



Rad18 Polyclonal Antibody

Catalog No	YP-Ab-00505
Isotype	IgG
Reactivity	Human;Rat
Applications	WB;IHC
Gene Name	RAD18
Immunogen	The antiserum was produced against synthesized peptide derived from human RAD18. AA range:301-350
Specificity	Rad18 Polyclonal Antibody detects endogenous levels of Rad18 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000;IHC-p 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	E3 ubiquitin-protein ligase RAD18;EC:2.3.2.27;hHR18;hRAD18;RING finger protein 73;Rad18;RNF73;Postreplication repair protein RAD18
Observed Band	56kD
Calculated Molecular Weight	56kD
Cell Pathway	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). .
Tissue Specificity	Epithelium,Liver,Placenta,
Function	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: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

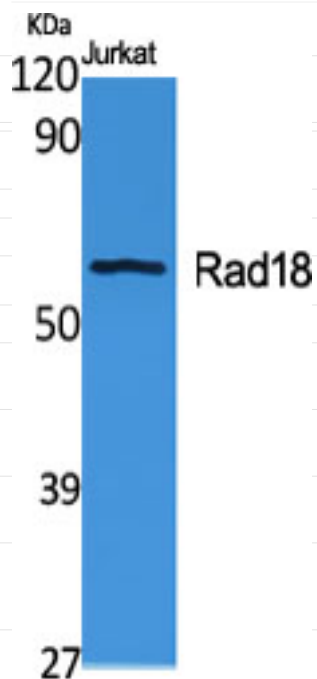
Avoid repeated freezing and thawing!

Usage suggestions

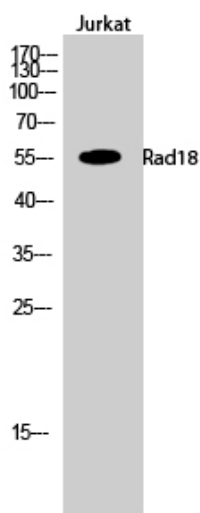
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



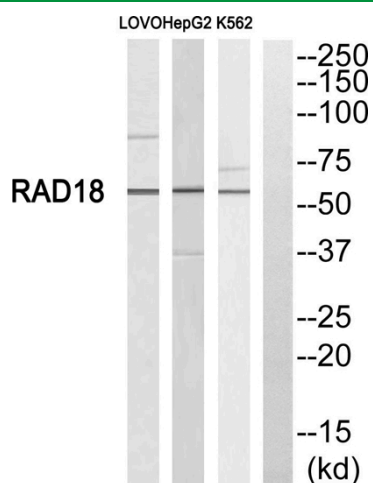
Products Images



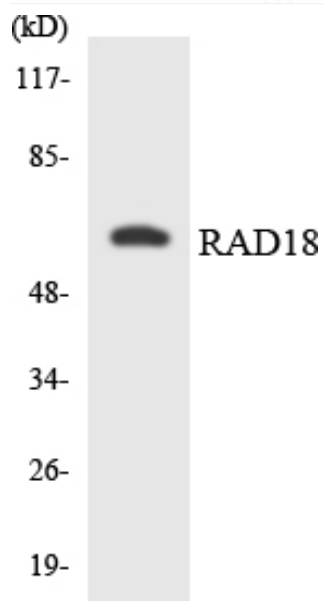
Western Blot analysis of various cells using Rad18 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



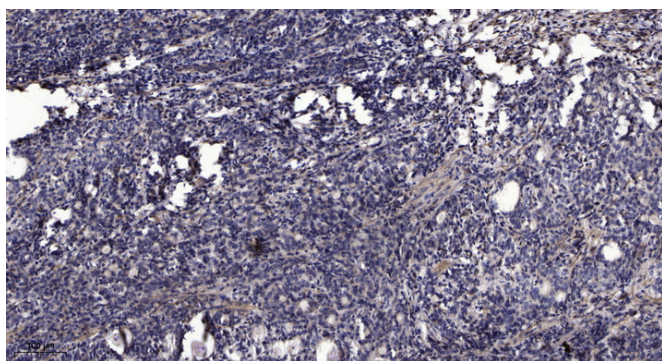
Western Blot analysis of Jurkat cells using Rad18 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



Western blot analysis of RAD18 Antibody. The lane on the right is blocked with the RAD18 peptide.



Western blot analysis of the lysates from COLO205 cells using RAD18 antibody.



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).