

Datasheet for ABIN7564255 MFN2 Protein (AA 1-757) (His tag)



Overview

Quantity:	1 mg
Target:	MFN2
Protein Characteristics:	AA 1-757
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MFN2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Mfn2 Protein expressed in mammalian cells.
Sequence:	MSLLFSRCNS IVTVKKDKRH MAEVNASPLK HFVTAKKKIN GIFEQLGAYI QESASFLEDT
	HRNTELDPVT TEEQVLDVKG YLSKVRGISE VLARRHMKVA FFGRTSNGKS TVINAMLWDK
	VLPSGIGHTT NCFLRVGGTD GHEAFLLTEG SEEKKSVKTV NQLAHALHQD EQLHAGSMVS
	VMWPNSKCPL LKDDLVLMDS PGIDVTTELD SWIDKFCLDA DVFVLVANSE STLMQTEKQF
	FHKVSERLSR PNIFILNNRW DASASEPEYM EEVRRQHMER CTSFLVDELG VVDRAQAGDR
	IFFVSAKEVL SARVQKAQGM PEGGGALAEG FQVRMFEFQN FERQFEECIS QSAVKTKFEQ
	HTVRAKQIAE AVRLIMDSLH IAAQEQRVYC LEMREERQDR LRFIDKQLEL LAQDYKLRIK
	QITEEVERQV STAMAEEIRR LSVLVDEYQM DFHPSPVVLK VYKNELHRHI EEGLGRNLSD
	RCSTAIASSL QTMQQDMIDG LKPLLPVSMR NQIDMLVPRQ CFSLSYDLNC DKLCADFQED
	IEFHFSLGWT MLVNRFLGPK NSRRALLGYS DQVQRPLPLT PANPSMPPLP QSSLTQEELM
	VSMVTGLASL TSRTSMGILV VGGVVWKAVG WRLIALSFGL YGLLYVYERL TWTTKAKERA
	FKRQFVEYAS EKLQLIISYT GSNCSHQVQQ ELSGTFAHLC QQVDITRDNL EQEIAAMNKK

	${\sf VEALDSLQSR}~{\sf AKLLRNKAGW}~{\sf LDSELNMFTH}~{\sf QYLQPSR}~{\bf Sequence}~{\bf without}~{\bf tag.}~{\bf The}~{\bf proposed}$
	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, pleas
	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.
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.
	experts in the lability 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:	MFN2
Alternative Name:	Mfn2 (MFN2 Products)
Background:	Mitofusin-2 (EC 3.6.5) (Hypertension-related protein 1) (Mitochondrial assembly regulatory
	factor) (HSG protein) (Transmembrane GTPase MFN2),FUNCTION: Mitochondrial outer
	membrane GTPase that mediates mitochondrial clustering and fusion (PubMed:12527753,
	PubMed:23921378, PubMed:23620051). Mitochondria are highly dynamic organelles, and their
	morphology is determined by the equilibrium between mitochondrial fusion and fission events
	Overexpression induces the formation of mitochondrial networks. Membrane clustering

requires GTPase activity and may involve a major rearrangement of the coiled coil domains (By

similarity). Plays a central role in mitochondrial metabolism and may be associated with obesity and/or apoptosis processes. Plays an important role in the regulation of vascular smooth muscle cell proliferation (By similarity). Involved in the clearance of damaged mitochondria via selective autophagy (mitophagy). Is required for PRKN recruitment to dysfunctional mitochondria (PubMed:23620051). Involved in the control of unfolded protein response (UPR) upon ER stress including activation of apoptosis and autophagy during ER stress (PubMed:23921556). Acts as an upstream regulator of EIF2AK3 and suppresses EIF2AK3 activation under basal conditions (PubMed:23921556). {ECO:0000250|UniProtKB:Q8R500, ECO:0000269|PubMed:12527753, ECO:0000269|PubMed:23620051, ECO:0000269|PubMed:23921378, ECO:0000269|PubMed:23921556}.

Molecular Weight:

86.2 kDa

UniProt:

Q80U63

Pathways:

Skeletal Muscle Fiber Development

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

12 months

Handling

Expiry Date:

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.