Datasheet for ABIN7545969

EEFSEC Protein (AA 1-596) (His tag)

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Overview

Quantity:	1 mg
Target:	EEFSEC
Protein Characteristics:	AA 1-596
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EEFSEC protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat EEFSEC Protein expressed in mammalien cells.
Sequence:	MAGRRVNVNV GVLGHIDSGK TALARALSTT ASTAAFDKQP QSRERGITLD LGFSCFSVPL PARLRSSLPE FQAAPEAEPE PGEPLLQVTL VDCPGHASLI RTIIGGAQII DLMMLVIDVT KGMQTQSAEC LVIGQIACQK LVVVLNKIDL LPEGKRQAAI DKMTKKMQKT LENTKFRGAP IIPVAAKPGG PEAPETEAPQ GIPELIELLT SQISIPTRDP SGPFLMSVDH CFSIKGQGTV MTGTILSGSI SLGDSVEIPA LKVVKKVKSM QMFHMPITSA MQGDRLGICV TQFDPKLLER GLVCAPESLH TVHAALISVE KIPYFRGPLQ TKAKFHITVG HETVMGRLMF FSPAPDNFDQ EPILDSFNFS QEYLFQEQYL SKDLTPAVTD NDEADKKAGQ ATEGHCPRQQ WALVEFEKPV TCPRLCLVIG SRLDADIHTN TCRLAFHGIL LHGLEDRNYA DSFLPRLKVY KLKHKHGLVE RAMDDYSVIG RSLFKKETNI QLFVGLKVHL STGELGIIDS AFGQSGKFKI HIPGGLSPES KKILTPALKK RARAGRGEAT RQEESAERSE PSQHVVLSLT FKRYVFDTHK RMVQSP **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression**

Product Details

	system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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:	EEFSEC
Alternative Name:	EEFSEC (EEFSEC Products)
Background:	Selenocysteine-specific elongation factor (EC 3.6.5.-) (Elongation factor sec) (Eukaryotic elongation factor, selenocysteine-tRNA-specific),FUNCTION: Translation factor required for the incorporation of the rare amino acid selenocysteine encoded by UGA codons (PubMed:27708257, PubMed:35709277). Replaces the eRF1-eRF3-GTP ternary complex for the insertion of selenocysteine directed by the UGA codon (PubMed:27708257, PubMed:35709277). Insertion of selenocysteine at UGA codons is mediated by SECISBP2 and EEFSEC: SECISBP2 (1) specifically binds the SECIS sequence once the 80S ribosome encounters an in-frame UGA codon and (2) contacts the RPS27A/eS31 of the 40S ribosome before ribosome stalling (PubMed:35709277). (3) GTP-bound EEFSEC then delivers selenocysteinyl-tRNA(Sec) to the 80S ribosome and adopts a preaccommodated state conformation (PubMed:35709277). (4) After GTP hydrolysis, EEFSEC dissociates from the

Target Details

	assembly, selenocysteinyl-tRNA(Sec) accommodates, and peptide bond synthesis and selenoprotein elongation occur (PubMed:35709277). {ECO:0000269|PubMed:27708257, ECO:0000269|PubMed:35709277}.
Molecular Weight:	65.3 kDa
UniProt:	P57772

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