

Datasheet for ABIN7554503

MARK4 Protein (AA 1-752) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	MARK4
Protein Characteristics:	AA 1-752
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MARK4 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat MARK4 Protein expressed in mammalian cells.
Sequence:	<p>MSSRTVLAPG NDRNSDTHGT LGSGRSSDKG PSWSSRSLGA RCRNSIASCP EEQPHVGNRYR</p> <p>LLRTIGKGNF AKVKLARHIL TGREVAIKII DKTQLNPSSL QKLFREVRIM KGLNHPNIVK</p> <p>LFEVIETKT LYLVMYASA GEVFDYLVSH GRMKEKEARA KFRQIVSAVH YCHQKNIVHR</p> <p>DLKAENLLLD AEANIKIADF GFSNEFTLGS KLDFTCGSPP YAAPELFQ GK KYDGPEVDIW</p> <p>SLGVILYTLV SGSLPFDGHN LKELRERVLR GKYRVPFYMS TDCESILRRF LVLNPAKRCT</p> <p>LEQIMKDKWI NIGYEGEELK PYTEPEEDFG DTKRIEVMVG MGYTREEIKE SLTSQKYNEV</p> <p>TATYLLLGRK TEEGGDRGAP GLALARVRAP SDDTNGTSSS KGTSHSKGQR SSSSTYHRQR</p> <p>RHSDFCGPSP APLHPKRSPT STGEAELKEE RLPGRKASCS TAGSGSRGLP PSSPMVSSAH</p> <p>NPNKAEIPER RKDSTSTPNN LPPSMMTRRN TYVCTERPGA ERPSLLPNGK ENSSGTTPRVP</p> <p>PASPSSHSLA PPSGERSRLA RGSTIRSTFH GGQVRDRRAG GGGGGGVQNG PPASPTLAHE</p> <p>AAPLPAGRPR PTTNLF TKLT SKLTRRVADE PERIGGPEVT SCHLPWDQTE TAPRLLRFPW</p>

SVKLTSSRPP EALMAALRQA TAAARCRCRQ PQPFLACLH GGAGGPEPLS HFEVEVCQLP
RPGLRGVLFR RVAGTALAFR TLVTRISNDL EL **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.**

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, Western Blot

Grade:

custom-made

Target Details

Target:

MARK4

Alternative Name:

MARK4 ([MARK4 Products](#))

Background:

MAP/microtubule affinity-regulating kinase 4 (EC 2.7.11.1) (MAP/microtubule affinity-regulating kinase-like 1),FUNCTION: Serine/threonine-protein kinase (PubMed:15009667, PubMed:14594945, PubMed:23666762, PubMed:23184942). Phosphorylates the microtubule-associated protein MAPT/TAU (PubMed:14594945, PubMed:23666762). Also phosphorylates the microtubule-associated proteins MAP2 and MAP4 (PubMed:14594945). Involved in regulation of the microtubule network, causing reorganization of microtubules into bundles (PubMed:14594945, PubMed:25123532). Required for the initiation of axoneme extension during cilium assembly (PubMed:23400999). Regulates the centrosomal location of ODF2 and

Target Details

phosphorylates ODF2 in vitro (PubMed:23400999). Plays a role in cell cycle progression, specifically in the G1/S checkpoint (PubMed:25123532). Reduces neuronal cell survival (PubMed:15009667). Plays a role in energy homeostasis by regulating satiety and metabolic rate (By similarity). Promotes adipogenesis by activating JNK1 and inhibiting the p38MAPK pathway, and triggers apoptosis by activating the JNK1 pathway (By similarity). Phosphorylates mTORC1 complex member RPTOR and acts as a negative regulator of the mTORC1 complex, probably due to disruption of the interaction between phosphorylated RPTOR and the RAGA/RRAGC heterodimer which is required for mTORC1 activation (PubMed:23184942). Involved in NLRP3 positioning along microtubules by mediating NLRP3 recruitment to microtubule organizing center (MTOC) upon inflammasome activation (PubMed:28656979). {ECO:0000250|UniProtKB:Q8CIP4, ECO:0000269|PubMed:14594945, ECO:0000269|PubMed:15009667, ECO:0000269|PubMed:23184942, ECO:0000269|PubMed:23400999, ECO:0000269|PubMed:23666762, ECO:0000269|PubMed:25123532, ECO:0000269|PubMed:28656979}.

Molecular Weight: 82.5 kDa

UniProt: [Q96L34](#)

Application Details

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.

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