E3 Ubiquitin-Protein Ligase RAD18 (RAD18) Human Recombinant Protein

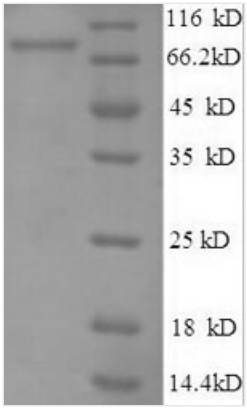
PRODUCT OVERVIEW

Product Name	E3 ubiquitin-protein ligase RAD18, Recombinant Protein
Full Product Name	Recombinant Human E3 ubiquitin-protein ligase RAD18
Product Gene Name	RAD18 recombinant protein
Product Synonym Names	Postreplication repair protein RAD18; hHR18; hRAD18; RING finger protein 73
Sequence	MDSLAESRWP PGLAVMKTID DLLRCGICFE YFNIAMIIPQ CSHNYCSLCI RKFLSYKTQC PTCCVTVTEP DLKNNRILDE LVKSLNFARN HLLQFALESP AKSPASSSSK NLAVKVYTPV ASRQSLKQGS RLMDNFLIRE MSGSTSELLI KENKSKFSPQ KEASPAAKTK ETRSVEEIAP DPSEAKRPEP PSTSTLKQVT KVDCPVCGVN IPESHINKHL DSCLSREEKK ESLRSSVHKR KPLPKTVYNL LSDRDLKKKL KEHGLSIQGN KQQLIKRHQE FVHMYNAQCD ALHPKSAAEI VREIENIEKT RMRLEASKLN ESVMVFTKDQ TEKEIDEIHS KYRKKHKSEF QLLVDQARKG YKKIAGMSQK TVTITKEDES TEKLSSVCMG QEDNMTSVTN HFSQSKLDSP EELEPDREED SSSCIDIQEV LSSSESDSCN SSSSDIIRDL LEEEEAWEAS HKNDLQDTEI SPRQNRRTRA AESAEIEPRN KRNRN
Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.
Molecular Weight	72.2 kDa
Sequence Positions	1-495aa; Full Length
Tag Information	This protein contains an N-terminal tag and may also contain a C-terminal tag. Tag types are determined by various factors including tag-protein stability, please inquire for tag information.
Sterility	Sterile filter available upon request.
Endotoxin	Low endotoxin available upon request.
OMIM	605256
3D Structure	ModBase 3D Structure for Q9NS91
Product Categories/Family for RAD18 recombinant protein	Epigenetics and Nuclear Signaling
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for RAD18 recombinant protein	E3 ubiquitin-protein ligase involved in postreplication repair of UV-damaged DNA. Postreplication repair functions in gap-filling of a daughter strand on replication of damaged DNA. Associates to the E2 ubiquitin conjugating enzyme UBE2B to form the UBE2B-RAD18 ubiquitin ligase complex involved in mono-ubiquitination of DNA-associated PCNA on 'Lys-164'. Has ssDNA binding activity.

Product References and Citations for RAD18 recombinant protein

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Other Notes	Small volumes of RAD18 recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for RAD18 purchase	MBS1355759 is a recombinant protein targeting RAD18. Also known as Recombinant Human E3 ubiquitin-protein ligase RAD18. Host: E Coli or Yeast or Baculovirus or Mammalian Cell.



SDS-PAGE of RAD18 recombinant protein

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for RAD18. It may not necessarily be applicable to this product.

NCBI GI #	256818821
NCBI GeneID	56852
NCBI Accession #	NP_064550.3
UniProt Primary Accession #	Q9NS91
UniProt Secondary Accession #	Q58F55; Q9NRT6
UniProt Related Accession #	Q9NS91
GenBank Nucleotide #	NM_020165.3
NCBI Official Full Name	E3 ubiquitin-protein ligase RAD18
NCBI Official Synonym Full Names	RAD18, E3 ubiquitin protein ligase
NCBI Official Symbol	RAD18
NCBI Official Synonym Symbols	RNF73
UniProt Protein Name	E3 ubiquitin-protein ligase RAD18
UniProt Synonym Protein Names	Postreplication repair protein RAD18; hHR18; hRAD18; RING finger protein 73
Protein Family	E3 ubiquitin-protein ligase
UniProt Gene Name	RAD18
UniProt Synonym Gene Names	RNF73; hHR18; hRAD18
UniProt Entry Name	RAD18_HUMAN
NCBI Protein Information	E3 ubiquitin-protein ligase RAD18
NCBI Summary for RAD18	The protein encoded by this gene is highly similar to S. cerevisiae DNA damage repair protein Rad18. Yeast Rad18 functions through its interaction with Rad6, which is an ubiquitin-conjugating enzyme required for post-replication repair of damaged DNA. Similar to its yeast counterpart, this protein is able to interact with the human homolog of yeast Rad6 protein through a conserved ring-finger motif. Mutation of this motif results in defective replication of UV-damaged DNA and hypersensitivity to multiple mutagens. [provided by RefSeq, Jul 2008]

UniProt Comments for RAD18	RAD18: a structural maintenance of chromosomes (SMC) protein involved in postreplication repair of UV-damaged DNA. Has ssDNA binding activity. Interacts with Rad6 through a conserved ring-finger motif. Rad6 is an ubiquitin-conjugating enzyme required for post-replication repair of damaged DNA. Postreplication repair functions in gap-filling of a daughter strand on replication of damaged DNA. Protein type: EC 6.3.2.-; DNA repair, damage; EC 6.3.2.19; Ubiquitin conjugating system; Ligase; Ubiquitin ligase Chromosomal Location of Human Ortholog: 3p25.3 Cellular Component: centrosome; chromatin; cytoplasm; nuclear inclusion body; nucleoplasm; nucleus; replication fork; XY body Molecular Function: damaged DNA binding; ligase activity; polyubiquitin binding; protein binding; protein complex binding; single-stranded DNA-dependent ATPase activity; ubiquitin protein ligase binding; Y-form DNA binding; zinc ion binding Biological Process: bypass DNA synthesis; DNA damage response, detection of DNA damage; DNA repair; negative regulation of DNA recombination; positive regulation of chromosome segregation; postreplication repair; protein monoubiquitination; response to DNA damage stimulus; response to UV; spermatogenesis
Research Articles on RAD18	**1.** RAD18 can function as a mediator for DNA damage response signals to activate the G2/M checkpoint in order to maintain genome integrity and cell survival after IR exposure.
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