TAO2 Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	TAO2, Blocking Peptide
Full Product Name	TAO2 Blocking Peptide
Product Gene Name	TAO2 blocking peptide
Product Synonym Gene Name	TAOK2
Product Synonym Names	1110033K02Rik; B230344N16; hKFC C; hKFC-C; KIAA0881; Kinase from chicken homolog C; MAP3K17; mKIAA0881; Prostate derived STE20 like kinase 1; Prostate derived STE20 like kinase PSK; Prostate derived sterile 20 like kinase 1; Prostate-derived STE20-like kinase 1; PSK 1; PSK; PSK-1; PSK1; PSK1 beta; Serine/threonine protein kinase TAO2; Serine/threonine-protein kinase TAO2; TAO 1; TAO 2; TAO kinase 2; TAO1; TAO2; TAOK 2; Taok2; TAOK2_HUMAN; Thousand and one amino acid protein 2; Thousand and one amino acid protein kinase; UNQ2971/PRO7431
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	TAO2 peptide (MBS9617618) is used for blocking the activity of TAO2 antibody (MBS9613538)
Molecular Weight	1235
OMIM	613199
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for TAO2 blocking peptide	Blocking/Control
Related Product Information for TAO2 blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of TAO2 blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for TAO2 purchase	MBS9617618 is a blocking peptide targeting TAO2.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for TAO2. It may not necessarily be applicable to this product.

NCBI GI #	116242813
NCBI GeneID	9344

NCBI Accession #	Q9UL54.2
UniProt Primary Accession #	Q9UL54
UniProt Secondary Accession #	O94957; Q6UW73; Q7LC09; Q9NSW2; A5PKY1; A7MCZ2; B2RN35; B7ZM88
UniProt Related Accession #	Q9UL54
NCBI Official Full Name	Serine/threonine-protein kinase TAO2
NCBI Official Synonym Full Names	TAO kinase 2
NCBI Official Symbol	TAOK2
NCBI Official Synonym Symbols	PSK; PSK1; TAO1; TAO2; MAP3K17; PSK1-BETA
UniProt Protein Name	Serine/threonine-protein kinase TAO2
UniProt Synonym Protein Names	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
Protein Family	Serine/threonine-protein kinase
UniProt Gene Name	TAOK2
UniProt Synonym Gene Names	KIAA0881; MAP3K17; PSK; PSK1; hKFC-C; PSK-1; PSK1; Prostate-derived STE20-like kinase 1
UniProt Entry Name	TAOK2_HUMAN
NCBI Protein Information	serine/threonine-protein kinase TAO2; PSK-1; hKFC-C; kinase from chicken homolog C; prostate-derived STE20-like kinase 1; prostate derived STE20-like kinase PSK; prostate-derived sterile 20-like kinase 1; thousand and one amino acid protein kinase 2
NCBI Summary for TAO2	This gene encodes a serine/threonine protein kinase that is involved in many different processes, including, cell signaling, microtubule organization and stability, and apoptosis. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Oct 2011]
UniProt Comments for TAO2	TAO2: a serine/threonine-protein kinase of the STE20 family. Activates the p38 MAPK signaling pathway through the specific activation of the upstream kinases MKK3 and MKK6. A potential multi-pass membrane protein. Activated in the DNA damage response and regulates the G2/M transition DNA damage checkpoint. Interacts with tubulins through the C-terminal domain. Involved in apoptotic processes such as membrane blebbing and apoptotic body formation. Prevents TAK1-mediated activation of IKK-alpha, and thus NF-kappa-B activation. May play a role in the osmotic stress-JNK1 pathway. An autism spectrum disorder susceptibility gene. Affects basal dendrite formation and axonal projections in cortical pyramidal neurons. Interacts with NRP1 (neuropilin 1), a receptor for the secreted guidance protein semaphorin 3A (Sema3A). Influences the formation of basal dendrites through the activation of JNK. Three isoforms of the human protein are produced by alternative splicing. Isoform 2, but not isoform 1, is required for PCDH8 endocytosis. Isoform 2 and kinase-defective, as well as full-length isoform 1 are excluded from the nucleus. Catalytically active full-length phosphorylated isoform 1 localizes to microtubules in the cytoplasm predominantly on microtubule cables positioned around the nucleus. A C-terminally truncated form of isoform 1 is present in the nucleus. Protein type: Kinase, protein; Membrane protein, integral; Apoptosis; Protein kinase, STE; Membrane protein, multi-pass; EC 2.7.11.1; Protein kinase, Ser/Thr (non-receptor); STE group; STE20 family; TAO subfamily Chromosomal Location of Human Ortholog: 16p11.2 Cellular Component: cytoplasmic vesicle membrane; cytoskeleton; cytoplasmic membrane-bound vesicle; dendrite; cytoplasm; nucleolus; integral to membrane; nucleus; receptor complex Molecular Function: protein serine/threonine kinase activity; MAP kinase kinase kinase activity; mitogen-activated protein kinase kinase binding; ATP binding Biological Process: focal adhesion formation; cell migration; activation of MAPKK activity; apoptosis; stress-activated MAPK cascade; positive regulation of JNK cascade; protein amino acid phosphorylation; positive regulation of stress-activated MAPK cascade; regulation of cell shape; response to stress; regulation of cell growth; G2/M transition DNA damage checkpoint; actin cytoskeleton organization and biogenesis; protein targeting to membrane; response to DNA damage stimulus

Research Articles on TAO2	**1.** tau is a good substrate for PSK1 and PSK2 phosphorylation with mass spectrometric analysis of phosphorylated tau revealing more than 40 tau residues as targets of these kinases.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/blocking-peptide/tao2/9617618