

Datasheet for ABIN3094972
RAD23A Protein (AA 1-363) (Strep Tag)



[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	RAD23A
Protein Characteristics:	AA 1-363
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RAD23A protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

Product Details

Sequence: MAVTITLKTL QQQTFKIRME PDETVKVLKE KIEAEKGRDA FPVAGQKLIY AGKILSDDVP
IRDYRIDEKN FVWVMVTKTK AGQGTSAPPE ASPTAAPPESS TSFPPAPTSG MSHPPPAARE
DKSPSEESAP TTSPESVSGS VPSSGSSGRE EDAASTLVTG SEYETMLTEI MSMGYERERV
VAALRASYNM PHRAVEYLLT GIPGSPEPEH GSVQESQVSE QPATEAAGEN PLEFLRDQPQ
FQNMQRVIQQ NPALLPALLQ QLGQENPQLL QQISRHQEQF IQMLNEPPGE LADISDVEGE
VGAIGEEAPQ MNYIQVTPQE KEAIERLKAL GFPESLVIQA YFACEKNENL AANFLLSQNF DDE

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics: Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALICE® and purified by multi-step, protein-specific process to ensure

correct folding and modification.

- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Product Details

Endotoxin Level: Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Grade: Crystallography grade

Target Details

Target: RAD23A

Alternative Name: RAD23A ([RAD23A Products](#))

Background: UV excision repair protein RAD23 homolog A (HR23A) (hHR23A),FUNCTION: 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., FUNCTION: 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., FUNCTION: (Microbial infection) 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. {ECO:0000269|PubMed:20614012}.

Molecular Weight: 39.6 kDa

UniProt: [P54725](#)

Pathways: [DNA Damage Repair](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

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Application Details

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Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process