Recombinant MP2K2 protein (His tag)

Catalog Number	546943
Synonyms	MAP kinase kinase 2; MAPKK 2; ERK activator kinase 2; MAPK/ERK kinase 2; MEK 2
Species	Human
Expression System	E. coli
Accession	P36507
Molecular Weight	Predictes a molecular mass of 29.09 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	39-283
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 39-283 aa (P36507) 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	Recombinant Dual specificity mitogen-activated protein kinase kinase 2 (MAP2K2) fragment (residues 39-283) is a high-quality, soluble protein designed for structural and biochemical studies. This 245-amino acid fragment, derived from human MAP2K2, retains key functional regions essential for investigating its role in MAP kinase signaling pathways, offering researchers a stable and reliable tool for exploring cellular regulation mechanisms. Dual specificity mitogen-activated protein kinase kinase 2 (MAP2K2) is a crucial enzyme that catalyzes the phosphorylation of both threonine and tyrosine residues within the Thr-Glu-Tyr motif of MAP kinases, specifically activating ERK1 and ERK2. It also plays a role in BRAF activation through interactions with KSR1 or KSR2, promoting dimerization and subsequent signaling events. Located primarily in the cytoplasm and peripherally associated with the membrane, MAP2K2's membrane localization is regulated by its binding to KSR1, highlighting its importance in intracellular signaling cascades that govern cell proliferation, differentiation, and survival.