Datasheet for ABIN7554502

MARK2 Protein (AA 1-788) (His tag)

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Overview

Quantity:	1 mg
Target:	MARK2
Protein Characteristics:	AA 1-788
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MARK2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat MARK2 Protein expressed in mammalien cells.
Sequence:	MSSARTPLPT LNERDTEQPT LGHLDSKPSS KSNMIRGRNS ATSADEQPHI GNYRLLKTIG KGNFAKVKLA RHILTGKEVA VKIIDKTQLN SSSLQKLFRE VRIMKVLNHP NIVKLFEVIE TEKTLYLVME YASGGEVFDY LVAHGRMKEK EARAKFRQIV SAVQYCHQKF IVHRDLKAEN LLLDADMNIK IADFGFSNEF TFGNKLDTFC GSPPYAAPEL FQGKKYDGPE VDVWSLGVIL YTLVSGSLPF DGQNLKELRE RVLRGKYRIP FYMSTDCENL LKKFLILNPS KRGTLEQIMK DRWMNVGHED DELKPYVEPL PDYKDPRRTE LMVSMGYTRE EIQDSLVGQR YNEVMATYLL LGYKSSELEG DTITLKPRPS ADLTNSSAPS PSHKVQRSVS ANPKQRRFSD QAAGPAIPTS NSYSKKTQSN NAENKRPEED RESGRKASST AKVPASPLPG LERKKTTPTP STNSVLSTST NRSRNSPLLE RASLGQASIQ NGKDSLTMPG SRASTASASA AVSAARPRQH QKSMSASVHP NKASGLPPTE SNCEVPRPST APQRVPVASP SAHNISSSGG APDRTNFPRG VSSRSTFHAG QLRQVRDQQN LPYGVTPASP SGHSQGRRGA SGSIFSKFTS KFVRRNLSFR FARRNLNEPE

Product Details

	SKDRVETLRP HVVGSGGNDK EKEEFREAKP RSLRFTWSMK TTSSMEPNEM MREIRKVLDA NSCQSELHEK YMLLCMHGTP GHEDFVQWEM EVCKLPRLSL NGVRFKRISG TSMAFKNIAS KIANELKL **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 mammalien 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:	MARK2
Alternative Name:	MARK2 (MARK2 Products)
Background:	Serine/threonine-protein kinase MARK2 (EC 2.7.11.1) (EC 2.7.11.26) (ELKL motif kinase 1) (EMK-1) (MAP/microtubule affinity-regulating kinase 2) (PAR1 homolog) (PAR1 homolog b) (Par-1b) (Par1b),FUNCTION: Serine/threonine-protein kinase (PubMed:23666762). Involved in cell polarity and microtubule dynamics regulation. Phosphorylates CRTC2/TORC2, DCX, HDAC7, KIF13B, MAP2, MAP4 and RAB11FIP2. Phosphorylates the microtubule-associated protein MAPT/TAU (PubMed:23666762). Plays a key role in cell polarity by phosphorylating the microtubule-associated proteins MAP2, MAP4 and MAPT/TAU at KXGS motifs, causing detachment from microtubules, and their disassembly. Regulates epithelial cell polarity by

Target Details

	phosphorylating RAB11FIP2. Involved in the regulation of neuronal migration through its dual activities in regulating cellular polarity and microtubule dynamics, possibly by phosphorylating and regulating DCX. Regulates axogenesis by phosphorylating KIF13B, promoting interaction between KIF13B and 14-3-3 and inhibiting microtubule-dependent accumulation of KIF13B. Also required for neurite outgrowth and establishment of neuronal polarity. Regulates localization and activity of some histone deacetylases by mediating phosphorylation of HDAC7, promoting subsequent interaction between HDAC7 and 14-3-3 and export from the nucleus. Also acts as a positive regulator of the Wnt signaling pathway, probably by mediating phosphorylation of dishevelled proteins (DVL1, DVL2 and/or DVL3). Modulates the developmental decision to build a columnar versus a hepatic epithelial cell apparently by promoting a switch from a direct to a transcytotic mode of apical protein delivery. Essential for the asymmetric development of membrane domains of polarized epithelial cells. {ECO:0000269|PubMed:11433294, ECO:0000269|PubMed:12429843, ECO:0000269|PubMed:14976552, ECO:0000269|PubMed:15158914, ECO:0000269|PubMed:15324659, ECO:0000269|PubMed:15365179, ECO:0000269|PubMed:16775013, ECO:0000269|PubMed:16980613, ECO:0000269|PubMed:18626018, ECO:0000269|PubMed:20194617, ECO:0000269|PubMed:23666762}.
Molecular Weight:	87.9 kDa
UniProt:	Q7KZI7
Pathways:	SARS-CoV-2 Protein Interactome, The Global Phosphorylation Landscape of SARS-CoV-2 Infection

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.

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months

