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MAPK13/14 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP20706c

Specification

MAPK13/14 Blocking Peptide (Center) - Product Information

Primary Accession	Q15264
Other Accession	P47812, P70618, P47811, Q16539, Q9DGE2, Q9WTY9, Q9Z1B7, Q3T0N5

MAPK13/14 Blocking Peptide (Center) - Additional Information

Gene ID 5603

Other Names
Mitogen-activated protein kinase 13, MAP kinase 13, MAPK 13, Mitogen-activated protein kinase p38 delta, MAP kinase p38 delta, Stress-activated protein kinase 4, MAPK13, PRKM13, SAPK4

Target/Specificity
The synthetic peptide sequence is selected from aa 163-174 of HUMAN MAPK13

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.

MAPK13/14 Blocking Peptide (Center) - Protein Information

Name MAPK13

MAPK13/14 Blocking Peptide (Center) - Background

Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK13 is one of the four p38 MAPKs which play an important role in the cascades of cellular responses evoked by extracellular stimuli such as proinflammatory cytokines or physical stress leading to direct activation of transcription factors such as ELK1 and ATF2. Accordingly, p38 MAPKs phosphorylate a broad range of proteins and it has been estimated that they may have approximately 200 to 300 substrates each. MAPK13 is one of the less studied p38 MAPK isoforms. Some of the targets are downstream kinases such as MAPKAPK2, which are activated through phosphorylation and further phosphorylate additional targets. Plays a role in the regulation of protein translation by phosphorylating and inactivating EEF2K. Involved in cytoskeletal remodeling through phosphorylation of MAPT and STMN1. Mediates UV irradiation induced up-regulation of the gene expression of CXCL14. Plays an important role in the regulation of epidermal keratinocyte differentiation, apoptosis and skin tumor development. Phosphorylates the transcriptional activator MYB in response to stress which leads to rapid MYB degradation via a proteasome-dependent pathway. MAPK13 also phosphorylates and down-regulates PRKD1 during regulation of insulin secretion in pancreatic beta cells.

MAPK13/14 Blocking Peptide (Center) - References

Goedert M.,et al.EMBO J. 16:3563-3571(1997).
Jiang Y.,et al.J. Biol. Chem. 272:30122-30128(1997).
Wang X.S.,et al.J. Biol. Chem. 272:23668-23674(1997).
Kumar S.,et al.Biochem. Biophys. Res. Commun. 235:533-538(1997).
Hu M.C.-T.,et al.J. Biol. Chem. 274:7095-7102(1999).

Synonyms PRKM13, SAPK4

Function
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Tissue Location
Expressed in testes, pancreas, small intestine, lung and kidney. Abundant in macrophages, also present in neutrophils, CD4+ T-cells, and endothelial cells.

MAPK13/14 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides