Data Sheet (Cat.No.TMPY-04365)

TargetMol

MKK6 Protein, Human, Recombinant (S207D, T211D, His & GST)

General Information

Synonyms:	SAPKK3;mitogen-activated protein kinase kinase 6;MKK6;MAPKK6;MEK6;PRKMK6;SAPKK-3
Protein Construction:	A DNA sequence encoding the human MAP2K6 isoform 1 (P52564-1) (Met 1-Asp 334, Ser 207/Asp, Thr 211/Asp) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	P52564-1
Molecular Weight:	65.3 kDa (predicted); 60 kDa (reducing conditions)

QC Testing

Biological Activity:	The specific activity was determined to be > 200 nmol/min/mg using inactive MAPK14 as substrate.
Purity:	> 88 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Supplied as sterile 20 mM Tris, 500 mM NaCl, pH 8.0, 10% glycerol.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

Proteins are shipped with blue ice.

Protein Background

Dual specificity mitogen-activated protein kinase kinase 6, also known as MAP kinase kinase 6, MAPKK 6, MAPK / ERK kinase 6, SAPKK3, MAP2K6, and MKK6, is a protein that belongs to the protein kinase superfamily, STE Ser / Thr protein kinase family and MAP kinase kinase subfamily. MAP2K6 / MKK6 contains one protein kinase domain. Mitogen-activated protein kinases are members of a conserved cascade of kinases involved in many signal transduction pathways. They stimulate phosphorylation of transcription factors in response to extracellular signals such as growth factors, cytokines, ultraviolet light, and stress-inducing agents. MAP2K6 / MKK6 exists in a variety of alternatively spliced isoforms with distinct patterns of tissue expression. Isoform 2 of MAP2K6 / MKK6 is only

expressed in skeletal muscle. Isoform 1 of MAP2K6 / MKK6 is expressed in skeletal muscle, heart, and to a lesser extent in liver or pancreas.

Reference

Raingeaud J.,et al.,(1996), MKK3- and MKK6-regulated gene expression is mediated by the p38 mitogen-activated protein kinase signal transduction pathway. Mol. Cell. Biol. 16:1247-1255.

Stein B.,et al., (1996), Cloning and characterization of MEK6, a novel member of the mitogen-activated protein kinase kinase cascade.J. Biol. Chem. 271:11427-11433.

HAn J.,et al.,(1996), Characterization of the structure and function of a novel MAP kinase kinase (MKK6).J. Biol. Chem. 271:2886-2891.

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