Datasheet for ABIN7554598

MOCS3 Protein (AA 1-460) (His tag)

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Overview

Quantity:	1 mg
Target:	MOCS3
Protein Characteristics:	AA 1-460
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MOCS3 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant MOCS3 Protein expressed in mammalian cells.
Sequence:	MASREEVLAL QAEVAQREEE LNSLKQKLAS ALLAEQEPQP ERLVPVSPLP PKAALSRDEI LRYSRQLVLP ELGVHGQLRL GTACVLIVGC GGLGCPLAQY LAAAGVGRLG LVDYDVVEMS NLARQVLHGE ALAGQAKAFS AAASLRRLNS AVECVPYTQA LTPATALDLV RRYDVVADCS DNVPTRYLVN DACVLAGRPL VSASALRFEG QITVYHYDGG PCYRCIFPQP PPAETVTNCA DGGVLGVVTG VLGCLQALEV LKIAAGLGPS YSGSLLLFDA LRGHFRSIRL RSRRLDCAAC GERPTVTDLL DYEAFCGSSA TDKCRSLQLL SPEERVSVTD YKRLLDSGAF HLLLDVRPQV EVDICRLPHA LHIPLKHLER RDAESLKLLK EAIWEEKQGT QEGAAVPIYV ICKLGNDSQK AVKILQSLSA AQELDPLTVR DVVGGLMAWA AKIDGTFPQY **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

Product Details

	isoform, please contact us regarding an individual offer.
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:	MOCS3
Alternative Name:	MOCS3 (MOCS3 Products)
Background:	Adenylyltransferase and sulfurtransferase MOCS3 (Molybdenum cofactor synthesis protein 3) (Molybdopterin synthase sulfurylase) (MPT synthase sulfurylase) [Includes: Molybdopterin-synthase adenylyltransferase (EC 2.7.7.80) (Adenylyltransferase MOCS3) (Sulfur carrier protein MOCS2A adenylyltransferase), Molybdopterin-synthase sulfurtransferase (EC 2.8.1.11) (Sulfur carrier protein MOCS2A sulfurtransferase) (Sulfurtransferase MOCS3)],FUNCTION: Plays a central role in 2-thiolation of mcm(5)S(2)U at tRNA wobble positions of cytosolic tRNA(Lys), tRNA(Glu) and tRNA(Gln). Also essential during biosynthesis of the molybdenum cofactor. Acts by mediating the C-terminal thiocarboxylation of sulfur carriers URM1 and MOCS2A. Its N-terminus first activates URM1 and MOCS2A as acyl-adenylates (-COAMP), then the persulfide sulfur on the catalytic cysteine is transferred to URM1 and MOCS2A to form thiocarboxylation (-COSH) of their C-terminus. The reaction probably involves hydrogen sulfide that is generated from the persulfide intermediate and that acts as a nucleophile towards URM1 and MOCS2A.

Target Details

	Subsequently, a transient disulfide bond is formed. Does not use thiosulfate as sulfur donor, NFS1 acting as a sulfur donor for thiocarboxylation reactions. {ECO:0000255|HAMAP-Rule:MF_03049, ECO:0000269|PubMed:15073332, ECO:0000269|PubMed:19017811, ECO:0000269|PubMed:30817134}.
Molecular Weight:	49.7 kDa
UniProt:	O95396

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

