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RAD18 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2090a

Product Information

Application	WB, FC, E
Primary Accession	Q9NS91
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2G8C10
Isotype	IgG1
Calculated MW	56223
Description	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.
Immunogen	Purified recombinant fragment of human RAD18 (AA: 332-430) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	56852
Other Names	E3 ubiquitin-protein ligase RAD18, 6.3.2.-, Postreplication repair protein RAD18, hHR18, hRAD18, RING finger protein 73, RAD18, RNF73
Dilution	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	RAD18 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAD18

Synonyms	RNF73
Function	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.
Cellular Location	Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Associates with chromatin (PubMed:25931565). Colocalizes with SLF1 in the nucleus and to centrosomes (PubMed:15632077). Relocalizes with SLF1 to nuclear foci in response to DNA damage (PubMed:22036607). Accumulates with the SLF1- SLF2 and SMC5-SMC6 complexes at replication-coupled DNA interstrand repair and DNA double-strand breaks (DSBs) sites on chromatin in a ubiquitin-dependent manner (PubMed:25931565)

References

1.Pigment Cell Melanoma Res. 2012 Mar;25(2):213-8.2.J Exp Clin Cancer Res. 2009 Jul 25;28:106.

Images

