

Datasheet for ABIN7564752  
**MIOS Protein (AA 1-875) (His tag)**



[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	MIOS
Protein Characteristics:	AA 1-875
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MIOS protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

## Product Details

Purpose:	Custom-made recombinat Mios Protein expressed in mammalien cells.
Sequence:	<p>MSGTKPDILW APHQVDRFVV CDELSLYHV ESAVNSELKA GSLRLEDSEA ATLLSINSDT PYMKCVAWYL NYDPECLLAV GQANGRVVLT SLGQDHNSKF KDLIGKEFVP KHARQCNTLA WNPLDSNWLA AGLDKHRADF SVLIWDICSK YTPDIVPMEK VRLSAGEAET TLLVTKPLYE LGQNDASLSL CWLPRDQKLL LAGMHRNLAI FDLRNTSQKM FVNTKAVQGV TVDPYFHDRV ASFYEGQVAI WDLRKFEKPV LTLTEQPKPL TKVAWCPTRT GLLATLTRDS NIIRLYDMQH TPTPIGDETE PTIERSVQP CDNYIASFAW HPTSQNRMIV VTPNRTMSDF TVFERISLAW SPITSLMWAC GRHLYECAEE ESDNSLEKDI ATKMRLRALS RYGLDTEQVW RNHILAGNED PQLKSLWYTL HFMKQYTEDN DQKSPGNKGS LVYAGIKSIV KSSLGMVESS RHNWSGLDKQ TDIQLNNEER ILALQLCGWI KKGTDVDVGP FLNSLVQEGE WERAAVAALF NLDIRRAIQI LNEGASSEKG DLNLNVVAMA LSGYTDEKNS LWREMCSTLR LQLNNPYLCV MFAFLTSEAG AYDGVLYENK VAVRDRVAFA CKFLGDAQLN KYIEKLTNEM KEAGNLEGIL LTGLTKDGVD</p>

## Product Details

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LMESYVDRTG DVQTASYCML QGSPLDVLKD ERVQYWIENY RNLLDAWRFW HKRAEFDIHR  
SKLDPSSKPL AQVFVSCNFC GKSISYSCSS VPHQGRGFSQ YGVSGSPTKS KVTSCPGCRK  
PLPRCALCLI NMGTPVSSCP GGSKSDEKVD LSKDKKLAQF NNWFTWCHNC RHGGHAGHML  
SWFRDHAIECP VSACTCKCMQ LDTTGNLVPA ETVQP **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.**

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### 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.

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### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

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### Grade:

custom-made

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## Target Details

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### Target:

MIOS

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### Alternative Name:

Mios ([MIOS Products](#))

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### Background:

GATOR2 complex protein MIOS,FUNCTION: As a component of the GATOR2 complex, functions as an activator of the amino acid-sensing branch of the mTORC1 signaling pathway (PubMed:35022234). The GATOR2 complex indirectly activates mTORC1 through the inhibition of the GATOR1 subcomplex (By similarity). GATOR2 probably acts as an E3 ubiquitin-protein ligase toward GATOR1 (By similarity). In the presence of abundant amino acids, the GATOR2 complex mediates ubiquitination of the NPRL2 core component of the GATOR1 complex,

## Target Details

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leading to GATOR1 inactivation (By similarity). In the absence of amino acids, GATOR2 is inhibited, activating the GATOR1 complex (By similarity). Within the GATOR2 complex, MIOS is required to prevent autoubiquitination of WDR24, the catalytic subunit of the complex (By similarity). The GATOR2 complex is required for brain myelination (PubMed:35022234). {ECO:0000250|UniProtKB:Q9NXC5, ECO:0000269|PubMed:35022234}.

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Molecular Weight: 98.3 kDa

UniProt: [Q8VE19](#)

## Application Details

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Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. 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

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