Datasheet for ABIN7548425

EIF5 Protein (AA 1-431) (His tag)

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Overview

Quantity:	1 mg
Target:	EIF5
Protein Characteristics:	AA 1-431
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EIF5 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat EIF5 Protein expressed in mammalien cells.
Sequence:	MSVNVNRSVS DQFYRYKMPR LIAKVEGKGN GIKTVIVNMV DVAKALNRPP TYPTKYFGCE LGAQTQFDVK NDRYIVNGSH EANKLQDMLD GFIKKFVLCP ECENPETDLH VNPKKQTIGN SCKACGYRGM LDTHHKLCTF ILKNPPENSD SGTGKKEKEK KNRKGKDKEN GSVSSSETPP PPPPPNEINP PPHTMEEEED DDWGEDTTEE AQRRRMDEIS DHAKVLTLSD DLERTIEERV NILFDFVKKK KEEGVIDSSD KEIVAEAERL DVKAMGPLVL TEVLFNEKIR EQIKKYRRHF LRFCHNNKKA QRYLLHGLEC VVAMHQAQLI SKIPHILKEM YDADLLEEEV IISWSEKASK KYVSKELAKE IRVKAEPFIK WLKEAEEESS GGEEEDEDEN IEVVYSKAAS VPKVETVKSD NKDDDIDIDA I **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.**
Characteristics:	Key Benefits:

Product Details

- 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:	EIF5
Alternative Name:	EIF5 (EIF5 Products)
Background:	Eukaryotic translation initiation factor 5 (eIF-5),FUNCTION: Component of the 43S pre-initiation complex (43S PIC), which binds to the mRNA cap-proximal region, scans mRNA 5'-untranslated region, and locates the initiation codon (PubMed:11166181, PubMed:22813744, PubMed:24319994). In this complex, acts as a GTPase-activating protein, by promoting GTP hydrolysis by eIF2G (EIF2S3) (PubMed:11166181). During scanning, interacts with both EIF1 (via its C-terminal domain (CTD)) and EIF1A (via its NTD) (PubMed:22813744). This interaction with EIF1A contributes to the maintenance of EIF1 within the open 43S PIC (PubMed:24319994). When start codon is recognized, EIF5, via its NTD, induces eIF2G (EIF2S3) to hydrolyze the GTP (PubMed:11166181). Start codon recognition also induces a conformational change of the PIC to a closed state (PubMed:22813744). This change increases the affinity of EIF5-CTD for EIF2-beta (EIF2S2), which allows the release, by an indirect mechanism, of EIF1 from the PIC (PubMed:22813744). Finally, EIF5 stabilizes the PIC in its closed conformation (PubMed:22813744). {ECO:0000269|PubMed:11166181, ECO:0000269|PubMed:22813744, ECO:0000269|PubMed:24319994}.

Target Details

Molecular Weight:	49.2 kDa
UniProt:	P55010

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