

Datasheet for ABIN7555190
RED1 Protein (AA 1-741) (His tag)



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Overview

Quantity:	1 mg
Target:	RED1 (ADARB1)
Protein Characteristics:	AA 1-741
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RED1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant ADARB1 Protein expressed in mammalian cells.
Sequence:	MDIEDEENMS SSSTDVKENR NLDNVSPKDG STPGPGEGSQ LSNGGGGGPG RKRPLEEGSN GHSKYRLKKR RKTPGPVLPK NALMQLNEIK PGLQYTLLSQ TGPVHAPLFV MSVEVNGQVF EGSGPTKKKA KLHAAEKALR SFVQFPNASE AHLAMGRTLS VNTDFTSDQA DFPDTLFGF ETPDKAEPF YVGSNGDDSF SSSGDLSLSA SPVPASLAQP PLPVLPPFPF PSGKNPVMIL NELRPLKDYD FLSEGESHA KSFVMSVVVD GQFFEGSGRN KKLAKARAAQ SALAAIFNLH LDQTPSRQPI PSEGLQLHLP QVLADAVSRL VLGKFGDLTD NFSSPHARRK VLAGVVMTTG TDVKDAKVIS VSTGTKCING EYMSDRGLAL NDCHAEIISR RLLRFLYTQ LELYLNNKDD QKRSIFQKSE RGGFRLKENV QFHLYISTSP CGDARIFSPH EPILEGSRYSY TQAGVQWCNH GSLQPRPPGL LSDPSTSTFQ GAGTTEPADR HPNRKARGQL RTKIESGEGT IPVRSNASIQ TWDGVLQGER LLTMSCSDKI ARWNVVGIIQG SLLSIFVEPI YFSSIIIGSL YHGDHLSRAM YQRISNIEDL PPLYTLNKPL LSGISNAEAR QPGKAPNFSV NWTVGDSAIE VINATTGKDE LGRASRLCKH ALYCRWMRVH GKVPSHLLRS KITKPNVYHE SKLAAKEYQA AKARLFTAFI

Product Details

KAGLGAWVEK PTEQDQFSLT P **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: RED1 (ADARB1)

Alternative Name: ADARB1 ([ADARB1 Products](#))

Background: Double-stranded RNA-specific editase 1 (EC 3.5.4.37) (RNA-editing deaminase 1) (RNA-editing enzyme 1) (dsRNA adenosine deaminase),FUNCTION: Catalyzes the hydrolytic deamination of adenosine to inosine in double-stranded RNA (dsRNA) referred to as A-to-I RNA editing. This may affect gene expression and function in a number of ways that include mRNA translation by changing codons and hence the amino acid sequence of proteins, pre-mRNA splicing by altering splice site recognition sequences, RNA stability by changing sequences involved in nuclease recognition, genetic stability in the case of RNA virus genomes by changing sequences during viral RNA replication, and RNA structure-dependent activities such as

Target Details

microRNA production or targeting or protein-RNA interactions. Can edit both viral and cellular RNAs and can edit RNAs at multiple sites (hyper-editing) or at specific sites (site-specific editing). Its cellular RNA substrates include: bladder cancer-associated protein (BLCAP), neurotransmitter receptors for glutamate (GRIA2 and GRIK2) and serotonin (HTR2C), GABA receptor (GABRA3) and potassium voltage-gated channel (KCNA1). Site-specific RNA editing of transcripts encoding these proteins results in amino acid substitutions which consequently alter their functional activities. Edits GRIA2 at both the Q/R and R/G sites efficiently but converts the adenosine in hotspot1 much less efficiently. Can exert a proviral effect towards human immunodeficiency virus type 1 (HIV-1) and enhances its replication via both an editing-dependent and editing-independent mechanism. The former involves editing of adenosines in the 5'UTR while the latter occurs via suppression of EIF2AK2/PKR activation and function. Can inhibit cell proliferation and migration and can stimulate exocytosis.

{ECO:0000269|PubMed:18178553, ECO:0000269|PubMed:19908260, ECO:0000269|PubMed:21289159}., FUNCTION: [Isoform 1]: Has a lower catalytic activity than isoform 2. {ECO:0000269|PubMed:9149227}., FUNCTION: [Isoform 2]: Has a higher catalytic activity than isoform 1. {ECO:0000269|PubMed:9149227}.

Molecular Weight: 80.8 kDa

UniProt: [P78563](#)

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