Datasheet for ABIN7555724

TAO Kinase 2 Protein (TAOK2) (AA 1-1235) (His tag)

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Overview

Quantity:	1 mg
Target:	TAO Kinase 2 (TAOK2)
Protein Characteristics:	AA 1-1235
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TAO Kinase 2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat TAOK2 Protein expressed in mammalien cells.
Sequence:	MPAGGRAGSL KDPDVAELFF KDDPEKLFSD LREIGHGSFG AVYFARDVRN SEVVAIKKMS YSGKQSNEKW QDIIKEVRFL QKLRHPNTIQ YRGCYLREHT AWLVMEYCLG SASDLLEVHK KPLQEVEIAA VTHGALQGLA YLHSHNMIHR DVKAGNILLS EPGLVKLGDF GSASIMAPAN SFVGTPYWMA PEVILAMDEG QYDGKVDVWS LGITCIELAE RKPPLFNMNA MSALYHIAQN ESPVLQSGHW SEYFRNFVDS CLQKIPQDRP TSEVLLKHRF VLRERPPTVI MDLIQRTKDA VRELDNLQYR KMKKILFQEA PNGPGAEAPE EEEEAEPYMH RAGTLTSLES SHSVPSMSIS ASSQSSSVNS LADASDNEEE EEEEEEEEE EEGPEAREMA MMQEGEHTVT SHSSIIHRLP GSDNLYDDPY QPEITPSPLQ PPAAPAPTST TSSARRRAYC RNRDHFATIR TASLVSRQIQ EHEQDSALRE QLSGYKRMRR QHQKQLLALE SRLRGEREEH SARLQRELEA QRAGFGAEAE KLARRHQAIG EKEARAAQAE ERKFQQHILG QQKKELAALL EAQKRTYKLR KEQLKEELQE NPSTPKREKA EWLLRQKEQL QQCQAEEEAG LLRRQRQYFE LQCRQYKRKM LLARHSLDQD

Product Details

	LLREDLNKKQ TQKDLECALL LRQHEATREL ELRQLQAVQR TRAELTRLQH QTELGNQLEY NKRREQELRQ KHAAQVRQQP KSLKVRAGQR PPGLPLPIPG ALGPPNTGTP IEQQPCSPGQ EAVLDQRMLG EEEEAVGERR ILGKEGATLE PKQQRILGEE SGAPSPSPQK HGSLVDEEVW GLPEEIEELR VPSLVPQERS IVGQEEAGTW SLWGKEDESL LDEEFELGWV QGPALTPVPE EEEEEEEGAP IGTPRDPGDG CPSPDIPPEP PPTHLRPCPA SQLPGLLSHG LLAGLSFAVG SSSGLLPLLL LLLLPLLAAQ GGGGLQAALL ALEVGLVGLG ASYLLLCTAL HLPSSLFLLL AQGTALGAVL GLSWRRGLMG VPLGLGAAWL LAWPGLALPL VAMAAGGRWV RQQGPRVRRG ISRLWLRVLL RLSPMAFRAL QGCGAVGDRG LFALYPKTNK DGFRSRLPVP GPRRRNPRTT QHPLALLARV WVLCKGWNWR LARASQGLAS HLPPWAIHTL ASWGLLRGER PTRIPRLLPR SQRQLGPPAS RQPLPGTLAG RRSRTRQSRA LPPWR **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:	TAO Kinase 2 (TAOK2)
Alternative Name:	TAOK2 (TAOK2 Products)

Target Details

Background:	Serine/threonine-protein kinase TAO2 (EC 2.7.11.1) (Kinase from chicken homolog C) (hKFC-C) (Prostate-derived sterile 20-like kinase 1) (PSK-1) (PSK1) (Prostate-derived STE20-like kinase 1) (Thousand and one amino acid protein kinase 2),FUNCTION: Serine/threonine-protein kinase involved in different processes such as membrane blebbing and apoptotic bodies formation DNA damage response and MAPK14/p38 MAPK stress-activated MAPK cascade. Phosphorylates itself, MBP, activated MAPK8, MAP2K3, MAP2K6 and tubulins. Activates the MAPK14/p38 MAPK signaling pathway through the specific activation and phosphorylation of the upstream MAP2K3 and MAP2K6 kinases. In response to DNA damage, involved in the G2/M transition DNA damage checkpoint by activating the p38/MAPK14 stress-activated MAPK cascade, probably by mediating phosphorylation of upstream MAP2K3 and MAP2K6 kinases. Isoform 1, but not isoform 2, plays a role in apoptotic morphological changes, including cell contraction, membrane blebbing and apoptotic bodies formation. This function, which requires the activation of MAPK8/JNK and nuclear localization of C-terminally truncated isoform 1, may be linked to the mitochondrial CASP9-associated death pathway. Isoform 1 binds to microtubules and affects their organization and stability independently of its kinase activity. Prevents MAP3K7-mediated activation of CHUK, and thus NF-kappa-B activation, but not that of MAPK8/JNK. May play a role in the osmotic stress-MAPK8 pathway. Isoform 2, but not isoform 1, is required for PCDH8 endocytosis. Following homophilic interactions between PCDH8 extracellular domains, isoform 2 phosphorylates and activates MAPK14/p38 MAPK which in turn phosphorylates isoform 2. This process leads to PCDH8 endocytosis and CDH2 cointernalization. Both isoforms are involved in MAPK14 phosphorylation. {ECO:0000269|PubMed:10660600, ECO:0000269|PubMed:11279118, ECO:0000269|PubMed:12639963, ECO:0000269|PubMed:12665513, ECO:0000269|PubMed:13679851, ECO:0000269|PubMed:16893890, ECO:0000269|PubMed:17158878, ECO:0000269|PubMed:17396146}.
Molecular Weight:	138.3 kDa
UniProt:	Q9UL54
Pathways:	Cell-Cell Junction Organization

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

