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Phospho-MAP4K4(S801) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3444a

Product Information

Application	DB, E
Primary Accession	O95819
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB11324
Calculated MW	142101

Additional Information

Gene ID	9448
Other Names	Mitogen-activated protein kinase kinase kinase kinase 4, HPK/GCK-like kinase HGK, MAPK/ERK kinase kinase kinase 4, MEK kinase kinase 4, MEKKK 4, Nck-interacting kinase, MAP4K4, HGK, KIAA0687, NIK
Target/Specificity	This MAP4K4 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S801 of human MAP4K4.
Dilution	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(S801) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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. 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.

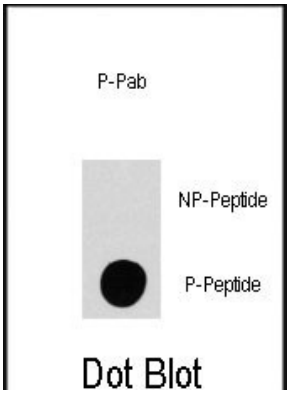
Background

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.

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).

Images



Dot blot analysis of anti-MAP4K4-pS801 Phospho-specific Pab (RB11324) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.