

**MAP3K9 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7963a****Specification**

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**MAP3K9 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P80192](#)**MAP3K9 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 4293**Other Names**

Mitogen-activated protein kinase kinase kinase 9, Mixed lineage kinase 1, MAP3K9, MLK1, PRKE1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7963a](/product/products/AP7963a) was selected from the N-term region of human MAP3K9. 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.

**MAP3K9 Antibody (N-term) Blocking Peptide - Protein Information****Name** MAP3K9**Synonyms** MLK1, PRKE1**Function**

Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. Plays an important role in the cascades of cellular responses evoked by changes in the environment. Once activated, acts as an upstream activator of the MKK/JNK signal transduction cascade through the phosphorylation of MAP2K4/MKK4 and MAP2K7/MKK7 which in turn activate the JNKs. The MKK/JNK signaling pathway regulates stress response via activator protein-1 (JUN) and GATA4 transcription factors. Also plays a role in mitochondrial death signaling pathway, including the release cytochrome c, leading to apoptosis.

**Tissue Location**

Expressed in epithelial tumor cell lines of colonic, breast and esophageal origin.

## **MAP3K9 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **MAP3K9 Antibody (N-term) Blocking Peptide - Images**

## **MAP3K9 Antibody (N-term) Blocking Peptide - 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.

## **MAP3K9 Antibody (N-term) Blocking Peptide - References**

Dorow, D.S., et al., Eur. J. Biochem. 213(2):701-710 (1993).