

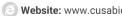


Recombinant Human UV excision repair protein RAD23 homolog A (RAD23A)

Product Code	CSB-EP019259HU
Relevance	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.Involved in nucleotide excision repair and is thought to be functional equivalent for RAD23B in global genome nucleotide excision repair (GG-NER) by association with XPC. In vitro, the XPC:RAD23A dimer has NER activity. Can stabilize XPC.Involved in vpr-dependent replication of HIV-1 in non-proliferating cells and primary macrophages. Required for the association of HIV-1 vpr with the host proteasome.
Abbreviation	Recombinant Human RAD23A protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P54725
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	MAVTITLKTLQQQTFKIRMEPDETVKVLKEKIEAEKGRDAFPVAGQKLIYAGKIL SDDVPIRDYRIDEKNFVVVMVTKTKAGQGTSAPPEASPTAAPESSTSFPPAPT SGMSHPPPAAREDKSPSEESAPTTSPESVSGSVPSSGSSGREEDAASTLVTG SEYETMLTEIMSMGYERERVVAALRASYNNPHRAVEYLLTGIPGSPEPEHGSV QESQVSEQPATEAAGENPLEFLRDQPQFQNMRQVIQQNPALLPALLQQLGQE NPQLLQQISRHQEQFIQMLNEPPGELADISDVEGEVGAIGEEAPQMNYIQVTP QEKEAIERLKALGFPESLVIQAYFACEKNENLAANFLLSQNFDDE
Research Area	Epigenetics and Nuclear Signaling
Source	E.coli
Torget Names	
Target Names	RAD23A
Expression Region	1-363aa
Expression Region	1-363aa Repeated freezing and thawing is not recommended. Store working aliquots at





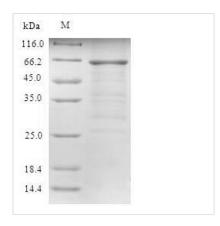




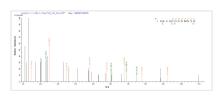
Protein Length

Image

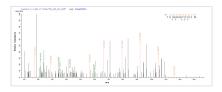
Full Length



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP019259HU could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) RAD23A.



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Description

Amino acids 1-363 constitute the expression domain of recombinant Human RAD23A. The theoretical molecular weight of the RAD23A protein is 66.6 kDa. This RAD23A recombinant protein is manufactured in e.coli. The RAD23A coding gene included the N-terminal GST tag, which simplifies the detection and purification processes of the recombinant RAD23A protein in following stages of expression and purification.

UV excision repair protein RAD23 homolog A (RAD23A) is a multifunctional protein involved in nucleotide excision repair (NER), a DNA repair mechanism that removes damaged nucleotides caused by UV radiation and other genotoxic agents. RAD23A acts as a shuttle protein that participates in the recognition and recruitment of damaged DNA sites during the initial steps of NER. It forms a complex with the Xeroderma Pigmentosum Group C (XPC) protein, aiding in the detection of DNA lesions. Additionally, RAD23A is involved in the delivery of ubiquitinated substrates to the proteasome for degradation. Studies on RAD23A contribute to the understanding of NER and the coordination of DNA repair processes. Aberrations in DNA repair mechanisms, including RAD23A function, are implicated in cancer development. Research explores the potential role of RAD23A in tumorigenesis. RAD23A's involvement in delivering ubiquitinated substrates to the proteasome connects it to cellular protein quality control and degradation pathways.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a



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concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.