

MAP4K1 (HPK1) Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP7971b**Specification**

MAP4K1 (HPK1) Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q92918](#)**MAP4K1 (HPK1) Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 11184

Other Names

Mitogen-activated protein kinase kinase kinase 1, Hematopoietic progenitor kinase, MAPK/ERK kinase kinase 1, MEK kinase kinase 1, MEKKK 1, MAP4K1, HPK1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7971b](/product/products/AP7971b) was selected from the C-term region of human HPK1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MAP4K1 (HPK1) Antibody (C-term) Blocking peptide - Protein Information

Name MAP4K1

Synonyms HPK1

Function

Serine/threonine-protein kinase, which may play a role in the response to environmental stress (PubMed: [24362026](http://www.uniprot.org/citations/24362026)). Appears to act upstream of the JUN N-terminal pathway (PubMed: [8824585](http://www.uniprot.org/citations/8824585)). May play a role in hematopoietic lineage decisions and growth regulation (PubMed: [8824585](http://www.uniprot.org/citations/8824585), PubMed: [24362026](http://www.uniprot.org/citations/24362026)). Able to autophosphorylate (PubMed: [8824585](http://www.uniprot.org/citations/8824585)). Together with CLNK, it enhances CD3-triggered activation of

T-cells and subsequent IL2 production (By similarity).

Tissue Location

Expressed primarily in hematopoietic organs, including bone marrow, spleen and thymus. Also expressed at very low levels in lung, kidney, mammary glands and small intestine

MAP4K1 (HPK1) Antibody (C-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

MAP4K1 (HPK1) Antibody (C-term) Blocking peptide - Images**MAP4K1 (HPK1) Antibody (C-term) Blocking peptide - Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the γ phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

MAP4K1 (HPK1) Antibody (C-term) Blocking peptide - References

Sawasdikosol, S., et al., Blood 101(9):3687-3689 (2003). Hu, M.C., et al., Genes Dev. 10(18):2251-2264 (1996).