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MAPK13 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7510a

Specification

MAPK13 Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	O15264
Other Accession	Q9WTY9, Q9Z1B7, Q3T0N5
Reactivity	**Human, Mouse, Rat, Monkey**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**335-365**

MAPK13 Antibody (C-term) - 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
This MAPK13 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 335-365 amino acids from the C-terminal region of human MAPK13.

Dilution
WB~~1:1000
IHC-P~~1:10~50

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
MAPK13 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MAPK13 Antibody (C-term) - 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.

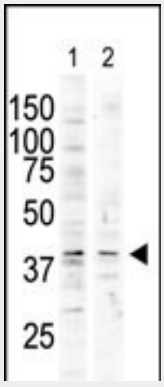
Tissue Location
Expressed in testes, pancreas, small intestine, lung and kidney. Abundant in macrophages, also present in neutrophils, CD4+ T-cells, and endothelial cells.

MAPK13 Antibody (C-term) - Protocols

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

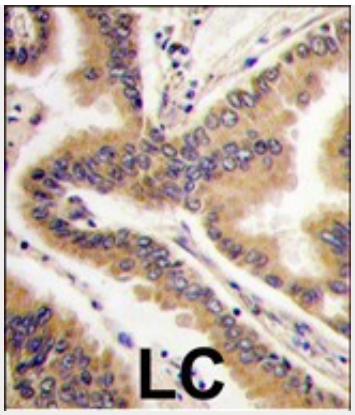
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MAPK13 Antibody (C-term) - Images



The anti-P38delta C-term Pab (Cat. #AP7510a) is used in Western blot to detect P38 delta in nocodazole-treated HCT116 (lane 1) and PMA-treated Pam212 (lane 2) cell lysates.

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Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with P38 delta antibody (C-term), 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.

MAPK13 Antibody (C-term) - Background

P38 delta 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) - 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).