Datasheet for ABIN7562463

MAPKAP Kinase 5 Protein (AA 1-473) (His tag)

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Overview

Quantity:	1 mg
Target:	MAPKAP Kinase 5 (MAPKAPK5)
Protein Characteristics:	AA 1-473
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MAPKAP Kinase 5 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Mapkapk5 Protein expressed in mammalien cells.
Sequence:	MSEDSDMEKA IKETSILEEY SINWTQKLGA GISGPVRVCV KKSTQERFAL KILLDRPKAR NEVRLHMMCA THPNIVQIIE VFANSVQFPH ESSPRARLLI VMEMMEGGEL FHRISQHRHF TEKQASQVTK QIALALQHCH LLNIAHRDLK PENLLFKDNS LDAPVKLCDF GFAKVDQGDL MTPQFTPYYV APQVLEAQRR HQKEKSGIIP TSPTPYTYNK SCDLWSLGVI IYVMLCGYPP FYSKHHSRTI PKDMRKKIMT GSFEFPEEEW SQISEMAKDV VRKLLKVKPE ERLTIEGVLD HPWLNSTEAL DNVLPSAQLM MDKAVVAGIQ QAHAEQLANM RIQDLKVSLK PLHSVNNPIL RKRKLLGTKP KDGIYIHDHE NGTEDSNVAL EKLRDVIAQC ILPQAGKGEN EDEKLNEVMQ EAWKYNRECK LLRDALQSFS WNGRGFTDKV DRLKLAEVVK QVIEEQTLPH EPQ **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.**

Product Details

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:	MAPKAP Kinase 5 (MAPKAPK5)
Alternative Name:	Mapkapk5 (MAPKAPK5 Products)
Background:	MAP kinase-activated protein kinase 5 (MAPK-activated protein kinase 5) (MAPKAP kinase 5) (MAPKAPK-5) (EC 2.7.11.1),FUNCTION: Tumor suppressor serine/threonine-protein kinase involved in mTORC1 signaling and post-transcriptional regulation. Phosphorylates FOXO3, ERK3/MAPK6, ERK4/MAPK4, HSP27/HSPB1, p53/TP53 and RHEB. Acts as a tumor suppressor by mediating Ras-induced senescence and phosphorylating p53/TP53. Involved in post-transcriptional regulation of MYC by mediating phosphorylation of FOXO3: phosphorylation of FOXO3 leads to promote nuclear localization of FOXO3, enabling expression of miR-34b and miR-34c, 2 post-transcriptional regulators of MYC that bind to the 3'UTR of MYC transcript and prevent MYC translation. Acts as a negative regulator of mTORC1 signaling by mediating phosphorylation and inhibition of RHEB. Part of the atypical MAPK signaling via its interaction with ERK3/MAPK6 or ERK4/MAPK4: the precise role of the complex formed with ERK3/MAPK6 or ERK4/MAPK4 is still unclear, but the complex follows a complex set of phosphorylation events: upon interaction with atypical MAPK (ERK3/MAPK6 or ERK4/MAPK4), ERK3/MAPK6 (or

Target Details

	ERK4/MAPK4) is phosphorylated and then mediates phosphorylation and activation of MAPKAPK5, which in turn phosphorylates ERK3/MAPK6 (or ERK4/MAPK4). Mediates phosphorylation of HSP27/HSPB1 in response to PKA/PRKACA stimulation, inducing F-actin rearrangement. {ECO:0000269|PubMed:15538386, ECO:0000269|PubMed:15577943, ECO:0000269|PubMed:16973613, ECO:0000269|PubMed:17254968, ECO:0000269|PubMed:21336308, ECO:0000269|PubMed:21575178}.
Molecular Weight:	54.2 kDa
UniProt:	O54992
Pathways:	MAPK Signaling

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