

Product datasheet for **TP510289**

Mark2 (NM_001080388) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse MAP/microtubule affinity regulating kinase 2 (Mark2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR210289 protein sequence Red =Cloning site Green =Tags(s)

MSSARTPLPTLNERDTEQPTLGHLDSPSSKSNMLRGRNSATSADAEQPHIGNYRLLKTIGKGNFAKVKLA
RHILTGKEVAVKIIDKTQLNSSSLQKLFREVRIMKVLNHPNIVKLFVETETKLYLVMEYASGGVEFDY
LVAHGRMKEKEARAKFRQIVSAVQYCHQKFIVHRDLKAENLLLDADMNIKADFGFSNEFTFGNKLDTFC
GSPPYAAPELFQGGKDYDGPVVDVWVSLGVILYTLVSGSLPFDGQNLKELRERVLRGKYRIPFYMSTDCENL
LKKFLILNPSKRGTLQIMKDRWMNVGHEDDELKPYVEPLPDYKDPRTTELMVSMGYTREEIQDSLQVGR
YNEVMATYLLGYSSELEGDTITLKPRPSADLTNSSAPSPSHKVQSVSANPKQRRSSDQAVPAIPTSN
SYSKKTQSNNAENKRPEEETGRKASSTAKVPASPLPGLDRKKTTPAPSTNSVLSTSTNRSRNSPLDRAS
LGQASIQNGKDSTAPQRPVAVSPSAHNISSSSGAPDRTNFPRGVSSRSTFHAGQLRQVRDQQLNPYGVTP
ASPSGHSQGRRGASGSIFSFKFTSKFVRRNLNEPESKDRVETLRPHVWVSGGTDKDKKEEFREAKPRSLRFT
WSMKTSSMEPNEMMREIRKVLNANSCQSELHERYMLLCVHGTPGHENFVQWEMEVECKLPRLSLNGVRFK
RISGTSMAFKNIASKIANELKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	80.9 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.



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Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_001073857
Locus ID:	13728
UniProt ID:	Q05512 , A0A0R4J227
RefSeq Size:	4502
Cytogenetics:	19 5.32 cM
RefSeq ORF:	2169
Synonyms:	Emk; EMK-1; Par-1; Par-1b
Summary:	<p>Serine/threonine-protein kinase. Involved in cell polarity and microtubule dynamics regulation. Phosphorylates CRTC2/TORC2, DCX, HDAC7, KIF13B, MAP2, MAP4 and RAB11FIP2. Phosphorylates the microtubule-associated protein MAPT/TAU. Plays a key role in cell polarity by phosphorylating the microtubule-associated proteins MAP2, MAP4 and MAPT/TAU at KXGS motifs, causing detachment from microtubules, and their disassembly. Regulates epithelial cell polarity by phosphorylating RAB11FIP2. Involved in the regulation of neuronal migration through its dual activities in regulating cellular polarity and microtubule dynamics, possibly by phosphorylating and regulating DCX. Regulates axogenesis by phosphorylating KIF13B, promoting interaction between KIF13B and 14-3-3 and inhibiting microtubule-dependent accumulation of KIF13B. Also required for neurite outgrowth and establishment of neuronal polarity. Regulates localization and activity of some histone deacetylases by mediating phosphorylation of HDAC7, promoting subsequent interaction between HDAC7 and 14-3-3 and export from the nucleus. Also acts as a positive regulator of the Wnt signaling pathway, probably by mediating phosphorylation of dishevelled proteins (DVL1, DVL2 and/or DVL3). Modulates the developmental decision to build a columnar versus a hepatic epithelial cell apparently by promoting a switch from a direct to a transcytotic mode of apical protein delivery. Essential for the asymmetric development of membrane domains of polarized epithelial cells.[UniProtKB/Swiss-Prot Function]</p>