10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

phospho-MAP4K4 (Ser629) Rabbit pAb

Catalog # AP98973

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	O95819
Other Accession	O95819
Predicted	Rat, Human, Mouse, Rabbit, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	142101
Physical State	Liquid
Immunogen	KLH conjugated Synthesised phosphopeptide derived from human MAP4K4 around the phosphorylation site of Ser629
Epitope Specificity	TT(p-S)RS
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily.Contains 1 CNH domain.Contains 1 protein kinase domain.
SUBUNIT	Interacts with the SH3 domain of the adapter proteins Nck (By similarity). Interacts (via its CNH regulatory domain) with ATL1 (via the N-terminal region). Interacts with RAP2A (GTP-bound form preferentially).
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is a member of the serine/threonine protein kinase family. This kinase has been shown to specifically activate MAPK8/JNK. The activation of MAPK8 by this kinase is found to be inhibited by the dominant-negative mutants of MAP3K7/TAK1, MAP2K4/MKK4, and MAP2K7/MKK7, which suggests that this kinase may function through the MAP3K7-MAP2K4-MAP2K7 kinase cascade, and mediate the TNF-alpha signaling pathway. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	9448
Other Names	FLH21957; HEL-S-31; HGK; MEKKK4; NIK; M4K4_HUMAN; MAP4K4; HPK/GCK-like kinase HGK; MAPK/ERK kinase kinase kinase 4 (MEK kinase kinase 4 | MEKKK 4); Nck-interacting kinase; 2.7.11.1; KIAA0687; mitogen-activated protein kinase kinase kinase kinase 4; HPK/GCK-like kinase; hepatocyte progenitor kinase-like/germinal center kinase-like kinase; MAP4K4 (phospho-S629); p-MAP4K4; phospho-MAP4K4; MAP4K4 (phospho-Ser629)

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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