

Datasheet for ABIN7547222

eEF1A1 Protein (AA 1-462) (His tag)



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Overview

Quantity:	1 mg
Target:	eEF1A1 (EEF1A1)
Protein Characteristics:	AA 1-462
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This eEF1A1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat EEF1A1 Protein expressed in mammalian cells.
Sequence:	<p>MGKEKTHINI VVIGHVDSGK STTTGHLIYK CGGIDKRTIE KFEKEAAEMG KGSFKYAWVL</p> <p>DKLKAERERG ITIDISLWKF ETSKYVYVITII DAPGHRDFIK NMITGTSQAD CAVLIVAAGV</p> <p>GEFEAGISKV GQTRHALLA YTLGVKQLIV GVNKMDSTEP PYSQKRYEEI VKEVSTYIKK</p> <p>IGYNPDVAF VPISGWNGDN MLEPSANMPW FKGWKVTRKD GNASGTTLL EALDCILPPT</p> <p>PTDKPLRLPL QDVYKIGGIG TVPVGRVETG VLKPGMVVTF APVNVTTTEVK SVEMHHEALS</p> <p>EALPGDNGVF NVKNVSVKDV RRGNVAGDSK NDPPMEAAGF TAQVIILNHP GQISAGYAPV</p> <p>LDCHTAHIAC KFAELKEKID RRSKKLEDG PKFLKSGDAA IVDMPGKPM CVESFSDYPP</p> <p>LGRFAVRDMR QTVAVGVIA VDKKAAGAGK VTKSAQKAQK AK 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.</p>

Product Details

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, Western Blot

Grade:

custom-made

Target Details

Target:

eEF1A1 (EEF1A1)

Alternative Name:

EEF1A1 ([EEF1A1 Products](#))

Background:

Elongation factor 1-alpha 1 (EF-1-alpha-1) (EC 3.6.5.-) (Elongation factor Tu) (EF-Tu) (Eukaryotic elongation factor 1 A-1) (eEF1A-1) (Leukocyte receptor cluster member 7),FUNCTION:

Translation elongation factor that catalyzes the GTP-dependent binding of aminoacyl-tRNA (aa-tRNA) to the A-site of ribosomes during the elongation phase of protein synthesis

(PubMed:26651998, PubMed:26593721, PubMed:36264623, PubMed:36123449,

PubMed:36638793). Base pairing between the mRNA codon and the aa-tRNA anticodon

promotes GTP hydrolysis, releasing the aa-tRNA from EEF1A1 and allowing its accommodation into the ribosome (PubMed:26651998, PubMed:26593721, PubMed:36264623,

PubMed:36123449, PubMed:36638793). The growing protein chain is subsequently transferred

from the P-site peptidyl tRNA to the A-site aa-tRNA, extending it by one amino acid through ribosome-catalyzed peptide bond formation (PubMed:26651998, PubMed:26593721,

PubMed:36264623, PubMed:36123449). Also plays a role in the positive regulation of IFNG

transcription in T-helper 1 cells as part of an IFNG promoter-binding complex with TXK and

Target Details

PARP1 (PubMed:17177976). {ECO:0000269|PubMed:17177976, ECO:0000269|PubMed:26593721, ECO:0000269|PubMed:26651998, ECO:0000269|PubMed:36123449, ECO:0000269|PubMed:36264623, ECO:0000269|PubMed:36638793}., FUNCTION: (Microbial infection) Required for the translation of viral proteins and viral replication during human coronavirus SARS-CoV-2 infection. {ECO:0000269|PubMed:33495306}.

Molecular Weight: 50.1 kDa

UniProt: [P68104](#)

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 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