PARVB	22q13.31	PARVB (parvin, beta)
PASD1	Xq28	PASD1 (PAS domain containing 1)
PASD2 (Alias)	2p21	EPAS1
PASG (Alias)	10q23.33	HELLS
PASS1 (Alias)	3q21.1	HSPBAP1
Patched 2 (Alias)	1p34.1	PTCH2
Patched homolog 2 (Alias)	1p34.1	PTCH2
PAWR	12q21.2	PAWR (PRKC apoptosis WT1 regulator protein)
PAX2	10q24.31	PAX2 (Paired box gene 2)
PAX3	2q36.1	PAX3 (paired box gene 3 (Waardenburg syndrome 1))
PAX5	9p13.2	PAX5 (paired box gene 5)
PAX6	11p13	PAX6 (paired box 6)
PAX8	2q13	PAX8 (paired box 8)
PAX9	14q13.3	PAX9 (Paired box gene 9)
PB1 (Alias)	3p21.1	PBRM1
PBEF1 (Alias)	7q22.3	NAMPT
PBEF (Alias)	7q22.3	NAMPT
PBF (Alias)	21q22.3	PTTG1IP
PBP (Alias)	12q24.23	PEBP1
PBP (Alias)	16p13.3	PKD1
PBR3 (Alias)	20q11.22	E2F1
PBRM1	3p21.1	PBRM1 (polybromo 1)
PBX1	1q23.3	PBX1 (pre-B-cell leukemia homeobox 1)
Pc-1 (Alias)	16p13.3	PKD1
PC-1 (Alias)	8q21.13	TPD52
PC4 (Alias)	19p13.3	PCSK4
PC5 (Alias)	9q21.13	PCSK5
PC6A (Alias)	9q21.13	PCSK5
PC6 (Alias)	9q21.13	PCSK5
PCAD (Alias)	16q22.1	CDH3
PCANAP1 (Alias)	7q21.13	STEAP2
PCAR1 (Alias)	3q21.1	CASR
PCDGF (Alias)	17q21.31	GRN

PCGF4 (Alias)	10p12.2	BMI1
PCMF (Alias)	2p11.2	KCMF1
PCNA	20p13	PCNA (proliferating cell nuclear antigen)
PCPTP1 (Alias)	12q15	PTPRR
PCSK3 (Alias)	15q26.1	FURIN
PCSK4	19p13.3	PCSK4 (proprotein convertase subtilisin/kexin type 4)
PCSK5	9q21.13	PCSK5 (Proprotein Convertase Subtilisin/Kexin Type 5)
PD1alpha (Alias)	8q24.12	ENPP2
PD2 (Alias)	19q13.2	PAF1
PDAF (Alias)	8q23.2	EBAG9
PDCD12 (Alias)	15q14	AVEN
PDCD4	10q25.2	PDCD4 (Programmed Cell Death 4)
PDCD6	5p15.33	PDCD6 (programmed cell death 6)
PDCD8 (Alias)	Xq26.1	AIFM1
PDE11A1 (Alias)	2q31.2	PDE11A
PDE11A2 (Alias)	2q31.2	PDE11A
PDE11A3 (Alias)	2q31.2	PDE11A
PDE11A	2q31.2	PDE11A (phosphodiesterase 11A)
PDE4DIP	1q21.1	PDE4DIP (phosphodiesterase 4D interacting protein (myomegalin))
PDECGF (Alias)	22q13.33	TYMP
PDF (prostate derived factor) (Alias)	19p13.11	GDF15
PDGFB	22q13.1	PDGFB platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog)
PDGFR1 (Alias)	5q32	PDGFRB
PDGFR-2 (Alias)	4q12	PDGFRA
PDGFR2 (Alias)	4q12	PDGFRA
PDGFRA	4q12	PDGFRA (platelet-derived growth factor receptor, alpha polypeptide)
PDGFR (Alias)	5q32	PDGFRB
PDGF-R-beta (Alias)	5q32	PDGFRB
PDGFRB	5q32	PDGFRB (platelet-derived growth factor receptor, beta polypeptide)
PDNP2 (Alias)	8q24.12	ENPP2
PDSS2	6q21	PDSS2 (prenyl (decaprenyl) diphosphate synthase, subunit 2)
PDX-1 (Alias)	13q12.2	PDX1
PDX1	13q12.2	PDX1 (pancreatic and duodenal homeobox 1)
PDZK1IP1	1p33	PDZK1IP1 (PDZK1 interacting protein 1)
PEA-15 (Alias)	1q23.2	PEA15

PEA15	1q23.2	PEA15 (phosphoprotein enriched in astrocytes 15)
PEA3 (Alias)	17q21.31	ETV4
PEAS3 (Alias)	17q21.31	ETV4
PEBP-1 (Alias)	12q24.23	PEBP1
PEBP1	12q24.23	PEBP1 (phosphatidylethanolamine binding protein 1)
PEBP2-ALPHA-A (Alias)	6p21.1	RUNX2
PEBP2b (polyomavirus enhancer binding protein b) (Alias)	16q22.1	CBFB
PEBPαB (polyomavirus enhancer binding protein αB) (Alias)	21q22.12	RUNX1
PEBP (Alias)	12q24.23	PEBP1
PED (Alias)	1q23.2	PEA15
PEF1B (Alias)	5p15.33	PDCD6
PEG10	7q21.3	PEG10 (paternally expressed 10)
PEG3	19q13.43	PEG3 (paternally expressed 3)
PEL98 (Alias)	1q21.3	S100A4
PEP (Alias)	9q34.3	PAEP
PEPI (Alias)	17q21.31	GRN
Perlecan (Alias)	1p36.12	HSPG2
PERP	6q23.3	PERP (PERP, TP53 apoptosis effector)
PERSYN (Alias)	10q23.2	SNCG
PETA-3 (Alias)	11p15.5	CD151
PETA3 (Alias)	11p15.5	CD151
PETA3F (Alias)	11p15.5	CD151
PEZ (Alias)	1q41	PTPN14
PF4A (Alias)	4q13.3	PF4V1
PF-4 (Alias)	4q13.3	PF4
PF4-ALT (Alias)	4q13.3	PF4V1
PF4	4q13.3	PF4 (platelet factor 4)
PF4V1	4q13.3	PF4V1 (Platelet Factor 4 Variant 1)
PFK2 (Alias)	10p15.1	PFKFB3
PFK-2/FBPase-2 (Alias)	1q32.2	PFKFB2
PFKFB2	1q32.2	PFKFB2 (6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2)
PFKFB3	10p15.1	PFKFB3 (6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3)
PFKFB4	3p21.31	PFKFB4 (6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4)
PFK/FBPase 4 (Alias)	3p21.31	PFKFB4
PFM1 (Alias)	5q35.2	MSX2
PFM (Alias)	5q35.2	MSX2
PGG/HS (Alias)	1q31.1	PTGS2
PGHS-2 (Alias)	1q31.1	PTGS2
PGIS (Alias)	20q13.13	PTGIS
PG-M (Alias)	5q14.2	VCAN
Pgp1 (Alias)	11p13	CD44

PGP-1 (Alias)	11p13	CD44
PGP-I (Alias)	11p13	CD44
PGRL (Alias)	1q23.2	IGSF8
PGRN (Alias)	17q21.31	GRN
PGY1 (P glycoprotein1/ multidrug resistance 1) (Alias)	7q21.12	ABCB1
PH-20 (Alias)	7q31.32	SPAM1
PH20 (Alias)	7q31.32	SPAM1
PHAP1 (Alias)	15q23	ANP32A
PHAPI (Alias)	15q23	ANP32A
PHAPII (Alias)	9q34.11	SET
PHAS-I (Alias)	8p11.23	EIF4EBP1
PHD2 (Alias)	1q42.2	EGLN1
PHLDA1	12q21.2	PHLDA1 (pleckstrin homology-like domain, family A, member 1)
PHL (Philadelphie) (Alias)	22q11.23	BCR
PHLPP1	18q21.33	PHLPP1 (PH domain leucine-rich repeat protein phosphatase 1)
PHLPP2	16q22.2	PHLPP2 (PH domain leucine-rich repeat protein phosphatase 2)
PHLPP (Alias)	18q21.33	PHLPP1
PHLPPPL (Alias)	16q22.2	PHLPP2
PHM27 (Alias)	6q25.2	VIP
PHOX2B	4p13	PHOX2B (paired-like homeobox 2b)
PHP1A (Alias)	20q13.32	GNAS
PHP1B (Alias)	20q13.32	GNAS
PHP1C (Alias)	20q13.32	GNAS
PHRIP (Alias)	12q21.2	PHLDA1
PHS-2 (Alias)	1q31.1	PTGS2
PI3K (Alias)	3q26.32	PIK3CA
PI3K (Alias)	1p36.22	PIK3CD
PIAS1	15q23	PIAS1 (protein inhibitor of activated STAT, 1)
PIAS3	1q21.1	PIAS3 (protein inhibitor of activated STAT, 3)
PICALM	11q14.2	PICALM (clathrin assembly lymphoid myeloid leukemia gene)
PICT-1 (Alias)	19q13.33	GLTSCR2
PICT1 (Alias)	19q13.33	GLTSCR2
PIDX (Alias)	Xp11.23	FOXP3
PIG10 (Alias)	5q13.3	ENCI
PIG21 (proliferation-inducing gene 21) (Alias)	5q35.3	GNB2L1
PIG29 (Alias)	12p13.33	FOXM1
PIG8 (Alias)	11q21	CEP57
PIGPC1 (Alias)	6q23.3	PERP
PIK3CA	3q26.32	PIK3CA (phosphoinositide-3-kinase, catalytic, alpha polypeptide)
PIK3CD	1p36.22	PIK3CD (phosphoinositide-3-kinase, catalytic, delta polypeptide)
PIK3R1	5q13.1	PIK3R1 (phosphoinositide-3-kinase, regulatory subunit 1 (alpha))
PIM1	6p21.2	PIM1 (pim-1 oncogene)

PIM (Alias)	6p21.2	PIM1
PI-PLC (Alias)	20p12.3	PLCB1
PIRH2 (Alias)	4q21.1	RCHY1
Pit-1 (Alias)	3p11.2	POU1F1
PIT1 (Alias)	3p11.2	POU1F1
PIWI (Alias)	12q24.33	PIWIL1
PIWIL1	12q24.33	PIWIL1 (piwi-like RNA-mediated gene silencing 1)
PIWIL1L (Alias)	8p21.3	PIWIL2
PIWIL2	8p21.3	PIWIL2 (piwi-like RNA-mediated gene silencing 2)
PJS (Peutz-Jeghers syndrome) (Alias)	19p13.3	STK11
PK2 (Alias)	15q23	PKM
PK3 (Alias)	15q23	PKM
PKB (Alias)	14q32.33	AKT1
PKB-ALPHA (Alias)	14q32.33	AKT1
PKBBETA (PKB beta) (Alias)	19q13.2	AKT2
PKBB (protein kinase B, beta) (Alias)	19q13.2	AKT2
PKBG (Alias)	1q43	AKT3
PKCdelta (Alias)	3p21.1	PRKCD
PKCI (Alias)	3q26.2	PRKCI
PKCmu (Alias)	14q12	PRKD1
PKCSL (Alias)	6q21	MARCKS
PKD1	16p13.3	PKD1 (polycystic kidney disease 1 (autosomal dominant))
PKD1 (Protein Kinase D1) (Alias)	14q12	PRKD1
PKM2 (Alias)	15q23	PKM
PKM (Alias)	15q23	PKM
PKM	15q23	PKM (pyruvate kinase isoenzyme type M2)
PKR1 (Alias)	17q24.2	PRKAR1A
PKR (Alias)	2p22.2	EIF2AK2
PLA1/2-3 (Alias)	11q12.3	RARRES3
PLA2 (Alias)	1p36.13	PLA2G2A
PLA2B (Alias)	1p36.13	PLA2G2A
PLA2G2A	1p36.13	PLA2G2A (phospholipase A2, group IIA (platelets, synovial fluid))
PLA2G4A	1q31.1	PLA2G4A (phospholipase A2, group IVA (cytosolic, calcium-dependent))
PLA2G4 (Alias)	1q31.1	PLA2G4A
PLA2L (Alias)	1p36.13	PLA2G2A
PLA2S (Alias)	1p36.13	PLA2G2A
PLAB (Alias)	19p13.11	GDF15
PLAG1	8q12.1	PLAG1 (Pleomorphic adenoma gene 1)
PLAGL1	6q24.2	PLAGL1 (Pleomorphic adenoma gene-like 1)
PLAGL2	20q11.21	PLAGL2 (Pleomorphic adenoma gene-like 2)

PLAS1 (Alias)	1p36.13	PLA2G2A
PLAUR	19q13.31	PLAUR (plasminogen activator, urokinase receptor)
PLC148 (Alias)	20q12	PLCG1
PLC-154 (Alias)	20p12.3	PLCB1
PLC1 (Alias)	20q12	PLCG1
PLC (Alias)	1p36.12	HSPG2
PLCB1	20p12.3	PLCB1 (phospholipase C, beta 1 (phosphoinositide-specific))
PLCB2	15q15.1	PLCB2 (phospholipase C, beta 2)
PLCD1	3p22.2	PLCD1 (phospholipase C, delta 1)
PLCG1	20q12	PLCG1 (Phospholipase C, Gamma 1)
PLCgamma1 (Alias)	20q12	PLCG1
PLC-I (Alias)	20p12.3	PLCB1
PLC-II (Alias)	20q12	PLCG1
PLD1	3q26.31	PLD1 (phospholipase D1, phosphatidylcholine-specific)
PLD2	17p13.2	PLD2 (phospholipase D2)
PLEKHE1 (Alias)	18q21.33	PHLPP1
PLEXIN-B1 (Alias)	3p21.31	PLXNB1
Plinp1 (Alias)	19p13.2	GADD45GIP1
PLINP-1 (Alias)	19p13.2	GADD45GIP1
PLINP1 (Alias)	19p13.2	GADD45GIP1
PLIP/Tip60b (Alias)	11q13.1	KAT5
PLK1	16p12.2	PLK1 (polo-like kinase 1 (Drosophila))
PLK (Alias)	16p12.2	PLK1
PLML (Alias)	19q13.12	FXYD3
PLP (Alias)	12p11.22	PTHLH
PLXN5 (Alias)	3p21.31	PLXNB1
PLXNB1	3p21.31	PLXNB1 (plexin B1)
PLZF (promyelocytic leukemia zinc finger) (Alias)	11q23.2	ZBTB16
PME (Alias)	21q22.3	CSTB
PML	15q24.1	PML (promyelocytic leukemia)
PMS1	2q32.2	PMS1 (PMS1 postmeiotic segregation increased 1 (S. cerevisiae))
PMSL1 (Alias)	2q32.2	PMS1
PMX2 (Alias)	9q34.11	PRRX2
PMX2B (Alias)	4p13	PHOX2B
PN (Alias)	16q21	USB1
PNAS-143 (Alias)	1q21.3	CKS1B
PNAS-16 (Alias)	1q21.3	CKS1B
PNAS-18 (Alias)	1q21.3	CKS1B
PNAT (Alias)	8p22	NAT2
PNMA4 (Alias)	14q32.12	MOAP1

PNP1 (Alias)	4q21.3	PTPN13
PNQALRE (Alias)	9q22.1	CDK20
PNUTL1 (peanut (drosophila)- like 1) (Alias)	22q11.21	SEPT5
Pnutl3 (Alias)	2q37.3	SEPT2
PNUTL4 (Alias)	17q25.2	SEPT9
POB1 (Alias)	Xp22.2	REPS2
POB1 (Alias)	17q22	TRIM37
POF7 (Alias)	9q33.3	NR5A1
POH (Alias)	20q13.32	GNAS
P/OKcl.13 (Alias)	9q22.31	WNK2
POLH	6p21.1	POLH (polymerase (DNA direct), eta)
Pontin52 (Alias)	3q21.3	RUVBL1
PONTIN (Alias)	3q21.3	RUVBL1
PORIN (Alias)	5q31.1	VDAC1
Posphoinositide-3-kinase enhancers (PIKE)-A (Alias)	12q14.1	AGAP2
POU1F1a (Alias)	3p11.2	POU1F1
POU1F1	3p11.2	POU1F1 (POU class 1 homeobox 1)
POU2AF1	11q23.1	POU2AF1 (POU domain, class 2, associating factor 1)
POU3F2	6q16.1	POU3F2 (POU class 3 homeobox 2)
POU4F1	13q31.1	POU4F1 (POU class 4 homeobox 1)
POU6F2	7p14.1	POU6F2 (POU domain, class 6, transcription factor 2)
POUF3 (Alias)	6q16.1	POU3F2
PP13187 (Alias)	15q25.1	RASGRF1
PP14 (Alias)	9q34.3	PAEP
PP17 (Alias)	1p36.11	STMN1
PP19 (Alias)	1p36.11	STMN1
PP2A (Alias)	9q34.11	PPP2R4
PP2C delta (PP2Cd) (Alias)	17q23.2	PPM1D
PP32 (Alias)	15q23	ANP32A
PP90RSK4 (Alias)	Xq21.1	RPS6KA6
PP9284 (Alias)	21q22.3	TMPRSS2
PPAC (Alias)	6q21	WISP3
PPARB (Alias)	6p21.31	PPARD
PPAR-beta (Alias)	6p21.31	PPARD
PPAR-delta (Alias)	6p21.31	PPARD
PPARD	6p21.31	PPARD (peroxisome proliferator-activated receptor delta)
PPARG1 (Alias)	3p25.2	PPARG
PPARG2 (Alias)	3p25.2	PPARG
PPAR-gamma (Alias)	3p25.2	PPARG
PPARG	3p25.2	PPARG (peroxisome proliferator-activated receptor gamma)
PPD (Alias)	6q21	WISP3
PPH (Alias)	1p36.23	ENO1
PP1ase (Alias)	6p21.31	FKBP5

PPM1D	17q23.2	PPM1D (protein phosphatase 1D magnesium-dependent, delta isoform)
PPNAD2 (Alias)	2q31.2	PDE11A
PPP1R13A (Alias)	1q41	TP53BP2
PPP1R13L	19q13.32	PPP1R13L (protein phosphatase 1, regulatory (inhibitor) subunit 13 like)
PPP1R1B	17q12	PPP1R1B (protein phosphatase 1, regulatory (inhibitor) subunit 1B (dopamine and cAMP regulated phosphoprotein, DARPP-32))
PPP1R48 (Alias)	17p13.1	AURKB
PPP1R5 (Alias)	15q15.1	CASC5
PPP1R6 (Alias)	17q21.33	PPP1R9B
PPP1R8	1p35.3	PPP1R8 (protein phosphatase 1, regulatory (inhibitor) subunit 8)
PPP1R9 (Alias)	17q21.33	PPP1R9B
PPP1R9B	17q21.33	PPP1R9B (protein phosphatase 1, regulatory subunit 9B)
PPP2R4	9q34.11	PPP2R4 (protein phosphatase 2A activator, regulatory subunit 4)
PPT (Alias)	7q21.3	TAC1
PR22 (Alias)	1p36.11	STMN1
PR53 (Alias)	9q34.11	PPP2R4
PRAD1 (parathyroid adenomatosis 1) (Alias)	11q13.3	CCND1
PRAME	22q11.22	PRAME (Preferentially Expressed Antigen In Melanoma)
PRB2 (Alias)	16q12.2	RBL2
PRCAN (Alias)	1p36.12	HSPG2
PRCC	1q23.1	PRCC (papillary renal cell carcinoma)
PRDI-BF1 (Alias)	6q21	PRDM1
PRDM16	1p36.32	PRDM16 (PR domain containing 16)
PRDM1	6q21	PRDM1 (PR domain containing 1, with ZNF domain)
PRDM2	1p36.21	PRDM2 (PR domain containing 2, with ZNF domain)
PRDM3 (Alias)	3q26.2	MECOM
PR-domain zinc finger protein 16 (Alias)	1p36.32	PRDM16
PRDX1	1p34.1	PRDX1 (peroxiredoxin 1)
PRDX4	Xp22.11	PRDX4 (peroxiredoxin 4)
PRG1 (Alias)	6p21.33	IER3
PRG3 (Alias)	10q22.1	AIFM2
PRG6 (Alias)	19p13.2	GADD45GIP1
PRKA9 (Alias)	7q21.2	AKAP9
PRKAB1	12q24.23	PRKAB1 (protein kinase, AMP-activated, beta 1 non-catalytic subunit)

PRKARIA	17q24.2	PRKAR1A (protein kinase, cAMP-dependent, regulatory, type I, alpha (tissue specific extinguisher 1))
PRKAR1 (Alias)	17q24.2	PRKARIA
PRKBA (Alias)	14q32.33	AKT1
PRKBG (Alias)	1q43	AKT3
PRKCBP2 (Alias)	21q22.11	OLIG2
PRKCD	3p21.1	PRKCD (protein kinase C, delta)
PRKCI	3q26.2	PRKCI (protein kinase C, iota)
PRKCM (Alias)	14q12	PRKD1
PRKCSL (Alias)	6q21	MARCKS
PRKD1	14q12	PRKD1 (Protein Kinase D1)
PRKM12 (Alias)	22q13.33	MAPK12
PRKM13 (Alias)	6p21.31	MAPK13
PRKM14 (Alias)	6p21.31	MAPK14
PRKM15 (Alias)	6p21.31	MAPK14
PRKM1 (Alias)	22q11.21	MAPK1
PRKM2 (Alias)	22q11.21	MAPK1
PRKM3 (Alias)	16p11.2	MAPK3
PRKM4 (Alias)	18q21.1	MAPK4
PRKM6 (Alias)	15q21.2	MAPK6
PRKM7 (Alias)	17p11.2	MAPK7
PRKMK4 (Alias)	17p12	MAP2K4
PRKR, (Alias)	2p22.2	EIF2AK2
PRKWNK2 (Alias)	9q22.31	WNK2
PRL (Alias)	1q23.3	PBX1
PRL-R (Alias)	5p13.2	PRLR
PRLR	5p13.2	PRLR (prolactin receptor)
PrLZ (Alias)	8q21.13	TPD52
PRMT9 (Alias)	2p16.3	FBXO11
PRND	20p13	PRND (Prion Protein 2 (Dublet))
PRO0518 (Alias)	14q32.2	MEG3
PRO0593 (Alias)	7q34	HIPK2
PRO0618 (Alias)	4q35.1	SORBS2
PRO0989 (Alias)	20q11.22	ERGIC3
PRO1291 (Alias)	1p13.1	VTCN1
PRO1384 (Alias)	12p13.2	CLEC1B
PRO1779 (Alias)	1q41	CENPF
PRO1843 (Alias)	12q13.13	EIF4B
PRO1996 (Alias)	4q21.1	RCHY1
PRO2047 (Alias)	1p35.3	PPP1R8
PRO2160 (Alias)	14q32.2	MEG3
PRO232 (Alias)	8q24.3	PSCA
PRO2521 (Alias)	17q12	GSDMB
PRO2975 (Alias)	5q32	CSNK1A1
PRO4389 (Alias)	5p13.3	ADAMTS12
PRO6241 (Alias)	19q13.12	FXYS5

Prostase (Alias)	19q13.41	KLK4
PROSTASIN (Alias)	16p11.2	PRSS8
Protease Inhibitor 5, PI5 (Alias)	18q21.33	SERPINB5
Proto-IDO (Alias)	8p11.21	IDO2
PROXY1 (Alias)	8q24.22	NDRG1
PrPLP (Alias)	20p13	PRND
PRR4 (Alias)	1q23.3	PVRL4
PRRX2	9q34.11	PRRX2 (paired related homeobox 2)
PRSN (Alias)	10q23.2	SNCG
Prsp (Alias)	4p16.1	HTRA3
PRSS10 (Alias)	21q22.3	TMPRSS2
PRSS11 (Alias)	10q26.13	HTRA1
PRSS17 (Alias)	19q13.41	KLK4
PRSS19 (Alias)	19q13.41	KLK8
PRSS20 (Alias)	19q13.41	KLK11
PRSS24 (Alias)	7q21.13	STEAP1
PRSS25 (Alias)	2p13.1	HTRA2
PRSS6 (Alias)	19q13.41	KLK7
PRSS8	16p11.2	PRSS8 (protease, serine, 8)
PRSSL1 (Alias)	19q13.41	KLK10
PRTH (Alias)	3p24.2	THRB
PRUNE	1q21.3	PRUNE (prune exopolyphosphatase)
PRX1 (Alias)	1p34.1	PRDX1
Prx-1 (peroxiredoxin 1) (Alias)	1p34.1	PRDX1
PRX2 (Alias)	9q34.11	PRRX2
PRX-4 (Alias)	Xp22.11	PRDX4
PS2 (Alias)	1q42.13	PSEN2
PSAP	10q22.1	PSAP (Prosaposin (variant Gaucher disease and variant metachromatic leukodystrophy))
PSCA	8q24.3	PSCA (Prostate stem cell antigen)
PSCP (Alias)	17q21.31	BRCA1
PSCTK1 (Alias)	Xq22.1	BTK
PSCTK2 (Alias)	5q33.3	ITK
PSEN2	1q42.13	PSEN2 (presenilin 2 (Alzheimer disease 4))
PSF (PTB-associated splicing factor) (Alias)	1p34.3	SFPQ
PSIP1	9p22.3	PSIP1 (PC4 and SFRS1 interacting protein 1)
PSK-J3 (Alias)	12q14.1	CDK4
PSOR1 (Alias)	1q21.3	S100A7
PSR1 (Alias)	3p22.2	CTDSPL
PSTS (Alias)	19q13.41	KLK4
PTB-1 (Alias)	19p13.3	PTBP1
PTB2 (Alias)	19p13.3	PTBP1
PTB3 (Alias)	19p13.3	PTBP1
PTB4 (Alias)	19p13.3	PTBP1
PTB (Alias)	19p13.3	PTBP1

PTBP1	19p13.3	PTBP1 (polypyrimidine tract binding protein 1)
PTB-T (Alias)	19p13.3	PTBP1
PTC2 (Alias)	1p34.1	PTCH2
PTC3 (Alias)	10q11.23	NCOA4
PTC6 (Alias)	7q33	TRIM24
PTC, but this term was confusing with (Alias)	9q22.32	PTCH1
PTCH1	9q22.32	PTCH1 patched homolog 1 (Drosophila)
PTCH2	1p34.1	PTCH2 (patched homolog 2 (Drosophila))
PTCH (Alias)	9q22.32	PTCH1
PTEN	10q23.31	PTEN (Phosphatase and Tensin homolog deleted on chromosome Ten)
Ptg-10 (Alias)	6p21.31	FKBP5
PTGFB (Alias)	19p13.11	GDF15
PTGF- β (Alias)	19p13.11	GDF15
PTGI (Alias)	20q13.13	PTGIS
PTGIS	20q13.13	PTGIS (prostaglandin I2 (prostacyclin) synthase)
PTGS2	1q31.1	PTGS2 (prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase))
PTHLH	12p11.22	PTHLH (parathyroid hormone-like hormone)
PTHR (Alias)	12p11.22	PTHLH
PTHRP (Alias)	12p11.22	PTHLH
PTI1 (Alias)	6q13	EEF1A1
PTK2	8q24.3	PTK2 (PTK2 protein tyrosine kinase 2)
PTK3A (Alias)	6p21.33	DDR1
PTK3 (Alias)	6p21.33	DDR1
PTK6	20q13.33	PTK6 (protein tyrosine kinase 6)
PTK7	6p21.1	PTK7 (PTK7 protein tyrosine kinase 7)
PTMA	2q37.1	PTMA (prothymosin, alpha)
PTN	7q33	PTN (pleiotrophin)
PTP1B (Alias)	20q13.13	PTPN1
PTP-1C (Alias)		PTPN6
PTP1E (Alias)	4q21.3	PTPN13
PTP2C (Protein tyrosine phosphatase 2C) (Alias)	12q24.13	PTPN11
PTP36 (Alias)	1q41	PTPN14
PTPA (Alias)	9q34.11	PPP2R4
PTPA (Alias)	20p13	PTPRA
PTP-BAS (Alias)	4q21.3	PTPN13
PTP-BL (Alias)	4q21.3	PTPN13
PTPBR7 (Alias)	12q15	PTPRR

PTPD1 (Alias)	14q31.3	PTPN21
PTPD (Alias)	9p24.1	PTPRD
PTP-E1 (Alias)	4q21.3	PTPN13
PTPG (Alias)	3p14.2	PTPRG
PTPL1 (Alias)	4q21.3	PTPN13
PTPLE (Alias)	4q21.3	PTPN13
PTPN10 (Alias)	5q35.1	DUSP1
PTPN11	12q24.13	PTPN11 (Protein tyrosine phosphatase, non-receptor type, 11)
PTPN13	4q21.3	PTPN13 (Protein tyrosine phosphatase, non-receptor type 13)
PTPN14	1q41	PTPN14 (protein tyrosine phosphatase, non-receptor type 14)
PTPN1	20q13.13	PTPN1 (protein tyrosine phosphatase, non-receptor type 1)
PTPN21	14q31.3	PTPN21 (protein tyrosine phosphatase, non-receptor type 21)
PTPN6		PTPN6 (protein tyrosine phosphatase, non-receptor type 6)
PTPN7	1q32.1	PTPN7 (protein tyrosine phosphatase, non-receptor type 7)
PTPNI (Alias)	1q32.1	PTPN7
PTPRA	20p13	PTPRA (protein tyrosine phosphatase, receptor type, A)
PTPRD	9p24.1	PTPRD (protein tyrosine phosphatase, receptor type, D)
PTPRG	3p14.2	PTPRG (protein tyrosine phosphatase, receptor type, G)
PTPRJ	11p11.2	PTPRJ (protein tyrosine phosphatase, receptor type, J)
PTPRL10 (Alias)	14q31.3	PTPN21
PTPRL2 (Alias)	20p13	PTPRA
PTPRQ (Alias)	12q15	PTPRR
PTPRR	12q15	PTPRR (protein tyrosine phosphatase, receptor type, R)
PTP-SL (Alias)	12q15	PTPRR
PTTG1	5q33.3	PTTG1 (pituitary tumor-transforming 1)
PTTG1IP	21q22.3	PTTG1IP (pituitary tumor-transforming 1 interacting protein)
PTTG1	5q33.3	PTTG1 (pituitary tumor-transforming 1)
PTTG (Alias)	5q33.3	PTTG1
PU.1 (Alias)	11p11.2	SPI1
PUMA (p53-upregulated modulator of apoptosis) (Alias)	19q13.32	BBC3
PUMPCn (Alias)	7q21.13	STEAP2
PURH (Alias)	2q35	ATIC
PVRL4	1q23.3	PVRL4 (poliovirus receptor-related 4)
PW1 (Alias)	19q13.43	PEG3
PXN	12q24.23	PXN (paxillin)
PYCARD	16p11.2	PYCARD (PYD and CARD domain containing)

PYST1 (Alias)	12q21.33	DUSP6
PYY1 (Alias)	17q21.31	PYY
PYY4 (Alias)	7p15.3	NPY
PYY	17q21.31	PYY (peptide YY)
QDED721 (Alias)	12p13.2	CLEC1B
QM (Alias)	Xq28	RPL10
QRF1 (Glutamine-Rich Factor 1) (Alias)	3p13	FOXP1
R16 (Alias)	19q13.32	SLC1A5
R1A (Alias)	17q24.2	PRKAR1A
R1 (Alias)	11p15.4	RRM1
R2 (Alias)	11p11.2	CD82
R2 (Alias)	2p25.1	RRM2
R51H3 (Alias)	17q12	RAD51D
RAC2	22q13.1	RAC2 (ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2))
RAC3	17q25.3	RAC3 (ras-related C3 botulinum toxin substrate 3 (rho family, small GTP binding protein Rac3))
RAC3 (RAR-associated coactivator 3) (Alias)	20q13.12	NCOA3
RAC (Alias)	14q32.33	AKT1
RAC-ALPHA (Alias)	14q32.33	AKT1
RACK17 (Alias)	21q22.11	OLIG2
RACK1 (Receptor for activated kinase C) (Alias)	5q35.3	GNB2L1
RAC-PK-alpha (Alias)	14q32.33	AKT1
RAC-PK-Beta (rac protein kinase beta) (Alias)	19q13.2	AKT2
RAC-PK-gamma (Alias)	1q43	AKT3
RAD2 (Alias)	11q12.2	FEN1
RAD30A (Alias)	6p21.1	POLH
RAD51D (Alias)	17q12	RAD51D
RAD51D	17q12	RAD51D (RAD51-like 3 (S. cerevisiae))
RAD51L3 (Alias)	17q12	RAD51D
RAD52	12p13.33	RAD52 (RAD52 homolog (S. cerevisiae))
Rad53 (Alias)	22q12.1	CHEK2
RAD9A	11q13.2	RAD9A (RAD9 homolog A (S. pombe))
RAD9 (Alias)	11q13.2	RAD9A
Raf-1 (Alias)	3p25.2	RAF1
RAF1	3p25.2	RAF1 (v-raf-1 murine leukemia viral oncogene homolog 1)
RAFB1 (Alias)	7q34	BRAF
RAFT1 (Alias)	1p36.22	MTOR
RAGE (Alias)	6p21.32	AGER
RAI3 (Alias)	12p13.1	GPRC5A
RAIG1 (Alias)	12p13.1	GPRC5A
RAI (relA associated inhibitor) (Alias)	19q13.32	PPP1R13L

RaLP (Alias)	15q21.1	SHC4
RALT (Alias)	1p36.23	ERRF11
RAMP (Alias)	13q12.11	ZMYM2
RANBP2	2q12.3	RANBP2 (RAN binding protein 2)
RANBP3 (Alias)	12q24.33	RAN
RanBP7 (Alias)	6p23	RANBP9
RANBP9	6p23	RANBP9 (RAN binding protein 9)
RANBPM (Alias)	6p23	RANBP9
RanGTPase (Alias)	12q24.33	RAN
RAN	12q24.33	RAN (RAN, member RAS oncogene family)
RAP1A	1p13.2	RAP1A (RAP11, member of RAS oncogene family)
RAP1 (Alias)	4q23	RAPIGDS1
RAP1B	12q15	RAP1B (RAP1B, member of RAS oncogene family)
RAP1GA1 (Alias)	1p36.12	RAPIGAP
RAP1GAP1 (Alias)	1p36.12	RAPIGAP
RAPIGAP	1p36.12	RAP1GAP (RAP1 GTPase activating protein)
RAP1GAPII (Alias)	1p36.12	RAPIGAP
RAPIGDS1	4q23	RAPIGDS1 (RAP1, GTP-GDP dissociation stimulator 1)
RAP2A	13q32.1	RAP2A (RAP2A, member of RAS oncogene family)
RAP2B	3q25.2	RAP2B (RAP2B, member of RAS oncogene family)
RAP46 (Alias)	9p13.3	BAG1
RAPGAP (Alias)	1p36.12	RAPIGAP
RAPGEF1	9q34.13	RAPGEF1 (Rap guanine nucleotide exchange factor (GEF) 1)
RAPH (Alias)	11p15.5	CD151
RAPL (Alias)	1q32.1	RASSF5
RAPT1 (Alias)	1p36.22	MTOR
RARA	17q21.2	RARA (Retinoic acid receptor, alpha)
RARHOGAP (Alias)	11q23.1	ARHGAP20
RARRES1	3q25.32	RARRES1 (retinoic acid receptor responder (tazarotene induced) 1)
RARRES3	11q12.3	RARRES3 (retinoic acid receptor responder (tazarotene induced) 3)
RASFADIN (Alias)	20p13	RASSF2
RASGRF1	15q25.1	RASGRF1 (Ras protein-specific guanine nucleotide-releasing factor 1)
RASI-1 (Alias)	12q13.2	MMP19
RASL11B	4q12	RASL11B (RAS-like, family 11, member B)

RASSF1	3p21.31	RASSF1 (Ras association (RalGDS/AF-6) domain family member)
RASSF2	20p13	RASSF2 (Ras association (RalGDS/AF-6) domain family member 2)
RASSF3 (Alias)	1q32.1	RASSF5
RASSF5	1q32.1	RASSF5 (Ras association (RalGDS/AF-6) domain family member 5)
RASSF6	4q13.3	RASSF6 (Ras association (RalGDS/AF-6) domain family member 6)
RB1	13q14.2	RB1 (retinoblastoma)
Rb2 (Alias)	16q12.2	RBL2
RBAP-1 (Alias)	20q11.22	E2F1
RBAP1 (Alias)	20q11.22	E2F1
RbAp46 (Alias)	Xp22.2	RBBP7
RBAP46 (Alias)	Xp22.2	RBBP7
RBBP2 (Alias)	12p13.33	KDM5A
RBBP-3 (Alias)	20q11.22	E2F1
RBBP3 (Alias)	20q11.22	E2F1
RBBP-7 (Alias)	Xp22.2	RBBP7
RBBP7	Xp22.2	RBBP7 (retinoblastoma binding protein 7)
RBBP8	18q11.2	RBBP8 (retinoblastoma binding protein 8)
RBL2	16q12.2	RBL2 (retinoblastoma-like 2)
RBM15	1p13.3	RBM15 (RNA binding motif protein 15)
RBM5	3p21.31	RBM5 (RNA binding motif protein 5)
RBP2 (Alias)	12p13.33	KDM5A
RBP3 (Alias)	20q11.22	E2F1
RBP56 (RNA binding protein 56) (Alias)	17q12	TAF15
RBR-2 (Alias)	16q12.2	RBL2
RBSP3 (Alias)	3p22.2	CTDSPL
RBTN1 (Alias)	11p15.4	LMO1
RBTN2 (rhombotin-2) (Alias)	11p13	LMO2
RBTNL1 (rhombotin-like-1) (Alias)	11p13	LMO2
Rbx1 (Alias)	22q13.2	RBX1
RBX1	22q13.2	RBX1 (ring-box 1)
RBX2 (Alias)	3q23	RNF7
RCA1 (Alias)	8q24.13	RNF139
RCAS1 (Alias)	8q23.2	EBAG9
RCCP1 (renal cell carcinoma, papillary, 1) (Alias)	1q23.1	PRCC
RCHY1	4q21.1	RCHY1 (ring finger and CHY zinc finger domain containing 1)

RDA32 (Alias)	3p21.31	RASSF1
RDC1 (Alias)	2q37.3	ACKR3
RDC-1 (Alias)	13q31.1	POU4F1
RDRC (Alias)	19q13.32	SLC1A5
RDX12 (Alias)	17q12	MIEN1
RECC (Alias)	3q21.2	MUC13
RecQ4 (Alias)	8q24.3	RECQL4
RECQL4	8q24.3	RECQL4 (RecQ protein-like 4)
RECQL5	17q25.1	RECQL5 (RecQ protein-like 5)
RECQL	12p12.1	RECQL RecQ protein-like (DNA helicase Q1-like)
RecQ protein like 4 (Alias)	8q24.3	RECQL4
REDD-1 (Alias)	10q22.1	DDIT4
REDD1 (Alias)	10q22.1	DDIT4
REG4	1p12	REG4 (regenerating gene type IV)
REG-IV (regenerating gene type IV) (Alias)	1p12	REG4
REH3P21 (Alias)	3p21.31	RASSF1
REIC (Alias)	11p15.3	DKK3
REIIBP (Alias)	4p16.3	WHSC1
RELA	11q13.1	RELA (v-rel reticuloendotheliosis viral oncogene homolog A (avian))
RELB	19q13.32	RELB (v-rel reticuloendotheliosis viral oncogene homolog B)
REL	2p16.1	REL v-rel reticuloendotheliosis viral oncogene homolog (avian)
REPA2 (Alias)	1p35.3	RPA2
REPP86 (Alias)	20q11.21	TPX2
REPRIMO (Alias)	2q23.3	RPRM
REPS2	Xp22.2	REPS2 (RALBP1 associated Eps domain containing 2)
Reptin52 (Alias)	19q13.33	RUVBL2
REPTIN (Alias)	19q13.33	RUVBL2
REST	4q12	REST (RE1-silencing transcription factor)
RET	10q11.21	RET (REarranged during Transfection)
Retinoblastoma-like protein 2 (Alias)	16q12.2	RBL2
Retinoblastoma-related gene RB2 (Alias)	16q12.2	RBL2
RFG (Alias)	10q11.23	NCOA4
RFP (Alias)	6p22.1	TRIM27
RGAG3 (Alias)	7q21.3	PEG10
RGD-CAP (Alias)	5q31.1	TGFB1
RGS-17 (Alias)	6q25.2	RGS17
RGS17	6q25.2	RGS17 (regulator of G-protein signaling 17)

RGS2	1q31.2	RGS2 (regulator of G-protein signaling 2, 24kDa)
RGSZ2 (Alias)	6q25.2	RGS17
RHA (Alias)	1q25.3	DHX9
RHEPDGFRA (Alias)	4q12	PDGFRA
RHO12 (Alias)	3p21.31	RHOA
Rho8 (Alias)	2q23.3	RND3
RHOA	3p21.31	RHOA (ras homolog gene family, member A)
RHOB	2p24.1	RHOB (ras homolog gene family, member B)
RHOBTB1	10q21.2	RHOBTB1 (Rho-related BTB domain containing 1)
RHOBTB2	8p21.3	RHOBTB2 (Rho-related BTB domain containing 2)
RhoC (Alias)	1p13.2	RHOC
RHOC	1p13.2	RHOC (ras homolog gene family, member C)
RhoE (Alias)	2q23.3	RND3
RHOH12 (Alias)	3p21.31	RHOA
RHOH6 (Alias)	2p24.1	RHOB
RhoH9 (Alias)	1p13.2	RHOC
RHOH	4p14	RHOH (Ras homolog gene family, member H)
RHOI (Alias)	1p31.3	DIRAS3
RHOM1 (Alias)	11p15.4	LMO1
RHOM2 (Alias)	11p13	LMO2
RHS (Alias)	3q28	TP63
RIC (Alias)	19q13.12	FXYD5
RIEG3 (Alias)	6p25.3	FOXC1
RIG1 (Alias)	11q12.3	RARRES3
RIG (Alias)	11p15.3	DKK3
RIGB (Alias)	20q12	CHD6
RIIC (Alias)	3p24.1	TGFB2
RIM (Alias)	18q11.2	RBBP8
RINF (Alias)	5q31.2	CXXC5
RIP140 (Alias)	21q11.2	NR1P1
RIP14 (Alias)	12q23.1	NR1H4
RIPE3b1 (Alias)	8q24.3	MAFA
RIR1 (Alias)	11p15.4	RRM1
RIS2 (Alias)	16q24.3	CDT1
Rit1 zinc finger protein hRit1 alpha (not to be confused with RIT1 on chr. 1q22) (Alias)	14q32.2	BCL11B
Rit42 (Alias)	8q24.22	NDRG1
RIT42 (Alias)	8q24.22	NDRG1
RIZ1 (Alias)	1p36.21	PRDM2
RIZ2 (Alias)	1p36.21	PRDM2
RIZ (retinoblastoma interacting zinc-finger protein) (Alias)	1p36.21	PRDM2
RK17 (Alias)	21q22.11	OLIG2
RK (Alias)	6p21.31	MAPK14
RKIP (Alias)	12q24.23	PEBP1
RLC (Alias)	3p22.2	ITGA9

RLN2	9p24.1	RLN2 (relaxin 2)
RLXH2 (Alias)	9p24.1	RLN2
RMRP	9p13.3	RMRP (RNA component of mitochondrial RNA processing endoribonuclease)
RMRPR (Alias)	9p13.3	RMRP
RNASE4 (Alias)	14q11.2	ANG
RNASE5 (Alias)	14q11.2	ANG
RNASE6PL (Alias)	6q27	RNASET2
RNASET2	6q27	RNASET2 (ribonuclease T2)
RND3	2q23.3	RND3 (Rho family GTPase 3)
RNF11	1p32.3	RNF11 (ring finger protein 11)
RNF139	8q24.13	RNF139 (translocation in renal carcinoma, chromosome 8 gene)
RNF199 (Alias)	4q21.1	RCHY1
RNF213	17q25.3	RNF213 (lymphoma oligomerization partner on chromosome 17)
RNF45 (Alias)	16q12.2	AMFR
RNF48 (Alias)	11q22.2	BIRC2
RNF51 (Alias)	10p12.2	BMI1
RNF53 (Alias)	17q21.31	BRCA1
RNF71 (Alias)	15q24.1	PML
RNF75 (Alias)	22q13.2	RBX1
RNF76 (Alias)	6p22.1	TRIM27
RNF7	3q23	RNF7 (RING finger protein-7)
RNF80 (Alias)	3q24	HLTF
RNF82 (Alias)	7q33	TRIM24
RNX (Alias)	5q35.1	TLX3
ROBO1	3p12.3	ROBO1 (roundabout, axon guidance receptor, homolog 1 (Drosophila))
ROC1 (Alias)	22q13.2	RBX1
ROC2 (Alias)	3q23	RNF7
ROCK2	2p25.1	ROCK2 (Rho-associated, coiled-coil containing protein kinase 2)
ROCK-II (Alias)	2p25.1	ROCK2
RON protein tyrosine kinase (RON); (Alias)	3p21.31	MST1R
ROPP120 (Alias)	2p21	EML4
ROR2	9q22.31	ROR2 (receptor tyrosine kinase-like orphan receptor 2)
RP11-229A19.4 (Alias)	1p13.1	VTCN1
RP11-322N21.1 (Alias)	1p34.1	TSPAN1
RP11-367H5.2 (Alias)	10q22.1	AIFM2
RP11-383C12.1 (Alias)	Xq12	AR

RP11-403E24.2 (Alias)	Xq11.2	AMER1
RP11-422P24.6 (Alias)	1q21.3	CRTC2
RP11-514O12.3 (Alias)	6q27	RNASET2
RP11-525G3.1 (Alias)	6q13	CD109
RP11-552M11.3 (Alias)	1p13.2	WDR77
RP11-566C13 (Alias)	1p34.3	RSP01
RP1-18D14.5 (Alias)	1p33	PDZK1IP1
RP31 (Alias)	9p21.1	TOPORS
RP38 (Alias)	2q13	MERTK
RP5-944N15.1 (Alias)	1p31.3	MIER1
RPA2	1p35.3	RPA2 (replication protein A2, 32kDa)
RPA32 (Alias)	1p35.3	RPA2
RPD3-2 (Alias)	5q31.3	HDAC3
RPD3 (Alias)	6q21	HDAC2
RPD3 (Alias)	5q31.3	HDAC3
RPF-1 (Retina-derived POU-domain factor-1) (Alias)	7p14.1	POU6F2
RPL10	Xq28	RPL10 (ribosomal protein L10)
RPL26	17p13.1	RPL26 (ribosomal protein L26)
RPRM	2q23.3	RPRM (reprimo, TP53 dependent G2 arrest mediator candidate)
RPS27	1q21.3	RPS27 (ribosomal protein S27)
RPS30 (Alias)	11q13.1	FAU
RPS6KA1	1p36.11	RPS6KA1 (ribosomal protein S6 kinase, 90kDa, polypeptide 1)
RPS6KA6	Xq21.1	RPS6KA6 (Ribosomal Protein S6 Kinase, 90kDa, Polypeptide 6)
RPTPA (Alias)	20p13	PTPRA
R-PTP-alpha (Alias)	20p13	PTPRA
R-PTP-delta (Alias)	9p24.1	PTPRD
R-PTP-DELTA (Alias)	9p24.1	PTPRD
R-PTP-ETA (Alias)	11p11.2	PTPRJ
RPTPG (Alias)	3p14.2	PTPRG
R-PTP-GAMMA (Alias)	3p14.2	PTPRG
RR1 (Alias)	11p15.4	RRM1
RR2 (Alias)	2p25.1	RRM2
RR2M (Alias)	2p25.1	RRM2
RREB-1 (Alias)	6p24.3	RREB1
RREB1	6p24.3	RREB1 (Ras Responsive Element Binding Protein 1)
RRM1	11p15.4	RRM1 (ribonucleotide reductase M1)
RRM2	2p25.1	RRM2 (ribonucleotide reductase M2)
RSE (Alias)	15q15.1	TYRO3
RSF-1 (Alias)	11q14.1	RSF1

RSF1	11q14.1	RSF1 (remodeling and spacing factor 1)
RSK1 (Alias)	1p36.11	RPS6KA1
RSK4 (Alias)	Xq21.1	RPS6KA6
RSK (Alias)	1p36.11	RPS6KA1
RSPO1	1p34.3	RSPO1 (R-spondin homolog (Xenopus laevis))
R-spondin1 (Alias)	1p34.3	RSPO1
RSPONDIN (Alias)	1p34.3	RSPO1
RSS (Alias)	7p12.1	GRB10
RSTS (Rubinstein-Taybi syndrome) (Alias)	16p13.3	CREBBP
RSU2 (Alias)	17q11.1	KSR1
RTA1A (Alias)	17q21.31	SLC4A1
RTK6 (Alias)	6p21.33	DDR1
RTN4-A (Alias)	2p16.1	RTN4
RTN4-B1 (Alias)	2p16.1	RTN4
RTN4-B2 (Alias)	2p16.1	RTN4
RTN4-C (Alias)	2p16.1	RTN4
RTN4	2p16.1	RTN4 (reticulon 4)
RTN-X (Alias)	2p16.1	RTN4
RTP (Alias)	8q24.22	NDRG1
RTS (Alias)	8q24.3	RECQL4
RUNX1	21q22.12	RUNX1 (runt-related transcription factor 1 (acute myeloid leukemia 1; aml1 oncogene))
RUNX1T1	8q21.3	RUNX1T1 (runt-related transcription factor 1; translocated to, 1 (cyclin D-related))
RUNX2	6p21.1	RUNX2 (Runt-related transcription factor 2)
RUNXBP2 (Alias)	8p11.21	KAT6A
RUVBL1	3q21.3	RUVBL1 (RuvB-like 1 (E. coli))
RUVBL2	19q13.33	RUVBL2 (RuvB-like 2 (E. coli))
RVB1 (Alias)	3q21.3	RUVBL1
Rvb2 (Alias)	19q13.33	RUVBL2
RVB2 (Alias)	19q13.33	RUVBL2

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