Datasheet for ABIN7549447

MIOS Protein (AA 1-875) (His tag)

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Overview

Quantity:	1 mg
Target:	MIOS
Protein Characteristics:	AA 1-875
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MIOS protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant MIOS Protein expressed in mammalian cells.
Sequence:	MSGTKPDILW APHHVDRFVV CDSELSLYHV ESTVNSELKA GSLRLSEDSA ATLLSINSDT PYMKCVAWYL NYDPECLLAV GQANGRVVLT SLGQDHNSKF KDLIGKEFVP KHARQCNTLA WNPLDSNWLA AGLDKHRADF SVLIWDICSK YTPDIVPMEK VKLSAGETET TLLVTKPLYE LGQNDACLSL CWLPRDQKLL LAGMHRNLAI FDLRNTSQKM FVNTKAVQGV TVDPYFHDRV ASFYEGQVAI WDLRKFEKPV LTLTEQPKPL TKVAWCPTRT GLLATLTRDS NIIRLYDMQH TPTPIGDETE PTIIERSVQP CDNYIASFAW HPTSQNRMIV VTPNRTMSDF TVFERISLAW SPITSLMWAC GRHLYECTEE ENDNSLEKDI ATKMRLRALS RYGLDTEQVW RNHILAGNED PQLKSLWYTL HFMKQYTEDM DQKSPGNKGS LVYAGIKSIV KSSLGMVESS RHNWSGLDKQ SDIQNLNEER ILALQLCGWI KKGTDVDVGP FLNSLVQEGE WERAAAVALF NLDIRRAIQI LNEGASSEKG DLNLNVVAMA LSGYTDEKNS LWREMCSTLR LQLNNPYLCV MFAFLTSETG SYDGVLYENK VAVRDRVAFA CKFLSDTQLN RYIEKLTNEM KEAGNLEGIL LTGLTKDGVD LMESYVDRTG DVQTASYCML QGSPLDVLKD ERVQYWIENY RNLLDAWRFW HKRAEFDIHR

Product Details

	SKLDPSSKPL AQVFVSCNFC GKSISYSCSA VPHQGRGFSQ YGVSGSPTKS KVTSCPGCRK PLPRCALCLI NMGTPVSSCP GGTKSDEKVD LSKDKKLAQF NNWFTWCHNC RHGGHAGHML SWFRDHAECP 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.**
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:	MIOS
Alternative Name:	MIOS (MIOS Products)
Background:	GATOR2 complex protein MIOS (Missing oocyte meiosis regulator homolog),FUNCTION: As a component of the GATOR2 complex, functions as an activator of the amino acid-sensing branch of the mTORC1 signaling pathway (PubMed:23723238, PubMed:26586190, PubMed:27487210, PubMed:36528027, PubMed:35831510). The GATOR2 complex indirectly activates mTORC1 through the inhibition of the GATOR1 subcomplex (PubMed:23723238,

Target Details

	PubMed:26586190, PubMed:27487210, PubMed:36528027, PubMed:35831510). GATOR2 probably acts as an E3 ubiquitin-protein ligase toward GATOR1 (PubMed:36528027). In the presence of abundant amino acids, the GATOR2 complex mediates ubiquitination of the NPRL2 core component of the GATOR1 complex, leading to GATOR1 inactivation (PubMed:36528027). In the absence of amino acids, GATOR2 is inhibited, activating the GATOR1 complex (PubMed:25263562, PubMed:25457612, PubMed:26586190, PubMed:27487210). Within the GATOR2 complex, MIOS is required to prevent autoubiquitination of WDR24, the catalytic subunit of the complex (PubMed:35831510). The GATOR2 complex is required for brain myelination (By similarity). {ECO:0000250|UniProtKB:Q8VE19, ECO:0000269|PubMed:23723238, ECO:0000269|PubMed:25263562, ECO:0000269|PubMed:25457612, ECO:0000269|PubMed:26586190, ECO:0000269|PubMed:27487210, ECO:0000269|PubMed:35831510, ECO:0000269|PubMed:36528027}.
Molecular Weight:	98.6 kDa
UniProt:	Q9NXC5

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