

RAD18 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2118a**Specification****RAD18 Antibody - Product Information**

Application	WB, FC, E
Primary Accession	O9NS91
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	56.2kDa KDa

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

RAD18 Antibody - 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.

RAD18 Antibody - 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)

RAD18 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)