

**MAP4K1 (HPK1) Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7971b****Specification**

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**MAP4K1 (HPK1) Antibody (C-term) - Product Information**

Application	WB, IHC-P,E
Primary Accession	<a href="#">Q92918</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	91296
Antigen Region	321-350

**MAP4K1 (HPK1) Antibody (C-term) - Additional Information****Gene ID** 11184**Other Names**

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

**Target/Specificity**

This MAP4K1 (HPK1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 321-350 amino acids from the C-terminal region of human MAP4K1 (HPK1).

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MAP4K1 (HPK1) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**MAP4K1 (HPK1) Antibody (C-term) - Protein Information****Name** MAP4K1

## Synonyms HPK1

**Function** Serine/threonine-protein kinase, which may play a role in the response to environmental stress (PubMed:[24362026](#)). Appears to act upstream of the JUN N-terminal pathway (PubMed:[8824585](#)). May play a role in hematopoietic lineage decisions and growth regulation (PubMed:[8824585](#), PubMed:[24362026](#)). Able to autophosphorylate (PubMed:[8824585](#)). Together with CLNK, it enhances CD3-triggered activation of T-cells and subsequent IL2 production (By similarity).

## Tissue Location

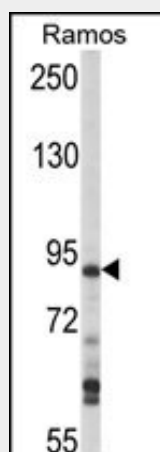
Expressed primarily in hematopoietic organs, including bone marrow, spleen and thymus. Also expressed at very low levels in lung, kidney, mammary glands and small intestine

## MAP4K1 (HPK1) Antibody (C-term) - Protocols

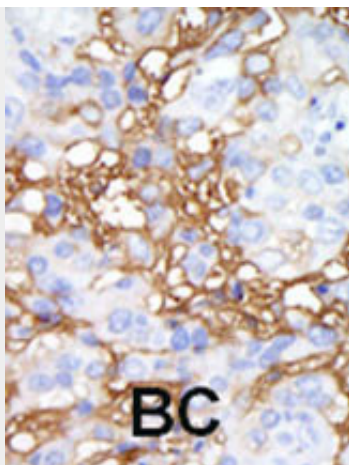
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## MAP4K1 (HPK1) Antibody (C-term) - Images



Western blot analysis of hHPK1-C335 (Cat. #AP7971b) in Ramos cell line lysates (35ug/lane). HPK1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

#### **MAP4K1 (HPK1) Antibody (C-term) - Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the  $\gamma$  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) - References**

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