Datasheet for ABIN7544948

UBA5 Protein (AA 1-404) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	UBA5
Protein Characteristics:	AA 1-404
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This UBA5 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant UBA5 Protein expressed in mammalian cells.
Sequence:	MAESVERLQQ RVQELERELA QERSLQVPRS GDGGGGRVRI EKMSSEVVDS NPYSRLMALK RMGIVSDYEK IRTFAVAIVG VGGVGSVTAE MLTRCGIGKL LLFDYDKVEL ANMNRLFFQP HQAGLSKVQA AEHTLRNINP DVLFEVHNYN ITTVENFQHF MDRISNGGLE EGKPVDLVLS CVDNFEARMT INTACNELGQ TWMESGVSEN AVSGHIQLII PGESACFACA PPLVVAANID EKTLKREGVC AASLPTTMGV VAGILVQNVL KFLLNFGTVS FYLGYNAMQD FFPTMSMKPN PQCDDRNCRK QQEEYKKKVA ALPKQEVIQE EEEIIHEDNE WGIELVSEVS EEELKNFSGP VPDLPEGITV AYTIPKKQED SVTELTVEDS GESLEDLMAK MKNM **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.

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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	UBA5
Alternative Name:	UBA5 (UBA5 Products)
Background:	Ubiquitin-like modifier-activating enzyme 5 (Ubiquitin-activating enzyme 5) (ThiFP1) (UFM1-activating enzyme) (Ubiquitin-activating enzyme E1 domain-containing protein 1),FUNCTION: E1-like enzyme which specifically catalyzes the first step in ufmylation (PubMed:15071506, PubMed:18442052, PubMed:25219498, PubMed:20368332, PubMed:27653677, PubMed:26929408, PubMed:27545674, PubMed:30412706, PubMed:27545681). Activates UFM1 by first adenylating its C-terminal glycine residue with ATP, and thereafter linking this residue to the side chain of a cysteine residue in E1, yielding a UFM1-E1 thioester and free AMP (PubMed:20368332, PubMed:27653677, PubMed:26929408, PubMed:30412706). Activates UFM1 via a trans-binding mechanism, in which UFM1 interacts with distinct sites in both subunits of the UBA5 homodimer (PubMed:27653677). Trans-binding also promotes stabilization of the UBA5 homodimer, and enhances ATP-binding (PubMed:29295865). Transfer of UFM1 from UBA5 to the E2-like enzyme UFC1 also takes place using a trans mechanism (PubMed:27653677). Ufmylation is involved in reticulophagy (also called ER-phagy) induced in

Target Details

	response to endoplasmic reticulum stress (PubMed:32160526). Ufmylation is essential for erythroid differentiation of both megakaryocytes and erythrocytes (By similarity). {ECO:0000250|UniProtKB:Q8VE47, ECO:0000269|PubMed:15071506, ECO:0000269|PubMed:18442052, ECO:0000269|PubMed:20368332, ECO:0000269|PubMed:25219498, ECO:0000269|PubMed:26929408, ECO:0000269|PubMed:27545674, ECO:0000269|PubMed:27545681, ECO:0000269|PubMed:27653677, ECO:0000269|PubMed:29295865, ECO:0000269|PubMed:30412706, ECO:0000269|PubMed:32160526}.
Molecular Weight:	44.9 kDa
UniProt:	Q9GZZ9

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

