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MLK1 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP7919c

Specification

MLK1 Blocking Peptide (Center) - Product Information

Primary Accession	P80192
Other Accession	Q3U1V8

MLK1 Blocking Peptide (Center) - 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 is selected from aa 785-799 of HUMAN MAP3K9

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.

MLK1 Blocking Peptide (Center) - Protein Information

Name MAP3K9

Synonyms MLK1, PRKE1

Function
Serine/threonine kinase which acts as an essential component of the MAP kinase

MLK1 Blocking Peptide (Center) - Background

MLK1 is a MLK(MAP3K) type protein kinase. The catalytic domain of mixed-lineage kinases (MLKs) kinases have amino acid sequence similarity to both the tyr-specific and the ser/thr-specific kinase classes. In addition to thee unusual nature of the kinase catalytic domains, MLK1 and MLK2 contain 2 leu/ile-zipper motifs and a basic sequence near their C-termini. MLK1 is a member of the neuronal apoptotic JNK/c-Jun pathway acting between Rac1/Cdc42 and MKK4 and -7 in death signaling. MLK1 expression has been documented in human epithelial tumor cell lines of colonic, breast and esophageal origin.

MLK1 Blocking Peptide (Center) - References

Durkin,J.T.,Biochemistry 43 (51), 16348-16355 (2004)
Figueroa,C.,J. Biol. Chem. 278 (48), 47922-47927 (2003)
Xu,Z.,Mol. Cell. Biol. 21 (14), 4713-4724 (2001)
Dorow,D.S.,Eur. J. Biochem. 234 (2), 492-500 (1995)

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. Plays also 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.

MLK1 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides