Datasheet for ABIN7564481

MSK1 Protein (AA 1-863) (His tag)

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Overview

Quantity:	1 mg
Target:	MSK1 (RPS6KA5)
Protein Characteristics:	AA 1-863
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MSK1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Rps6ka5 Protein expressed in mammalien cells.
Sequence:	MEGEGGGSGG AGTSGDSGDG GEQLLTVKHE LRTANLTGHA EKVGIENFEL LKVLGTGAYG KVFLVRKISG HDAGKLYAMK VLKKATIVQK AKTTEHTRTE RQVLEHIRQS PFLVTLHYAF QTETKLHLIL DYINGGELFT HLSQRERFTE HEVQIYVGEI VLALEHLHKL GIIYRDIKLE NILLDSNGHV VLTDFGLSKE FVADETERAY SFCGTIEYMA PDIVRGGDSG HDKAVDWWSL GVLMYELLTG ASPFTVDGEK NSQAEISRRI LKSEPPYPQE MSTVAKDLLQ RLLMKDPKKR LGCGPRDAEE IKEHLFFEKI KWDDLAAKKV PAPFKPVIRD ELDVSNFAEE FTEMDPTYSP AALPQSSERL FQGYSFVAPS ILFKRNAAVI DPLQFHMGVD RPGVTNVARS AMMKDSPFYQ HYDLDLKDKP LGEGSFSICR KCVHKKTNQA FAVKIISKRM EANTQKEITA LKLCEGHPNI VKLHEVFHDQ VAASAQPPGQ VVLCSLLLLA LLFNRSLTRK PVTWTWLVHS TSQLPPLPPP MPEIVLFILL SDNGQLHTFL VMELLNGGEL FERIKRKKHF SETEASYIMR KLVSAVSHMH DVGVVHRDLK PENLLFTDEN DNLEIKVIDF GFARLKPPDN QPLKTPCFTL HYAAPELLTH NGYDESCDLW

Product Details

	SLGVILYTML SGQVPFQSHD RSLTCTSAVE IMKKIKKGDF SFEGEAWKNV SQEAKDLIQG LLTVDPNKRL KMSGLRYNEW LQDGSQLSSN PLMTPDILGS SGAAVHTCVK ATFHAFNKYK REGFCLQNVD KAPLAKRRKM KRTSTSTETR SSSSESSRSS SSQSHGKTTP TKTLQPSNPT EGSNPDTLFQ FSD **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:	MSK1 (RPS6KA5)
Alternative Name:	Rps6ka5 (RPS6KA5 Products)
Background:	Ribosomal protein S6 kinase alpha-5 (S6K-alpha-5) (EC 2.7.11.1) (90 kDa ribosomal protein S6 kinase 5) (Nuclear mitogen- and stress-activated protein kinase 1) (RSK-like protein kinase) (RLSK),FUNCTION: Serine/threonine-protein kinase that is required for the mitogen or stress-induced phosphorylation of the transcription factors CREB1 and ATF1 and for the regulation of the transcription factors RELA, STAT3 and ETV1/ER81, and that contributes to gene activation by histone phosphorylation and functions in the regulation of inflammatory genes (By similarity)(PubMed:11553624, PubMed:11909979, PubMed:16806820). Phosphorylates CREB1

	and ATF1 in response to mitogenic or stress stimuli such as UV-C irradiation, epidermal growth factor (EGF) and anisomycin (PubMed:11909979). Plays an essential role in the control of RELA transcriptional activity in response to TNF and upon glucocorticoid, associates in the cytoplasm with the glucocorticoid receptor NR3C1 and contributes to RELA inhibition and repression of inflammatory gene expression (PubMed:12628924, PubMed:16806820). In skeletal myoblasts is required for phosphorylation of RELA at 'Ser-276' during oxidative stress (PubMed:12628924). In erythropoietin-stimulated cells, is necessary for the 'Ser-727' phosphorylation of STAT3 and regulation of its transcriptional potential (PubMed:11553624). Phosphorylates ETV1/ER81 at 'Ser-191' and 'Ser-216', and thereby regulates its ability to stimulate transcription, which may be important during development and breast tumor formation (By similarity). Directly represses transcription via phosphorylation of 'Ser-1' of histone H2A (By similarity). Phosphorylates 'Ser-10' of histone H3 in response to mitogenics, stress stimuli and EGF, which results in the transcriptional activation of several immediate early genes, including proto-oncogenes c-fos/FOS and c-jun/JUN (PubMed:15870105, PubMed:16517600). May also phosphorylate 'Ser-28' of histone H3 (PubMed:11441012, PubMed:15870105). Mediates the mitogen- and stress-induced phosphorylation of high mobility group protein 1 (HMGN1/HMG14) (By similarity). In lipopolysaccharide-stimulated primary macrophages, acts downstream of the Toll-like receptor TLR4 to limit the production of pro-inflammatory cytokines (PubMed:18690222). Functions probably by inducing transcription of the MAP kinase phosphatase DUSP1 and the anti-inflammatory cytokine interleukin 10 (IL10), via CREB1 and ATF1 transcription factors (PubMed:18690222). Plays a role in neuronal cell death by mediating the downstream effects of excitotoxic injury (PubMed:12807421). Phosphorylates TRIM7 at 'Ser-106' in response to growth factor signaling via the MEK/ERK pathway, thereby stimulating its ubiquitin ligase activity (By similarity). {ECO:0000250|UniProtKB:O75582, ECO:0000269|PubMed:11441012, ECO:0000269|PubMed:11553624, ECO:0000269|PubMed:11909979, ECO:0000269|PubMed:12628924, ECO:0000269|PubMed:12807421, ECO:0000269|PubMed:15870105, ECO:0000269|PubMed:16517600, ECO:0000269|PubMed:16806820, ECO:0000269|PubMed:18690222}.
Molecular Weight:	96.6 kDa
UniProt:	Q8C050
Pathways:	MAPK Signaling, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Activation of Innate immune Response, Toll-Like Receptors Cascades

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