

## Product datasheet for TP515627

### Taok2 (NM\_001163775) Mouse Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Purified recombinant protein of Mouse TAO kinase 2 (Taok2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug  
**Species:** Mouse  
**Expression Host:** HEK293T  
**Expression cDNA** >MR215627 representing NM\_001163775  
**Clone or AA Sequence:** Red=Cloning site Green=Tags(s)

MPAGGRAGSLKDPDVAELFFKDDPEKLFSDLREIGHGSFGAVYFARDVRNSEVVAIKKMSYSYGKQSNEKW  
 QDIIKEVRFQKLRHPNTIQYRGCYLREHTAWLVMYCLGSASDLLEVHKKPLQEVEIAAVTHGALQGLA  
 YLHSHNMIHRDVKAGNILLSEPLVKGDFGSASIMAPANSFVGTYPYWMapevilamdegqydgkvdvws  
 LGITCIELAERKPPLFNMNAMSALYHIAQNESPALQSGHWSEYFRNFVDSCLQKIPQDRPTSEVLLKHRF  
 VLRERPPTVIMDLIQRTKDAVRELDNLQYRKMKKILFQEAPNGPGAEAPEEEEEELTPCSQEAEPYTHRAGT  
 LTSLESSHSVPSMSISASSQSSSVNSLADASDNEEEEEEEEEEEEEEEEEEGPESREMAMMQEGETVTSH  
 SSIHRLPGSDNLYDDPYQPEMTPGPLQPPAAPPTSTSSARRRAYCRNRDHFATIRTASLVSRIQEH  
 QDSALREQLSGYKRMRRQHQQKLLALESRLRGEREEHSGRLQRELEAQRAGFGTEAEKLARRHQAIGEKE  
 ARAAQAEERKFQQHILGQQKELAALEAQKRTYKLRKEQLKEELQENPSTPKREKAEWLLRQKEQLQQC  
 QAEAEAGLLRRQRQYFELQCRQYKRKMLLARHSLDQDLLREDLNKKQTQKDLECALLRQHEATRELELR  
 QLQAVQRTRAE LRLQHQTELGNQLEYNKRREQELRQKHAAQVRQQPKSLKVRAGQLPMGLPATGALGPL  
 STGTPSEEQPCSSGQEAILDQRMLGEEEEAVPERRILGKEGTTLEPEEQRILGEEMGTFS SSPQKHRSLA  
 NEEDWDISEEMKEIRVPSLASQERNIIQEAAAWSLWEKEGGLVDVEFKLGWVQGPVLTVPVEEEEE  
 EEEGGAPIGTHRDPGDGCPSPDIPPEPPPSHLRQYPTSQLPGLLSHGLLAGLSFAVGS SGLPLLLLLL  
 LPLLAAGGGGLQAALLALEVGLVGLGASYLFLCTALHLPGLFLLAQTALLAVLSLWRRGLMGVPL  
 GLGAAWLLAWPSLALPLAAMAAGGKWVRQQGPQMRRGISRLWLRILLRSPMVFALQGC GAVGDRGLFA  
 LYPKTNKNGFRSRLPVPWPRQGNPRTTQHPLAQLTRVWAVCKGWNWRLARASHRLASCLPPWAVHILASW  
 GLLKGERPSRIPRLLPRSQRRLGLSASRQLPPGTVAGRRSQRTRTLPPWR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Tag:** C-MYC/DDK  
**Predicted MW:** 139.3 kDa  
**Concentration:** >0.05 µg/µL as determined by microplate BCA method



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<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C after receiving vials.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_001157247</a>
<b>Locus ID:</b>	381921
<b>UniProt ID:</b>	<a href="#">Q6ZQ29</a>
<b>RefSeq Size:</b>	5270
<b>Cytogenetics:</b>	7 F3
<b>RefSeq ORF:</b>	3720
<b>Synonyms:</b>	1110033K02Rik; B230344N16; MAP3K17; mKIAA0881; PSK; PSK1; TAO1; TAO2
<b>Summary:</b>	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. May affect microtubule organization and stability. May play a role in the osmotic stress-MAPK8 pathway. Prevents MAP3K7-mediated activation of CHUK, and thus NF-kappa-B activation. 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/p38 MAPK activation (By similarity).[UniProtKB/Swiss-Prot Function]