

Datasheet for ABIN7559401

## AFG3L2 Protein (AA 1-802) (His tag)



[Go to Product page](#)

### Overview

Quantity:	1 mg
Target:	AFG3L2
Protein Characteristics:	AA 1-802
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This AFG3L2 protein is labelled with His tag.

### Product Details

Purpose:	Custom-made recombinant Afg3l2 Protein expressed in mammalian cells.
Sequence:	<p>MAHRCLLLWS RGGCRRGLPP LLVPRGCLGP DRRPCLRTLY QYATVQTASS RRSLLRDVIA</p> <p>AYQRFCSRPP KGFEKYFPNG KNGKKASEPK EAVGEKKEPQ PSGPQPSGGA GGGGKRRGK</p> <p>KEDSHWWSRF QKGDFPWDDK DFRMYFLWTA LFWGGVMIYF VFKSSGREIT WKDFVNNYLS</p> <p>KGVVDRLLEV NKRFVRVTFT PGKTPVDGQY VWFNIGSVDT FERNLETQQ ELGIEGENRV</p> <p>PVVYIAESDG SFLLSMLPTV LIAFLLYTI RRGPAIGIRT GRGMGGLFSV GETTAKVLKD</p> <p>EIDVKFKDVA GCEEAKLEIM EFNFLKNPK QYQDLGAKIP KGAILTGPPG TGKTLAKAT</p> <p>AGEANVPFIT VSGSEFLEMF VGVGPARVRD LFALARKNAP CILFIDEIDA VGRKRGRGNF</p> <p>GGQSEQENTL NQLLVEMDGF NTTTTNVVILA GTNRPDILDP ALLRPGRFDR QIFIGPPDIK</p> <p>GRASIFKVHL RPLKLDSALE KDKLARKLAS LTPGFSGADV ANVCNEALI AARHLSDAIN</p> <p>EKHFEQAIER VIGGLEKKTQ VLQPEEKKTV AYHEAGHAVA GWYLEHADPL LKVSIIPRGK</p> <p>GLGYAQYLPK EQYLYTKEQL LDRMCMTLGG RVSEIEFFGR ITTGAQDDLK KVTQSAYAQI</p> <p>VQFGMNEKVG QISFDLPRQG DMVLEKPYSE ATARMIDDEV RILISDAYRR TVALLTEKKA</p>

## Product Details

DVEKVALLLL EKEVLDKNDM VQLLGPRPFT EKSTYEEFVE GTGSLDEDTLS LPEGLQDWNK  
EREKEEKKEK EKEEPLNEKV VS **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

**Target:** AFG3L2

**Alternative Name:** Afg3l2 ([AFG3L2 Products](#))

**Background:** AFG3-like protein 2 (EC 3.4.24.-),FUNCTION: ATP-dependent protease which is essential for axonal and neuron development (PubMed:18337413, PubMed:27642048). In neurons, mediates degradation of SMDT1/EMRE before its assembly with the uniporter complex, limiting the availability of SMDT1/EMRE for MCU assembly and promoting efficient assembly of gatekeeper subunits with MCU (By similarity). Required for the maturation of paraplegin (SPG7) after its cleavage by mitochondrial-processing peptidase (MPP), converting it into a proteolytically active mature form. Required for the maturation of PINK1 into its 52 kDa mature

## Target Details

form after its cleavage by mitochondrial-processing peptidase (MPP) (By similarity). Involved in the regulation of OMA1-dependent processing of OPA1 (By similarity). Contributes to the proteolytic degradation of GHITM upon hyperpolarization of mitochondria (By similarity). Progressive GHITM degradation upon persistent hyperpolarization leads to respiratory complex I degradation and broad reshaping of the mitochondrial proteome by AFG3L2 (By similarity). {ECO:0000250|UniProtKB:Q9Y4W6, ECO:0000269|PubMed:18337413, ECO:0000269|PubMed:27642048}.

Molecular Weight: 89.5 kDa

UniProt: [Q8JZQ2](#)

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

## 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