

Mouse monoclonal antibody to Human RAD18.

CABT-35931MH Mouse(RAD18)

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview	Mouse monoclonal antibody to Human RAD18.
Antigen Description	The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes one of the ATPase subunits, a member of the triple-A family of ATPases which have a chaperone-like activity. This subunit has been shown to interact with an orphan member of the nuclear hormone receptor superfamily highly expressed in liver, and with gankyrin, a liver oncoprotein. Two transcript variants encoding different isoforms have been identified.
Target	RAD18
Immunogen	Synthetic peptide: FSQSKLDSPEELE, corresponding to amino acids 402-414 of Human RAD18.
Host	Mouse
Isotype	IgG1
species	Human
Clone	80C2059
Purification	Immunogen affinity purified
Applications	WB
Sequence similarities	Belongs to the RAD18 family. Contains 1 RING-type zinc finger. Contains 1 SAP domain. Contains 1 UBZ-type zinc finger.
Cellular localization	Nucleus.

PACKAGING

Format	Liquid
Concentration	0.500 mg/ml
Buffer	Preservative: 0.1% Sodium Azide and 0.01% Thiomerosal Constituents: PBS containing 0.2% Gelatin
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

ANTIGEN GENE INFORMATION

Gene Name	RAD18 RAD18 homolog (S. cerevisiae) [Homo sapiens]
Official Symbol	RAD18

Synonyms	RAD18; RAD18 homolog (S. cerevisiae); E3 ubiquitin-protein ligase RAD18; RNF73; 2810024C04Rik; DNA repair protein rad18; E3 ubiquitin-protein ligase RAD18; EC 6.3.2.-; hHR 18; hHR18; hRAD 18; hRAD18; MGC156682; Postreplication repair E3 ubiquitin-protein ligase RAD18; Postreplication repair protein hRAD18p; Postreplication repair protein RAD18; RAD 18; RAD18; RAD18 homolog (S. cerevisiae); RAD18 homolog; RAD18 S. cerevisiae homolog; RAD18 S. cerevisiae homolog of; RAD18 transcript variant; RAD18_HUMAN; Rad18sc; Radiation sensitivity protein 18; RING finger protein 73; RNF 73; RNF73; Structural maintenance of chromosomes protein 6; hHR18; hRAD18; OTTHUMP00000115649; RING finger protein 73; RAD18, S. cerevisiae, homolog; postreplication repair protein RAD18; postreplication repair protein hRAD18p;
GeneID	56852
mRNA Refseq	NM_020165
Protein Refseq	NP_064550
MIM	605256
UniProt ID	Q9NS91
Chromosome Location	3p25-p24
Function	Y-form DNA binding; damaged DNA binding; ligase activity; metal ion binding; protein binding; ubiquitin protein ligase binding; zinc ion binding;

REFERENCES

1. Human RAD18 interacts with ubiquitylated chromatin components and facilitates RAD9 recruitment to DNA double strand breaks. Inagaki A, et al. PLoS One, 2011.
2. Symmetry and asymmetry of the RING-RING dimer of Rad18. Huang A, et al. J Mol Biol, 2011 Jul 15.
3. Rad18 E3 ubiquitin ligase activity mediates Fanconi anemia pathway activation and cell survival following DNA Topoisomerase 1 inhibition. Palle K, et al. Cell Cycle, 2011 May 15.