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RAD23A Recombinant Rabbit mAb

Catalog # AP100158

Product Information

Application	WB
Primary Accession	P54725
Other Accession	P54725
Reactivity	Human
Predicted	Rat, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	39609
Physical State	Liquid
Immunogen	A synthesized peptide derived from human RAD23A
Epitope Specificity	205-250/363
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SIMILARITY	Belongs to the RAD23 family.Contains 2 UBA domains.Contains 1 ubiquitin-like domain.
SUBUNIT	Interacts with XPC; the interaction is suggesting the existence of a functional equivalent variant XPC complex. Interacts with PSMD4 and PSMC5. Interacts with ATXN3. Interacts with HIV-1 vpr. Interacts with UBQLN2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Multiubiquitin chain receptor involved in modulation of proteasomal degradation. Binds to 'Lys-48'-linked polyubiquitin chains in a length-dependent manner and with a lower affinity to 'Lys-63'-linked polyubiquitin chains. Proposed to be capable to bind simultaneously to the 26S proteasome and to polyubiquitinated substrates and to deliver ubiquitinated proteins to the proteasome.

Additional Information

Gene ID	5886
Other Names	RD23A_HUMAN; RAD23A; HR23A; hHR23A; RD23A_MOUSE; mHR23A; RAD23 nucleotide excision repair protein A; RAD23 homolog A, nucleotide excision repair protein; RAD23 (S. cerevisiae) homolog A; RAD23 homolog A (S. cerevisiae); RAD23, yeast homolog, A
Dilution	WB=1:500-2000,Flow-Cyt=1:50-100,ICC/IF=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	RAD23A (HGNC:9812)
Function	Multifunctional protein that participates in histone H4K20 demethylation, DNA repair, ubiquitin-dependent protein degradation, transcriptional regulation, and viral replication (PubMed:12643283, PubMed:14621999, PubMed:15321727, PubMed:20614012, PubMed:32209475, PubMed:9372924). Specifically demethylates mono-, di- and trimethylated 'Lys-20' of histone H4 (H4K20me1, H4K20me2, H4K20me3, respectively) into unmethylated forms. Activates the transcription of coding genes by demethylating H4K20me1 and the transcription of repetitive elements by demethylating H4K20me3 (PubMed:32209475). Involved in modulation of proteasomal degradation. Binds to 'Lys-48'-linked polyubiquitin chains in a length-dependent manner and with a lower affinity to 'Lys-63'- linked polyubiquitin chains. Proposed to be capable to bind simultaneously to the 26S proteasome and to polyubiquitinated substrates and to deliver ubiquitinated proteins to the proteasome (PubMed:12643283, PubMed:14621999, PubMed:15321727). Involved in nucleotide excision repair, is considered functionally equivalent to RAD23B in global genome nucleotide excision repair (GG-NER) through its association with XPC. In vitro, the XPC-RAD23A complex demonstrates NER activity (PubMed:9372924). Can stabilize XPC (By similarity).
Cellular Location	Nucleus.

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