## Recombinant Human MAP4K5 protein (His Tag)

## Catalog Number: PDEH101049

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	E.coli-derived Human MAP4K5 protein Phe601-Tyr846, with an N-terminal His & C-
	terminal His
Calculated MW	27.0 kDa
Observed MW	35 kDa
Accession	Q9Y4K4
Bio-activity	Not validated for activity
Properties	
Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}C$ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 $\mu m$ filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

## Background

Mitogen-activated protein kinase kinase kinase kinase 5, also known as Kinase homologous to SPS1/STE20, MAPK/ ERK kinase kinase sinase 5, MEK kinase kinase 5 and MAP4K5, is a cytoplasm protein which belongs to the&nbsp, protein kinase superfamily, STE Ser/Thr protein kinase family and STE20 subfamily. MAP4K5 is ubiquitously expressed in all tissues examined, with high levels in the ovary, testis and prostate. It contains one&nbsp,CNH domain and one& nbsp,protein kinase domain. MAP4K5 is highly similar to yeast SPS1/STE20 kinase. Yeast SPS1/STE20 functions near the beginning of the MAP kinase signal cascades that is essential for yeast pheromone response. MAP4K5 has been shown to interact with CRKL and TRAF2. This kinase was shown to activate Jun kinase in mammalian cells. MAP4K5 is an early component of MAP kinase signal cascades. It may play a role in the response to environmental stress. MAP4K5 appears to act upstream of the JUN N-terminal pathway.