10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MAPK13 / p38delta Antibody (clone 1E11)

Mouse Monoclonal Antibody
Catalog # ALS14141

Specification

MAPK13 / p38delta Antibody (clone 1E11) - Product Information

Application	**WB, IF, IHC**
Primary Accession	O15264
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**42kDa KDa**

MAPK13 / p38delta Antibody (clone 1E11) - Additional Information

Gene ID 5603

Other Names
Mitogen-activated protein kinase 13, MAP kinase 13, MAPK 13, 2.7.11.24, Mitogen-activated protein kinase p38 delta, MAP kinase p38 delta, Stress-activated protein kinase 4, MAPK13, PRKM13, SAPK4

Target/Specificity
Human MAPK13

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
MAPK13 / p38delta Antibody (clone 1E11) is for research use only and not for use in diagnostic or therapeutic procedures.

MAPK13 / p38delta Antibody (clone 1E11) - 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.

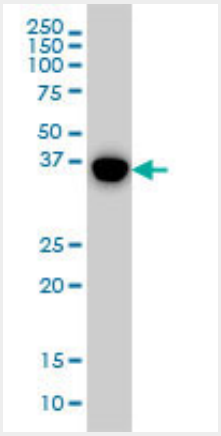
Tissue Location
Expressed in testes, pancreas, small intestine, lung and kidney. Abundant in macrophages, also present in neutrophils, CD4+ T-cells, and endothelial cells.

MAPK13 / p38delta Antibody (clone 1E11) - Protocols

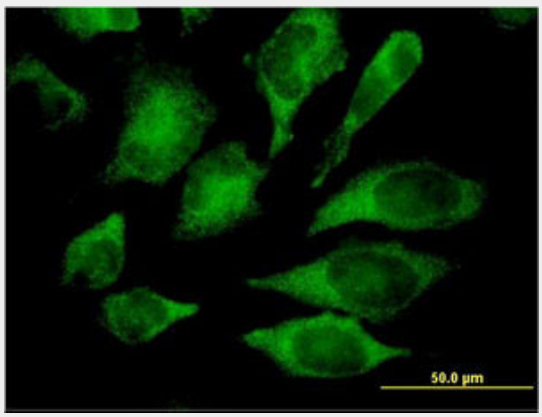
Provided below are standard protocols that you may find useful for product applications.

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

MAPK13 / p38delta Antibody (clone 1E11) - Images

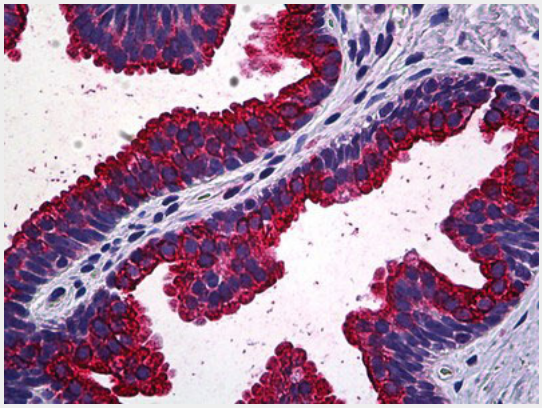


MAPK13 monoclonal antibody clone 1E11 Western blot of MAPK13 expression in A-549.



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Immunofluorescence of monoclonal antibody to MAPK13 on HeLa cell. [antibody concentration 10 ug/ml]



Anti-MAPK13 / SAPK4 antibody IHC of human prostate.

MAPK13 / p38delta Antibody (clone 1E11) - 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 / p38delta Antibody (clone 1E11) - 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).