

**MAPK13 / p38delta Antibody (clone 2D8)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS14133****Specification**

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**MAPK13 / p38delta Antibody (clone 2D8) - Product Information**

Application	WB, IF, IHC
Primary Accession	<a href="#">O15264</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	42kDa KDa

**MAPK13 / p38delta Antibody (clone 2D8) - 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 2D8) is for research use only and not for use in diagnostic or therapeutic procedures.

**MAPK13 / p38delta Antibody (clone 2D8) - 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**

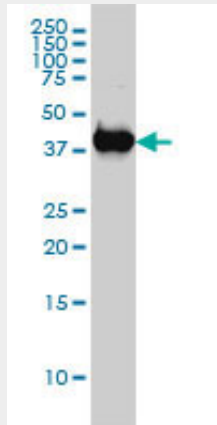
Expressed in testes, pancreas, small intestine, lung and kidney. Abundant in macrophages, also present in neutrophils, CD4+ T-cells, and endothelial cells.

#### **MAPK13 / p38delta Antibody (clone 2D8) - Protocols**

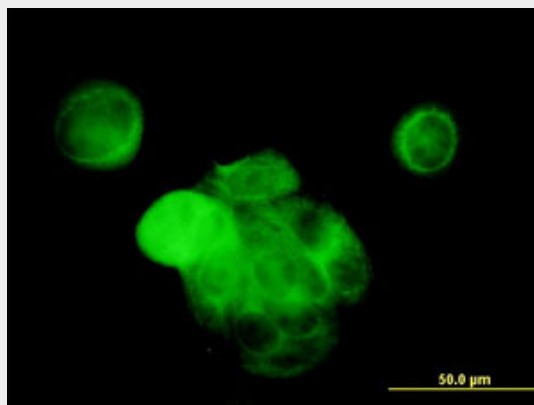
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

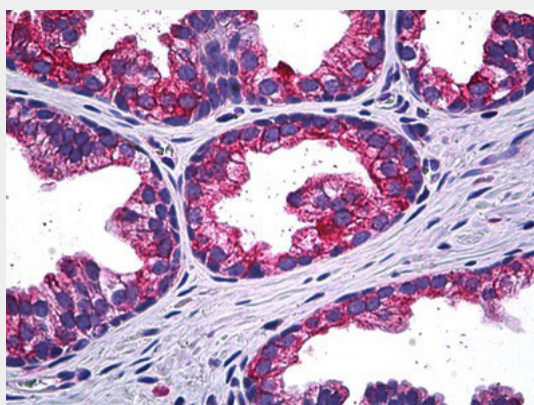
#### **MAPK13 / p38delta Antibody (clone 2D8) - Images**



MAPK13 monoclonal antibody (M02), clone 2D8 Western blot of MAPK13 expression in MCF-7.



Immunofluorescence of monoclonal antibody to MAPK13 on MCF-7 cell.



Anti-MAPK13 / SAPK4 antibody IHC of human prostate.

### **MAPK13 / p38delta Antibody (clone 2D8) - 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 2D8) - 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).