

MAPK13 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP7225c**Specification**

MAPK13 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [O15264](#)**MAPK13 Antibody (C-term) Blocking peptide - 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 used to generate the antibody [AP7225c](/product/products/AP7225c) was selected from the Center region of human MAPK13. 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.

MAPK13 Antibody (C-term) Blocking peptide - Protein Information**Name** MAPK13**Synonyms** PRKM13, SAPK4**Function**

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 pro-inflammatory 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.

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 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

MAPK13 Antibody (C-term) Blocking peptide - Images**MAPK13 Antibody (C-term) Blocking peptide - Background**

MAPK13 is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase is closely related to p38 MAP kinase, both of which can be activated by proinflammatory cytokines and cellular stress. MAP kinase kinases 3, and 6 can phosphorylate and activate this kinase. Transcription factor ATF2, and microtubule dynamics regulator stathmin have been shown to be the substrates of this kinase.

MAPK13 Antibody (C-term) Blocking peptide - References

Duyndam, M.C., et al., J. Biol. Chem. 278(9):6885-6895 (2003).Efimova, T., et al., J. Biol. Chem. 277(35):31753-31760 (2002).Knebel, A., et al., EMBO J. 20(16):4360-4369 (2001).Hu, M.C., et al., J. Biol. Chem. 274(11):7095-7102 (1999).Parker, C.G., et al., Biochem. Biophys. Res. Commun. 249(3):791-796 (1998).