



# Rad18 Monoclonal Antibody

|                           |  |
|---------------------------|--|
| <b>Catalog No</b>         | YP-mAb-00505   |
| <b>Isotype</b>            | IgG  |
| <b>Reactivity</b>         | Human;Rat  |
| <b>Applications</b>       | WB   |
| <b>Gene Name</b>          | RAD18  |
| <b>Protein Name</b>       | E3 ubiquitin-protein ligase RAD18  |
| <b>Immunogen</b>          | The antiserum was produced against synthesized peptide derived from human RAD18. AA range:301-350  |
| <b>Specificity</b>        | Rad18 Monoclonal Antibody detects endogenous levels of Rad18 protein.  |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.  |
| <b>Source</b>             | Monoclonal, Mouse,IgG  |
| <b>Purification</b>       | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.   |
| <b>Dilution</b>           | WB 1:500-1:2000  |
| <b>Concentration</b>      | 1 mg/ml  |
| <b>Purity</b>             | ≥90%   |
| <b>Storage Stability</b>  | -20°C/1 year   |
| <b>Synonyms</b>           | RAD18; RNF73; E3 ubiquitin-protein ligase RAD18; Postreplication repair protein RAD18; hHR18; hRAD18; RING finger protein 73   |
| <b>Observed Band</b>      | 56kD   |
| <b>Cell Pathway</b>       | Nucleus . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . 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). .   |
| <b>Tissue Specificity</b> | Epithelium,Liver,Placenta,   |
| <b>Function</b>           | 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.,pathway:Protein modification; protein ubiquitination.,similarity:Belongs to the RAD18 family.,similarity:Contains 1 RING-type zinc finger.,similarity:Contains 1 SAP domain.,subunit:Interacts with UBE2A and UBE2B. Interacts with SHPRH., |



## Background

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],

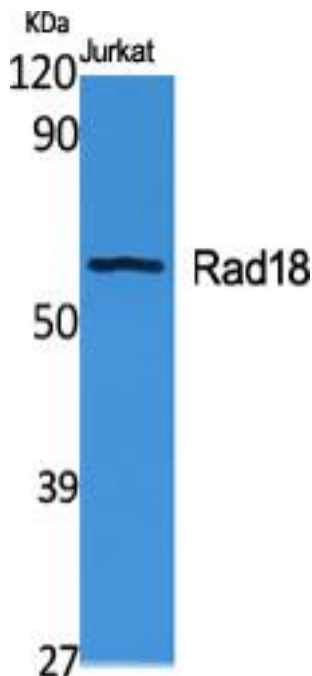
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of various cells using Rad18 Monoclonal Antibody