

Datasheet for ABIN7554534  
**MFN2 Protein (AA 1-757) (His tag)**



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## Overview

Quantity:	1 mg
Target:	MFN2
Protein Characteristics:	AA 1-757
Origin:	Human
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:	<p>MSLLFSRCNS IVTVKKNKRH MAEVNASPLK HFVTAKKKIN GIFEQLGAYI QESATFLEDT YRNAELDPVT TEEQVLVDKVG YLSKVRGISE VLARRHMKVA FFGRTSNGKS TVINAMLWDK VLPSGIGHTT NCFLRVEGTD GHEAFLLTEG SEEKRSKTV NQLAHALHQD KQLHAGSLVS VMWPNSKCPL LKDDLVLMDSPGIDVTELD SWIDKFCLDA DVFVLVANSE STLMQTEKHF FHKVSRLSR PNIFILNNRW DASASEPEYM EEVRRQHMER CTSFLVDELG VVDRSQAGDR IFFVSAKEVL NARIQKAQGM PEGGGALAEG FQVRMFEFQN FERRFEECIS QSAVKTKFEQ HTVRAKQIAE AVRLIMDSLH MAAREQQVYC EEMREERQDR LKFIDKQLEL LAQDYKLRIK QITEEVERQV STAMAEIIRR LSVLVDDYQM DFHPSPVVLK VYKNELHRHI EEGLGRNMSD RCSTAITNSL QTMQQDMIDG LKPLLPSVSR SQIDMLVPRQ CFSLNYDLNC DKLCADFQED IEFHSLGWT MLVNRFLGPK NSRRALMGYN DQVQRPIPLT PANPSMPPLP QGSLTQEEFM VSMVTGLASL TSRTSMGILV VGGVWVKAVG WRLIALSFGL YGLLYVYERL TWTTKAKERA FKRQFVEHAS EKLQLVISYT GSNCSHQVQQ ELSGTFAHLC QQVDVTRENLEQEIAAMNKK</p>

## Product Details

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IEVLDSLQSK AKLLRNKAGW LDSELMFTH QYLQPSR **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.

**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

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**Target:** MFN2

**Alternative Name:** MFN2 ([MFN2 Products](#))

**Background:** Mitofusin-2 (EC 3.6.5.-) (Transmembrane GTPase MFN2),FUNCTION: Mitochondrial outer membrane GTPase that mediates mitochondrial clustering and fusion (PubMed:11181170, PubMed:11950885, PubMed:26214738, PubMed:28114303, PubMed:19889647). Mitochondria are highly dynamic organelles, and their morphology is determined by the equilibrium between mitochondrial fusion and fission events (PubMed:28114303). Overexpression induces the formation of mitochondrial networks (PubMed:28114303). Membrane clustering requires GTPase activity and may involve a major rearrangement of the coiled coil domains (Probable).

## Target Details

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Plays a central role in mitochondrial metabolism and may be associated with obesity and/or apoptosis processes (By similarity). 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) (PubMed:23620051). 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 (By similarity). Acts as an upstream regulator of EIF2AK3 and suppresses EIF2AK3 activation under basal conditions (By similarity).  
{ECO:0000250|UniProtKB:Q80U63, ECO:0000250|UniProtKB:Q8R500, ECO:0000269|PubMed:11181170, ECO:0000269|PubMed:11950885, ECO:0000269|PubMed:19889647, ECO:0000269|PubMed:23620051, ECO:0000269|PubMed:26085578, ECO:0000269|PubMed:26214738, ECO:0000269|PubMed:28114303, ECO:0000305}.

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Molecular Weight: 86.4 kDa

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UniProt: [O95140](#)

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Pathways: [Skeletal Muscle Fiber Development](#)

## Application Details

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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.

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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Buffer: The buffer composition is at the discretion of the manufacturer.

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Handling Advice: Avoid repeated freeze-thaw cycles.

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Storage: -80 °C

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Storage Comment: Store at -80°C.

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Expiry Date: 12 months