

Product datasheet for TP509357

Map3k7 (NM_009316) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse mitogen-activated protein kinase kinase kinase 7 (Map3k7), transcript variant B, with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR209357 protein sequence Red=Cloning site Green=Tags(s)

MSTASAASSSSSSASSEMIEAPSQVLNFEEDYKEIEVEEVVGRGAFGVVCKAKWRAKDVAIKQIESESE
RKAFIVELRQLSRVNHPIVIVKLYGACLNPNVCLVMEYAEGGSLYNVLHGAEPLPYTAAHAMS WCLQCSQG
VAYLHSMQPKALIHRLDKPPNLLL VAGGTVLKICDFGTACDIQTHMTNNGSAAWMAPEVFEGSNYSEKC
DVFSWGIIWEVITRRKPFDEIGGPAFRIMWAVHNGTRPPLIKNLPKPIESLMTRCWSKDPQRSMEEI
VKIMTHLMRYFPGADEPLQYPCQYSDEGQSN SATSTG SFMDIANTNTSNKSDTNMEQVPATNDTIKRLES
KLLKNQAKQQSESGRLSLGASRGSSVESLPPTSEGKRMSADMSEIARIVATAAYSKPKRGHRKTASFGN
ILDVPEIVISGNGQPRRSIQDLTVTGTEPGQVSSRSSSPSVMITTS GPTSEKPARSHPWTPDDSTDTN
GSDNSIPMAYLTLDHQLQPLAPCPNSKESMAVFEQHCKMAQEYMKVQTEIALLLQRKQELVAELDQDEKD
QQNTSRLVQEHHKLLDENKSLSTYYQQCKKQLEVIRSQQQKRQGT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	67.2 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.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.



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RefSeq: [NP_033342](#)

Locus ID: 26409

UniProt ID: [Q543B5](#), [Q923A8](#)

RefSeq Size: 5763

Cytogenetics: 4 A5

RefSeq ORF: 1821

Synonyms: B430101B05; C87327; Tak1

Summary: Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. Plays an important role in the cascades of cellular responses evoked by changes in the environment. Mediates signal transduction of TRAF6, various cytokines including interleukin-1 (IL-1), transforming growth factor-beta (TGFB), TGFB-related factors like BMP2 and BMP4, toll-like receptors (TLR), tumor necrosis factor receptor CD40 and B-cell receptor (BCR) (PubMed:10748100, PubMed:16157589, PubMed:21183079, PubMed:29291351). Ceramides are also able to activate MAP3K7/TAK1. Once activated, acts as an upstream activator of the MKK/JNK signal transduction cascade and the p38 MAPK signal transduction cascade through the phosphorylation and activation of several MAP kinase kinases like MAP2K1/MEK1, MAP2K3/MKK3, MAP2K6/MKK6 and MAP2K7/MKK7. These MAP2Ks in turn activate p38 MAPKs, c-jun N-terminal kinases (JNKs) and I-kappa-B kinase complex (IKK). Both p38 MAPK and JNK pathways control the transcription factors activator protein-1 (AP-1), while nuclear factor-kappa B is activated by IKK (PubMed:16157589, PubMed:8533096, PubMed:29291351). MAP3K7 activates also IKBKB and MAPK8/JNK1 in response to TRAF6 signaling and mediates BMP2-induced apoptosis (PubMed:10748100). In osmotic stress signaling, plays a major role in the activation of MAPK8/JNK1, but not that of NF-kappa-B. Promotes TRIM5 capsid-specific restriction activity (By similarity).[UniProtKB/Swiss-Prot Function]