

MAPK13/14 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5371

Specification

MAPK13/14 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O15264
Other Accession	P47812 , P70618 , P47811 , Q16539 , Q9DGE2 , Q9WTY9 , Q9Z1B7 , Q3TON5
Reactivity	Human, Rat
Predicted	Bovine, Mouse, Zebrafish, Xenopus
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=42;M=42;Rat=42 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

MAPK13/14 Antibody (Center) - Additional Information

Gene ID 5603

Antigen Region
163-194

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

Dilution

WB~~1:1000

Target/Specificity

This MAPK13/14 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 163-194 amino acids from the Central region of human MAPK13/14.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

MAPK13/14 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

MAPK13/14 Antibody (Center) - 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

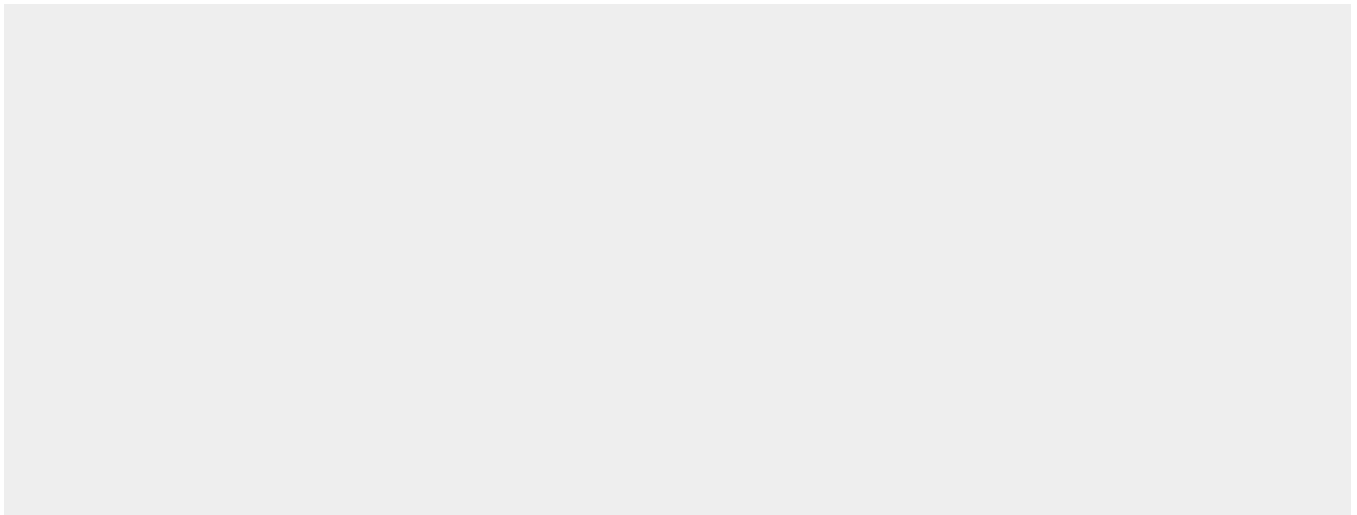
Expressed in testes, pancreas, small intestine, lung and kidney. Abundant in macrophages, also present in neutrophils, CD4+ T-cells, and endothelial cells.

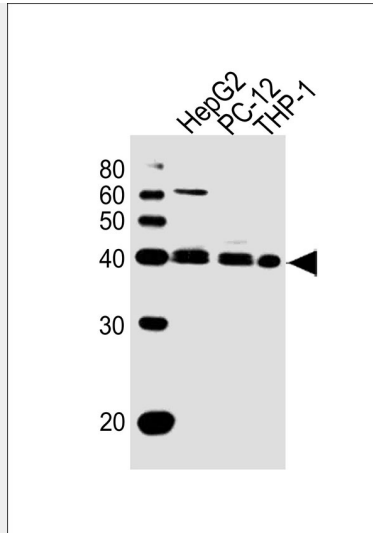
MAPK13/14 Antibody (Center) - Protocols

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](#)

MAPK13/14 Antibody (Center) - Images





All lanes : Anti-MAPK13/14 Antibody (Center) at 1/1000 dilution Lane 1: HepG2 whole cell lysates Lane 2: PC-12 whole cell lysates Lane 3: THP-1 whole cell lysates Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 42 kDa Blocking/Dilution buffer: 5% NFDm/TBST.

MAPK13/14 Antibody (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 Antibody (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).