

Datasheet for ABIN7555160 **RAD23B Protein (AA 1-409) (His tag)**



Overview

| Quantity: | 1 mg |
|-------------------------------|---|
| Target: | RAD23B |
| Protein Characteristics: | AA 1-409 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This RAD23B protein is labelled with His tag. |

| Product Details | |
|-----------------|---|
| Purpose: | Custom-made recombinant RAD23B Protein expressed in mammalian cells. |
| Sequence: | MQVTLKTLQQ QTFKIDIDPE ETVKALKEKI ESEKGKDAFP VAGQKLIYAG KILNDDTALK |
| | EYKIDEKNFV VVMVTKPKAV STPAPATTQQ SAPASTTAVT SSTTTTVAQA PTPVPALAPT |
| | STPASITPAS ATASSEPAPA SAAKQEKPAE KPAETPVATS PTATDSTSGD SSRSNLFEDA |
| | TSALVTGQSY ENMVTEIMSM GYEREQVIAA LRASFNNPDR AVEYLLMGIP GDRESQAVVD |
| | PPQAASTGAP QSSAVAAAAA TTTATTTTS SGGHPLEFLR NQPQFQQMRQ IIQQNPSLLP |
| | ALLQQIGREN PQLLQQISQH QEHFIQMLNE PVQEAGGQGG GGGGGSGGIA EAGSGHMNYI |
| | QVTPQEKEAI ERLKALGFPE GLVIQAYFAC EKNENLAANF LLQQNFDED Sequence without tag. |
| | The proposed Purification-Tag is based on experiences 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. |
| Specificity: | If you are looking for a specific domain and are interested in a partial protein or a different |
| | isoform, please contact us regarding an individual offer. |

Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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 try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

Target:

RAD23B

Alternative Name:

RAD23B (RAD23B Products)

Background:

UV excision repair protein RAD23 homolog B (HR23B) (hHR23B) (XP-C repair-complementing complex 58 kDa protein) (p58),FUNCTION: Multiubiquitin chain receptor involved in modulation of proteasomal degradation. Binds to 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. May play a role in endoplasmic reticulum-associated degradation (ERAD) of misfolded glycoproteins by association with PNGase and delivering deglycosylated proteins to the proteasome., FUNCTION: Involved in global genome nucleotide excision repair (GG-NER) by acting as component of the XPC complex. Cooperatively with CETN2 appears to stabilize XPC. May protect XPC from proteasomal degradation., FUNCTION: The XPC complex is proposed to represent the first factor bound at the sites of DNA damage and together with other core recognition factors, XPA, RPA and the TFIIH complex, is part of the pre-incision (or initial recognition) complex. The XPC complex recognizes a wide spectrum of damaged DNA characterized by distortions of the DNA helix such as single-stranded loops,

mismatched bubbles or single-stranded overhangs. The orientation of XPC complex binding appears to be crucial for inducing a productive NER. XPC complex is proposed to recognize and to interact with unpaired bases on the undamaged DNA strand which is followed by recruitment of the TFIIH complex and subsequent scanning for lesions in the opposite strand in a 5'-to-3' direction by the NER machinery. Cyclobutane pyrimidine dimers (CPDs) which are formed upon UV-induced DNA damage esacpe detection by the XPC complex due to a low degree of structural perurbation. Instead they are detected by the UV-DDB complex which in turn recruits and cooperates with the XPC complex in the respective DNA repair. In vitro, the XPC:RAD23B dimer is sufficient to initiate NER, it preferentially binds to cisplatin and UV-damaged double-stranded DNA and also binds to a variety of chemically and structurally diverse DNA adducts. XPC:RAD23B contacts DNA both 5' and 3' of a cisplatin lesion with a preference for the 5' side. XPC:RAD23B induces a bend in DNA upon binding. XPC:RAD23B stimulates the activity of DNA glycosylases TDG and SMUG1.

Molecular Weight: 43.2 kDa
UniProt: P54727

Pathways: DNA Damage Repair

Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

| Format: | Liquid |
|------------------|--|
| Buffer: | The buffer composition is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |
| Storage: | -80 °C |
| Storage Comment: | Store at -80°C. |
| Expiry Date: | 12 months |