

**Anti-SAPK4 Picoband Antibody**  
**Catalog # ABO12407****Specification**

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**Anti-SAPK4 Picoband Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">O15264</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Mitogen-activated protein kinase 13(MAPK13) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-SAPK4 Picoband Antibody - 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

**Calculated MW**

42090 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat  
Western blot, 0.1-0.5 µg/ml, Human, Rat

**Tissue Specificity**

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

**Protein Name**

Mitogen-activated protein kinase 13

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human SAPK4 (332-365aa KLTVD~~EW~~KQH~~IY~~KEIVNF~~SPI~~ARKDSRRRS~~GM~~KL), different from the related mouse sequence by two amino acids, and from the related rat sequence by three amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-SAPK4 Picoband Antibody - 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.

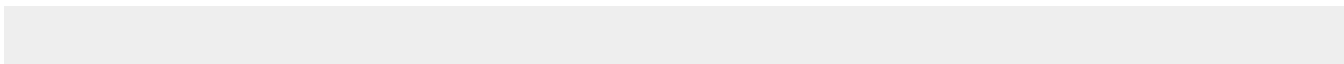
**Tissue Location**

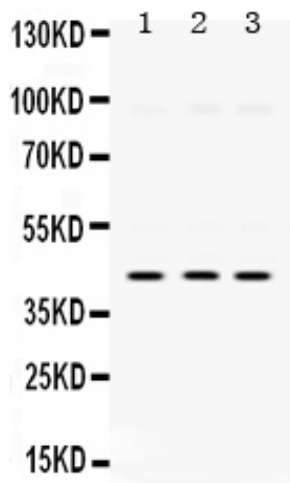
Expressed in testes, pancreas, small intestine, lung and kidney. Abundant in macrophages, also present in neutrophils, CD4+ T-cells, and endothelial cells.

**Anti-SAPK4 Picoband Antibody - 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](#)

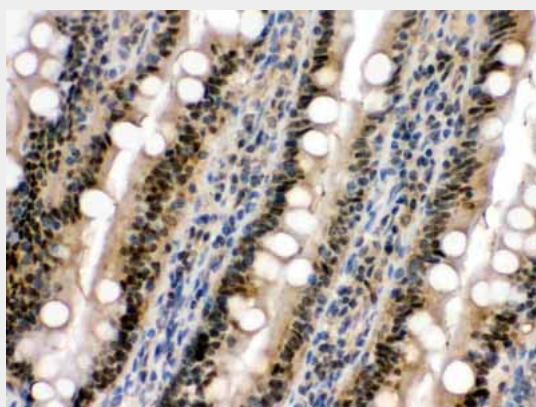
**Anti-SAPK4 Picoband Antibody - Images**



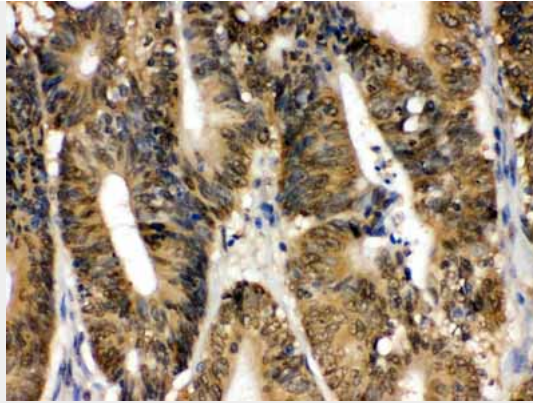
Anti- SAPK4 Picoband antibody, ABO12407, Western blotting All lanes: Anti SAPK4 (ABO12407) at 0.5ug/ml  
Lane 1: Rat Kidney Tissue Lysate at 50ug  
Lane 2: HELA Whole Cell Lysate at 40ug  
Lane 3: A549 Whole Cell Lysate at 40ug  
Predicted bind size: 42KD  
Observed bind size: 42KD



Anti- SAPK4 Picoband antibody, ABO12407, IHC(P) IHC(P): Mouse Intestine Tissue



Anti- SAPK4 Picoband antibody, ABO12407, IHC(P) IHC(P): Rat Intestine Tissue



Anti- SAPK4 Picoband antibody, ABO12407,IHC(P)IHC(P): Human Intestinal Cancer Tissue

#### **Anti-SAPK4 Picoband Antibody - Background**

MAPK13 (Mitogen-Activated Protein Kinase 13), also called p38-DELTA or Stress-Activated Protein Kinase 4(SAPK4), is an enzyme that in humans is encoded by the MAPK13 gene. The protein encoded by this gene 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.