Datasheet for ABIN1095574

ADAR Protein (AA 1-176) (His-SUMO Tag)

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Overview

Quantity:	100 µg
Target:	ADAR
Protein Characteristics:	AA 1-176
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ADAR protein is labelled with His-SUMO Tag.
Application:	ELISA

Product Details

Sequence:	MNPRQGYSLS GYYTHPFQGY EHRQLRYQQP GPGSSPSSFL LKQIEFLKGQ LPEAPVIGKQ TPSLPPSLPG LRPRFPVLLA SSTRGRQVDI RGVPRGVHLG SQGLQRGFQH PSPRGRSLPQ RGVDCLSSHF QELSIYQDQE QRILKFLEEL GEGKATTAHD LSGKLGTPKK EINRVL
Characteristics:	Please inquire if you are interested in this recombinant protein expressed in E. coli, mammalien cells or by baculovirus infection. Be aware about differences in price and lead time.
Purity:	90 %

Target Details

Target:	ADAR
Alternative Name:	Double-stranded RNA-specific adenosine deaminase protein (ADAR Products)
Background:	Converts multiple adenosines to inosines and creates I/U mismatched base pairs in double-

Target Details

	helical RNA substrates without apparent sequence specificity. Has been found to modify more frequently adenosines in AU-rich regions, probably due to the relative ease of melting A/U base pairs as compared to G/C pairs. Functions to modify viral RNA genomes and may be responsible for hypermutation of certain negative-stranded viruses. Edits the messenger RNAs for glutamate receptor (GLUR) subunits by site-selective adenosine deamination. Produces low-level editing at the GLUR-B Q/R site, but edits efficiently at the R/G site and HOTSPOT1. Binds to short interfering RNAs (siRNA) without editing them and suppresses siRNA-mediated RNA interference. Binds to ILF3/NF90 and up-regulates ILF3-mediated gene expression.
Molecular Weight:	47 kD
UniProt:	P55265
Pathways:	Protein targeting to Nucleus

Application Details

Comment:	The yeast protein expression system is the most economical and efficient eukaryotic system for secretion and intracellular expression. A protein expressed by the mammalian cell system is of very high-quality and close to the natural protein. But the low expression level, the high cost of medium and the culture conditions restrict the promotion of mammalian cell expression systems. The yeast protein expression system serve as a eukaryotic system integrate the advantages of the mammalian cell expression system. A protein expressed by yeast system could be modificated such as glycosylation, acylation, phosphorylation and so on to ensure the native protein conformation. It can be used to produce protein material with high added value that is very close to the natural protein. Our proteins produced by yeast expression system has been used as raw materials for downstream preparation of monoclonal antibodies.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.2-2 mg/mL
Buffer:	Tris-based buffer, 50 % glycerol
Handling Advice:	Repeated freezing and thawing is not recommended. Store working aliquots at 4 °C for up to one week
Storage:	-20 °C

Handling

Storage Comment:	Store at -20 °C for extended storage, conserve at -20 °C or -80 °C

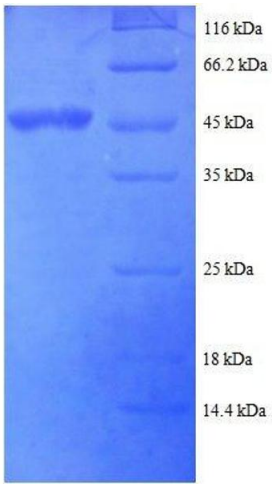
Publications

Product cited in:

Patterson, Samuel: "Expression and regulation by interferon of a double-stranded-RNA-specific adenosine deaminase from human cells: evidence for two forms of the deaminase." in: **Molecular and cellular biology**, Vol. 15, Issue 10, pp. 5376-88, (1995) (PubMed).

Kim, Wang, Sanford, Zeng, Nishikura: "Molecular cloning of cDNA for double-stranded RNA adenosine deaminase, a candidate enzyme for nuclear RNA editing." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 91, Issue 24, pp. 11457-61, (1994) (PubMed).

Images



SDS-PAGE

Image 1. Adenosine Deaminase, RNA-Specific (ADAR) (AA 1-176), (partial) protein (GST tag)