

### RAD18 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO2090a

# Specification

# **RAD18 Antibody - Product Information**

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**  E, WB, FC <u>O9NS91</u> Human Mouse Monoclonal IgG1 56.2kDa KDa

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 E~~1/10000 WB~~1/500 - 1/2000 FC~~1/200 - 1/400

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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>