

## Product datasheet for **TP300358**

### MAPKAP Kinase 3 (MAPKAPK3) (NM\_004635) Human Recombinant Protein

#### Product data:

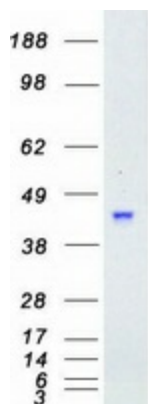
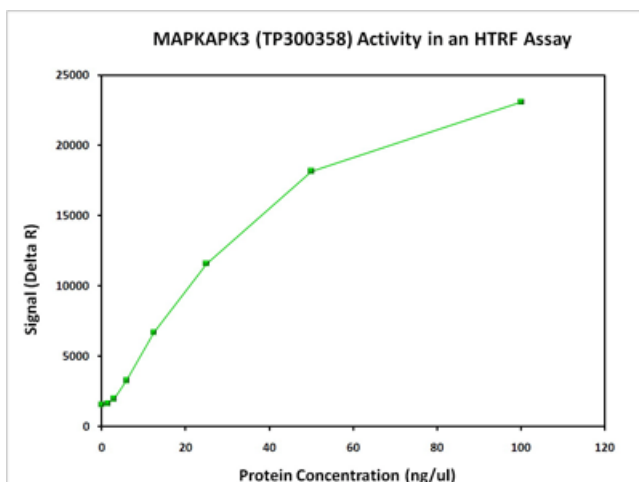
Product Type:	Recombinant Proteins
Description:	Recombinant protein of human mitogen-activated protein kinase-activated protein kinase 3 (MAPKAPK3), 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC200358 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)
	MDGETAEEQGGPVPPVPAPGGPGLGGAPGGRREPCKYAVTDDYQLSKQVLGLGVNGKVLFCFHRRTGQ KC ALKLLYDSPKARQEVDDHHWQASGGPHIVCILDVYENMHHGKRCLLIMECEMEGGELFSRIQERGDQAFTE REAAEIMRDIGTAIQFLHSHNIAHRDVKPENLLYSKEKDAVLKLTDFGFAKETTQNALQTPCYTPYYVA PEVLGPEKYDKSCDMWSLGVIMYILLCGFPFYSNTGQAISPGMKRRIRLGQYGFNPPEWSEVEDAKQL IRLLLKTDPTERTITQFMNHPWINQSMVVPQTPLHTARVLQEDKDHWDDEVKEEMTSALATMRVDYDQV K IKDLKTSNNRLLNKRRKKQAGSSSASQGCNNQ
	<b>TR</b> TRPLE <b>QKLISEEDLAANDILDYKDDDDKV</b>
Tag:	C-Myc/DDK
Predicted MW:	42.8 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



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<b>Bioactivity:</b>	MAPKAPK3 activity verified in a biochemical assay: <b>MAPKAPK3 (mitogen-activated protein kinase-activated protein kinase 3)</b> (TP300358) activity was measured in a homogeneous time-resolved fluorescent (HTRF®) assay. MAPKAPK3 is a serine/threonine kinase that functions as a mitogen-activated protein kinase (MAP kinase)- activated protein kinase. Varying concentrations of MAPKAPK3 were added to a reaction mix containing ATP and a biotinylated kinase substrate and the reaction mixture was incubated to allow the protein to phosphorylate the substrate. HTRF detection reagents were then added, and the time-resolved fluorescent signal was measured on a Flexstation 3 microplate reader. The time resolved fluorescent signal is expressed as “delta R” or “ΔR” and is a ratio calculated from the fluorescent emission intensities of the donor and acceptor fluors.
<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<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.
<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_004626</a>
<b>Locus ID:</b>	7867
<b>UniProt ID:</b>	<a href="#">Q16644</a>
<b>RefSeq Size:</b>	2553
<b>Cytogenetics:</b>	3p21.2
<b>RefSeq ORF:</b>	1146
<b>Synonyms:</b>	3PK; MAPKAP-K3; MAPKAP3; MAPKAPK-3; MDPT3; MK-3; MK3
<b>Summary:</b>	This gene encodes a member of the Ser/Thr protein kinase family. This kinase functions as a mitogen-activated protein kinase (MAP kinase)- activated protein kinase. MAP kinases are also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This kinase was shown to be activated by growth inducers and stress stimulation of cells. In vitro studies demonstrated that ERK, p38 MAP kinase and Jun N-terminal kinase were all able to phosphorylate and activate this kinase, which suggested the role of this kinase as an integrative element of signaling in both mitogen and stress responses. This kinase was reported to interact with, phosphorylate and repress the activity of E47, which is a basic helix-loop-helix transcription factor known to be involved in the regulation of tissue-specific gene expression and cell differentiation. Alternate splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq, Sep 2011]
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	MAPK signaling pathway, VEGF signaling pathway

## Product images:



Coomassie blue staining of purified MAPKAPK3 protein (Cat# TP300358). The protein was produced from HEK293T cells transfected with MAPKAPK3 cDNA clone (Cat# [RC200358]) using MegaTran 2.0 (Cat# [TT210002]).