

Gene Symbol	Accession	Alias/Prev Symbol	Official Full Name
ABL1	NM_005157.3	ABL, JTK7, c-ABL, p150	c-abl oncogene 1, non-receptor tyrosine kinase
AKT3	NM_005465.4		v-akt murine thymoma viral oncogene homolog 3
ALKBH2	NM_001001655.2		alkB, alkylation repair homolog 2 (E. coli)
ALKBH3	NM_139178.3		alkB, alkylation repair homolog 3 (E. coli)
APC	NM_000038.3		adenomatous polyposis coli
APEX1	NM_001641.2	APEX, APE, REF1, HAP1, APX, APEN, R	APEX nuclease (multifunctional DNA repair enzyme) 1
APEX2	NM_014481.2		APEX nuclease (apurinic/aprimidinic endonuclease) 2
ATM	NM_138292.3	ATA, ATDC, ATC, ATD, TEL1, TELO1	ataxia telangiectasia mutated
ATR	NM_001184.2		ataxia telangiectasia and Rad3 related
ATRIP	NM_130384.1		ATR interacting protein
AURKA	NM_003600.2	STK15, STK6, BTAK, AurA, STK7, ARK1	aurora kinase A
BCL2	NM_000657.2		B-cell CLL/lymphoma 2
BCL2L1	NM_138578.1		BCL2-like 1
BLM	NM_000057.2		Bloom syndrome, RecQ helicase-like
BRCA1	NM_007305.2		breast cancer 1, early onset
BRCA2	NM_000059.3	FANCD1, FACD, FANCD, FAD, FAD1, BR	breast cancer 2, early onset
BRIP1	NM_032043.1		BRCA1 interacting protein C-terminal helicase 1
BUB1B	NM_001211.4		BUB1 mitotic checkpoint serine/threonine kinase B
CASP8	NM_001228.4		caspase 8, apoptosis-related cysteine peptidase
CCND1	NM_053056.2	BCL1, D11S287E, PRAD1, U21B31	cyclin D1
CCND2	NM_001759.2		cyclin D2
CCND3	NM_001760.2		cyclin D3
CCNO	NM_021147.3	CCNU, UDG2, FLJ22422, UNG2	cyclin O
CDK7	NM_001799.2		cyclin-dependent kinase 7
CDKN1A	NM_000389.2	CDKN1, P21, CIP1, WAF1, SDI1, CAP20	cyclin-dependent kinase inhibitor 1A (p21, Cip1)
CDKN1B	NM_004064.2		cyclin-dependent kinase inhibitor 1B (p27, Kip1)
CDKN2A	NM_000077.3	CDKN2, MLM, CDK4I, p16, INK4a, MTS	cyclin-dependent kinase inhibitor 2A
CDKN2C	NM_001262.2		cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)
CHEK1	NM_001114121.1		checkpoint kinase 1
CHEK2	NM_007194.3	RAD53, CDS1, CHK2, HuCds1, PP1425,	checkpoint kinase 2
CREBBP	NM_001079846.1	RSTS, RTS, CBP, KAT3A	CREB binding protein
CRY1	NM_004075.3		cryptochrome circadian clock 1
DDB1	NM_001923.3		damage-specific DNA binding protein 1, 127kDa
DDB2	NM_000107.1		damage-specific DNA binding protein 2, 48kDa
DNA2	NM_001080449.2	DNA2L, KIAA0083	DNA replication helicase/nuclease 2
EGFR	NM_201282.1	ERBB, ERBB1	epidermal growth factor receptor
ERCC1	NM_001983.3		excision repair cross-complementing rodent repair deficiency, complementation group 1 (inc
ERCC2	NM_000400.2	XPD, MAG, EM9, MGC102762, MGC126	excision repair cross-complementing rodent repair deficiency, complementation group 2
ERCC3	NM_000122.1		excision repair cross-complementing rodent repair deficiency, complementation group 3
ERCC4	NM_005236.2	XPF, RAD1, FANCC	excision repair cross-complementing rodent repair deficiency, complementation group 4
ERCC5	NM_000123.2		excision repair cross-complementing rodent repair deficiency, complementation group 5
ERCC6	NM_000124.2	CKN2, CSB, RAD26, ARMD5	excision repair cross-complementing rodent repair deficiency, complementation group 6
ERCC8	NM_000082.3	CKN1, CSA	excision repair cross-complementing rodent repair deficiency, complementation group 8
EXO1	NM_006027.3		exonuclease 1
FAN1	NM_001146094.1		FANCD2/FANCI-associated nuclease 1
FANCA	NM_000135.2	FACA, FANCH, FAA, FA-H, FAH	Fanconi anemia, complementation group A
FANCB	NM_152633.2		Fanconi anemia, complementation group B
FANCC	NM_000136.2	FACC, FAC, FA3	Fanconi anemia, complementation group C
FANCD2	NM_033084.3	FACD, FANCD, FAD, FA-D2	Fanconi anemia, complementation group D2
FANCE	NM_021922.2	FACE, FAE	Fanconi anemia, complementation group E
FANCF	NM_022725.2		Fanconi anemia, complementation group F
FANCG	NM_004629.1	XRCC9, FAG	Fanconi anemia, complementation group G
FANCI	NM_001113378.1	KIAA1794, FLJ10719	Fanconi anemia, complementation group I
FANCL	NM_001114636.1	PHF9, FLJ10335, FAAP43, Pog	Fanconi anemia, complementation group L
FANCM	NM_020937.2	KIAA1596, FAAP250	Fanconi anemia, complementation group M
FEN1	NM_004111.4	RAD2, FEN-1, MF1	flap structure-specific endonuclease 1
GEN1	NM_182625.3		GEN1 Holliday junction 5' flap endonuclease
GTF2H3	NM_001516.3		general transcription factor IIH, polypeptide 3, 34kDa
H2AFX	NM_002105.2		H2A histone family, member X
HDAC1	NM_004964.2	RPD3L1, HD1, GON-10	histone deacetylase 1
HDAC2	NM_001527.1		histone deacetylase 2
HLTF	NM_139048.2	SNF2L3, SMARCA3, HIP116A, HLTF1, R	helicase-like transcription factor
HUS1	NM_004507.2		HUS1 checkpoint homolog (S. pombe)
KRAS	NM_004985.3	KRAS2, KRAS1	Kirsten rat sarcoma viral oncogene homolog
LIG1	NM_000234.1		ligase I, DNA, ATP-dependent
LIG3	NM_002311.3		ligase III, DNA, ATP-dependent
LIG4	NM_002312.3		ligase IV, DNA, ATP-dependent
MAD2L2	NM_001127325.1		MAD2 mitotic arrest deficient-like 2 (yeast)
MDC1	NM_014641.2		mediator of DNA-damage checkpoint 1
MGMT	NM_002412.3		O-6-methylguanine-DNA methyltransferase
MLH1	NM_000249.2	COCA2, HNPCC, FCC2, HNPCC2	mutL homolog 1
MLH3	NM_014381.2		mutL homolog 3
MNAT1	NM_002431.2		MNAT CDK-activating kinase assembly factor 1
MPG	NM_001015052.1		N-methylpurine-DNA glycosylase
MRE11A	NM_005591.3	MRE11, ATLD	MRE11 meiotic recombination 11 homolog A (S. cerevisiae)

MSH2	NM_000251.1	COCA1, HNPCC, HNPCC1	mutS homolog 2
MSH3	NM_002439.2		mutS homolog 3
MSH4	NM_002440.3		mutS homolog 4
MSH5	NM_172165.2		mutS homolog 5
MSH6	NM_000179.1		mutS homolog 6
MUTYH	NM_012222.2		mutY homolog
MYC	NM_002467.3		v-myc avian myelocytomatosis viral oncogene homolog
MYD88	NM_002468.3		myeloid differentiation primary response 88
NBN	NM_001024688.1	NBS, NBS1, ATV, AT-V2, AT-V1	nibrin
NEIL1	NM_024608.2		nei endonuclease VIII-like 1 (E. coli)
NEIL2	NM_145043.2		nei endonuclease VIII-like 2 (E. coli)
NEIL3	NM_018248.2		nei endonuclease VIII-like 3 (E. coli)
NFKB1	NM_003998.2		nuclear factor of kappa light polypeptide gene enhancer in B-cells 1
NKX3-1	NR_046072.1	NKX3A, NKX3.1, BAPX2	NK3 homeobox 1
NLRP2	NM_017852.1	NALP2, FLJ20510, PYPAF2, NBS1, PAN	NLR family, pyrin domain containing 2
NTHL1	NM_002528.5		nth endonuclease III-like 1 (E. coli)
OGG1	NM_002542.5		8-oxoguanine DNA glycosylase
PARP1	NM_001618.3	PPOL, ADPRT, PARP	poly (ADP-ribose) polymerase 1
PARP2	NM_005484.3		poly (ADP-ribose) polymerase 2
PARP3	NM_005485.4	ADPRTL3, ADPRT3, IRT1, hPARP-3, pA	poly (ADP-ribose) polymerase family, member 3
PARP4	NM_006437.3	ADPRTL1, VAULT3, p193, VPARP, VWA5	poly (ADP-ribose) polymerase family, member 4
PCNA	NM_002592.2		proliferating cell nuclear antigen
PIK3CA	NM_006218.2		phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit alpha
PIK3CB	NM_006219.1		phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit beta
PIK3R1	NM_181504.2		phosphoinositide-3-kinase, regulatory subunit 1 (alpha)
PMS1	NM_000534.4		PMS1 postmeiotic segregation increased 1 (S. cerevisiae)
PMS2	NM_000535.5	PMSL2, H_DJ0042M02.9, HNPCC4	PMS2 postmeiotic segregation increased 2 (S. cerevisiae)
PNKP	NM_007254.2		polynucleotide kinase 3'-phosphatase
POLB	NM_002690.1		polymerase (DNA directed), beta
POLD1	NM_002691.2	POLD, CDC2	polymerase (DNA directed), delta 1, catalytic subunit
POLD3	NM_006591.2		polymerase (DNA-directed), delta 3, accessory subunit
POLD4	NM_021173.2		polymerase (DNA-directed), delta 4, accessory subunit
POLE	NM_006231.3		polymerase (DNA directed), epsilon, catalytic subunit
POLE2	NM_002692.2		polymerase (DNA directed), epsilon 2, accessory subunit
POLE4	NM_019896.2		polymerase (DNA-directed), epsilon 4, accessory subunit
POLI	NM_007195.2		polymerase (DNA directed) iota
POLK	NM_016218.2	DINB1, POLQ, DINP	polymerase (DNA directed) kappa
POLL	NM_001174085.1		polymerase (DNA directed), lambda
POLM	NM_013284.3		polymerase (DNA directed), mu
POLQ	NM_199420.3		polymerase (DNA directed), theta
POLR2D	NM_004805.3		polymerase (RNA) II (DNA directed) polypeptide D
POLR2H	NM_001278698.1		polymerase (RNA) II (DNA directed) polypeptide H
POLR2J	NM_006234.4		polymerase (RNA) II (DNA directed) polypeptide J, 13.3kDa
PRKACB	NM_182948.2		protein kinase, cAMP-dependent, catalytic, beta
PRKDC	NM_006904.6	HYRC, HYRC1, DNP1, p350, DNAPK, X	protein kinase, DNA-activated, catalytic polypeptide
PRKX	NM_005044.1		protein kinase, X-linked
PTEN	NM_000314.4	BZS, MHAM, MMAC1, TEP1, PTEN1	phosphatase and tensin homolog
RAD1	NM_133377.2		RAD1 homolog (S. pombe)
RAD17	NM_133338.1		RAD17 homolog (S. pombe)
RAD18	NM_020165.2		RAD18 homolog (S. cerevisiae)
RAD21	NM_006265.2		RAD21 homolog (S. pombe)
RAD23A	NM_005053.2		RAD23 homolog A (S. cerevisiae)
RAD23B	NM_002874.3		RAD23 homolog B (S. cerevisiae)
RAD50	NM_005732.2		RAD50 homolog (S. cerevisiae)
RAD51	NM_133487.2	RAD51A, RECA, HsRad51, HsT16930, B	RAD51 recombinase
RAD51B	NM_002877.5	RAD51L1, REC2, hREC2, R51H2	RAD51 paralog B
RAD51C	NM_002876.2		RAD51 paralog C
RAD51D	NM_002878.3	RAD51L3, R51H3, Trad, HsTRAD	RAD51 paralog D
RAD52	NM_134424.2		RAD52 homolog (S. cerevisiae)
RAD54L	NM_003579.2		RAD54-like (S. cerevisiae)
RAD9A	NM_004584.2		RAD9 homolog A (S. pombe)
RB1	NM_000321.1	OSRC, RB	retinoblastoma 1
RECQL	NM_032941.2		RecQ protein-like (DNA helicase Q1-like)
RECQL5	NM_004259.6		RecQ protein-like 5
REV1	NM_016316.2		REV1, polymerase (DNA directed)
RFC1	NM_001204747.1		replication factor C (activator 1) 1, 145kDa
RFC3	NM_002915.3		replication factor C (activator 1) 3, 38kDa
RFC4	NM_181573.2		replication factor C (activator 1) 4, 37kDa
RMI1	NM_024945.2	C9orf76, FLJ12888, BLAP75	RecQ mediated genome instability 1
RMI2	NM_152308.1	C16orf75, MGC24665, BLAP18	RecQ mediated genome instability 2
RPA1	NM_002945.3		replication protein A1, 70kDa
RPA3	NM_002947.3		replication protein A3, 14kDa
RPS27A	NM_002954.5		ribosomal protein S27a
RRM2B	NM_015713.3		ribonucleotide reductase M2 B (TP53 inducible)
SIRT1	NM_012238.4		sirtuin 1

SLFN11	NM_001104587.1		schlafen family member 11
SLK	NM_014720.2		STE20-like kinase
SLX4	NM_032444.2	BTBD12, KIAA1784, KIAA1987, FANCP	SLX4 structure-specific endonuclease subunit
SMAD4	NM_005359.3	MADH4, DPC4	SMAD family member 4
SMARCA4	NM_003072.3	SNF2L4, hSNF2b, BRG1, BAF190, SNF2	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, m
SMC1A	NM_006306.2	SMC1L1, DXS423E, KIAA0178, SB1.8, S	structural maintenance of chromosomes 1A
SMC3	NM_005445.3	CSPG6, HCAP, BAM, SMC3L1, bamacan	structural maintenance of chromosomes 3
SMUG1	NM_001243789.1		single-strand-selective monofunctional uracil-DNA glycosylase 1
SUMO3	NM_006936.2	SMT3H1, SMT3A	small ubiquitin-like modifier 3
TDG	NM_003211.4		thymine-DNA glycosylase
TIPIN	NM_017858.2		TIMELESS interacting protein
TOP3A	NM_004618.3		topoisomerase (DNA) III alpha
TOP3B	NM_003935.4		topoisomerase (DNA) III beta
TP53	NM_000546.2		tumor protein p53
TP53BP1	NM_001141980.1		tumor protein p53 binding protein 1
TREX1	NM_016381.3	AGS1, DRN3	three prime repair exonuclease 1
UBB	NM_018955.2		ubiquitin B
UBE2T	NM_014176.3		ubiquitin-conjugating enzyme E2T (putative)
UNG	NM_003362.3	DGU, UDG, UNG1, UNG2, HIGM4	uracil-DNA glycosylase
USP1	NM_003368.4		ubiquitin specific peptidase 1
WEE1	NM_003390.3		WEE1 G2 checkpoint kinase
WRN	NM_000553.4		Werner syndrome, RecQ helicase-like
XPA	NM_000380.3		xeroderma pigmentosum, complementation group A
XPC	NM_004628.3		xeroderma pigmentosum, complementation group C
XRCC1	NM_006297.2		X-ray repair complementing defective repair in Chinese hamster cells 1
XRCC2	NM_005431.1		X-ray repair complementing defective repair in Chinese hamster cells 2
XRCC3	NM_001100119.1		X-ray repair complementing defective repair in Chinese hamster cells 3
XRCC4	NM_003401.3		X-ray repair complementing defective repair in Chinese hamster cells 4
XRCC5	NM_021141.3		X-ray repair complementing defective repair in Chinese hamster cells 5 (double-strand-break
XRCC6	NM_001469.3	G22P1, D22S731, D22S671, KU70, ML8	X-ray repair complementing defective repair in Chinese hamster cells 6
CC2D1B	NM_032449.2		coiled-coil and C2 domain containing 1B
COG7	NM_153603.3		component of oligomeric golgi complex 7
EDC3	NM_001142443.1	YJDC, LSM16, FLJ21128, hYjeF_N2-15	enhancer of mRNA decapping 3
GPATCH3	NM_022078.2	GPATC3, FLJ12455	G patch domain containing 3
HDAC3	NM_003883.2		histone deacetylase 3
MTMR14	NM_022485.3	C3orf29, FLJ22405, FLJ90311, hJumpy	myotubularin related protein 14
NUBP1	NM_001278506.1	NBP1, NBP35	nucleotide binding protein 1
PRPF38A	NM_032864.3		pre-mRNA processing factor 38A
SAP130	NM_024545.3		Sin3A-associated protein, 130kDa
SF3A3	NM_006802.2		splicing factor 3a, subunit 3, 60kDa
TLK2	NM_006852.2		tousled-like kinase 2
ZC3H14	NM_001160103.1		zinc finger CCCH-type containing 14