

# Datasheet for ABIN7564836 **RED1 Protein (AA 1-711) (His tag)**



## Overview

Quantity:	1 mg
Target:	RED1 (ADARB1)
Protein Characteristics:	AA 1-711
Origin:	Mouse
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 SSSTDIKENR NLDNMPPKDS STPGPGEGIP LSNGGGGSTS RKRPLEEGSN
	GHSKYRLKKR RKTPGPVLPK NALMQLNEIK PGLQYMLLSQ TGPVHAPLFV MSVEVNGQVF
	EGSGPTKKKA KLHAAEKALR SFVQFPNASE AHLAMGRTLS VNTDFTSDQA DFPDTLFNGF
	ETPDKSEPPF YVGSNGDDSF SSSGDVSLSA SPVPASLTQP PLPIPPPFPP PSGKNPVMIL
	NELRPGLKYD FLSESGESHA KSFVMSVVVD GQFFEGSGRN KKLAKARAAQ SALATVFNLH
	LDQTPSRQPV LSEGLQLHLP QVLADAVSRL VLGKFSDLTD NFSSPHARRK VLSGVVMTTG
	TDVKDAKVIS VSTGTKCING EYMSDRGLAL NDCHAEIISR RSLLRFLYAQ LELYLNNKED
	QKKSIFQKSE RGGFRLKDTV QFHLYISTSP CGDARIFSPH EPVLEGMTPD SHQLTEPADR
	HPNRKARGQL RTKIESGEGT IPVRSNASIQ TWDGVLQGER LLTMSCSDKI ARWNVVGIQG
	SLLSIFVEPI YFSSIILGSL YHGDHLSRAM YQRISNIEDL PPLYTLNKPL LSGISNAEAR
	QPGKAPNFSV NWTVGDATIE VINATTGKDE LGRPSRLCKH ALYCRWMRVH GKVPPHLLRT
	KITKPTTYHE SKLAAREYQA AKARLFTAFI KAGLGAWVEK PTEQDQFSFT 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:
	<ul> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul>
	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 be 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 inhibit cell proliferation and migration and can stimulate exocytosis. {EC0:0000269|PubMed:17369310}.

Molecular Weight:

78.0 kDa

UniProt:

Q91ZS8

#### **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