

Phospho-MAP4K4(S629) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3428a

Specification

Phospho-MAP4K4(S629) Antibody - Product Information

Application WB, DB,E
Primary Accession O95819
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

Phospho-MAP4K4(S629) Antibody - Additional Information

Gene ID 9448

Other Names

Mitogen-activated protein kinase kinase kinase kinase 4, HPK/GCK-like kinase HGK, MAPK/ERK kinase kinase 4, MEK kinase kinase 4, MEKKK 4, Nck-interacting kinase, MAP4K4, HGK, KIAA0687, NIK

Target/Specificity

This Phospho-MAP4K4-pS629 antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S629 of human MAP4K4.

Dilution

WB~~1:1000 DB~~1:500

E~~Use at an assay dependent concentration.

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

Phospho-MAP4K4(S629) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-MAP4K4(S629) Antibody - Protein Information

Name MAP4K4 (HGNC:6866)



Synonyms HGK, KIAA0687, NIK

Function Serine/threonine kinase that plays a role in the response to environmental stress and cytokines such as TNF-alpha. Appears to act upstream of the JUN N-terminal pathway (PubMed: 9890973). Activator of the Hippo signaling pathway which plays a pivotal role in organ size control and tumor suppression by restricting proliferation and promoting apoptosis. MAP4Ks act in parallel to and are partially redundant with STK3/MST2 and STK4/MST2 in the phosphorylation and activation of LATS1/2, and establish MAP4Ks as components of the expanded Hippo pathway (PubMed: 26437443). Phosphorylates SMAD1 on Thr- 322 (PubMed: 21690388).

Cellular Location Cytoplasm.

Tissue Location

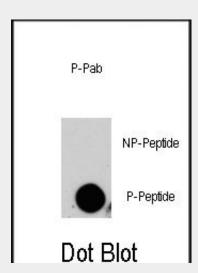
Widely expressed. Isoform 5 is abundant in the brain. Isoform 4 is predominant in the liver, skeletal muscle and placenta.

Phospho-MAP4K4(S629) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-MAP4K4(S629) Antibody - Images



Dot blot analysis of anti-MAP4K4-pS629 Phospho-specific Pab (Cat.#AP3428a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-MAP4K4(S629) Antibody - Background

M4K4, a member of the STE20 subfamily of Ser/Thr protein kinases, may play a role in the





response to environmental stress and cytokines such as TNF-alpha. It appears to act upstream of the JUN N-terminal pathway. This protein is thought to interact with the SH3 domain of the adapter proteins Nck. HGK binds, via its CNH regulatory domain, to the N-terminal region of SPG3A. Expression appears to be ubiquitous, expressed in all tissue types examined. Isoform 5 appears to be more abundant in the brain, and isoform 4 is predominant in the liver, skeletal muscle and placenta.

Phospho-MAP4K4(S629) Antibody - References

Wright, J.H., et al., Mol. Cell. Biol. 23(6):2068-2082 (2003). Yao, Z., et al., J. Biol. Chem. 274(4):2118-2125 (1999). Ishikawa, K., et al., DNA Res. 5(3):169-176 (1998).