Datasheet for ABIN3094984

RED1 Protein (AA 1-741) (His tag)

1 Image

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Overview

Quantity:	1 mg
Target:	RED1 (ADARB1)
Protein Characteristics:	AA 1-741
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RED1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MDIEDEENMS SSSTDVKENR NLDNVSPKDG STPGPGEGSQ LSNGGGGGPG RKRPLEEGSN GHSKYRLKKR RKTPGPVLPK NALMQLNEIK PGLQYTLLSQ TGPVHAPLFV MSVEVNGQVF EGSGPTKKKA KLHAAEKALR SFVQFPNASE AHLAMGRTLS VNTDFTSDQA DFPDTLFNGF ETPDKAEPPF YVGSNGDDSF SSSGDLSLSA SPVPASLAQP PLPVLPPFPP PSGKNPVMIL NELRPGLKYD FLSESGESHA KSFVMSVVVD GQFFEGSGRN KKLAKARAAQ SALAAIFNLH LDQTPSRQPI PSEGLQLHLP QVLADAVSRL VLGKFGDLTD NFSSPHARRK VLAGVVMTTG TDVKDAKVIS VSTGTKCING EYMSDRGLAL NDCHAEIISR RSLLRFLYTQ LELYLNNKDD QKRSIFQKSE RGGFRLKENV QFHLYISTSP CGDARIFSPH EPILEGSRSY TQAGVQWCNH GSLQPRPPGL LSDPSTSTFQ GAGTTEPADR HPNRKARGQL RTKIESGEGT IPVRSNASIQ TWDGVLQGER LLTMSCSDKI ARWNVVGIQG SLLSIFVEPI YFSSIILGSL YHGDHLSRAM YQRISNIEDL PPLYTLNKPL LSGISNAEAR QPGKAPNFSV NWTVGDSAIE VINATTGKDE LGRASRLCKH ALYCRWMRVH GKVPSHLLRS KITKPNVYHE SKLAAKEYQA AKARLFTAFI

Product Details

	KAGLGAWVEK PTEQDQFSLT P **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human ADARB1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • 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. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. 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. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. 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:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.

Product Details

Grade:	Crystallography grade

Target Details

Target:	RED1 (ADARB1)
Alternative Name:	ADARB1 (ADARB1 Products)
Background:	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 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}.
Molecular Weight:	81.7 kDa Including tag.
UniProt:	P78563

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 gurantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be

Application Details

	insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

Images

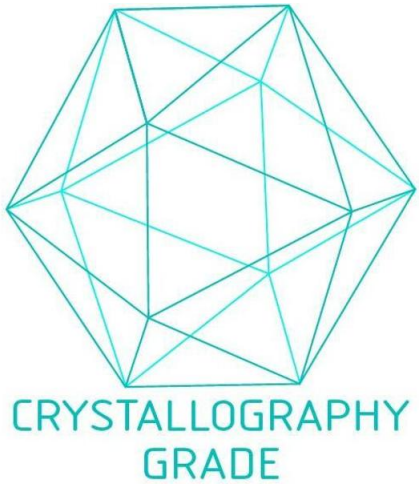

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process