Recombinant MP2K3 protein (His tag)

Catalog Number	539970
Synonyms	MAP kinase kinase 3; MAPKK 3; MAPK/ERK kinase 3; MEK 3; Stress-activated protein kinase kinase 2; SAPK kinase 2; SAPKK-2; SAPKK2
Species	Human
Expression System	E. coli
Accession	P46734
Molecular Weight	Predictes a molecular mass of 36.03 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	47-347
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 47-347 aa (P46734) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Introducing the recombinant human Dual Specificity Mitogen-Activated Protein Kinase Kinase 3 (MAP2K3) fragment (amino acids 47-347), a highly functional protein tool designed for kinase research. This fragment fully encompasses the protein kinase domain, making it an ideal reagent for studying MAPK signaling pathways, stress response mechanisms, and enzymatic activity assays. Dual Specificity Mitogen-Activated Protein Kinase Kinase 3 (MAP2K3) is a crucial signaling kinase in human cells that becomes activated by cytokines and environmental stress factors. As a dual specificity kinase, it catalyzes the phosphorylation of both threonine and tyrosine residues on p38 MAP kinase (MAPK14), thereby playing a central role in stress-activated protein kinase pathways. Research has demonstrated its involvement in signaling cascades initiated by adrenergic receptor ADRA1B activation, highlighting its importance in cellular stress response mechanisms and signal transduction networks.