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MAP4K3 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9860A

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8IVH8
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	101316

Additional Information

Gene ID	8491
Other Names	Mitogen-activated protein kinase kinase kinase kinase 3, Germinal center kinase-related protein kinase, GLK, MAPK/ERK kinase kinase kinase 3, MEK kinase kinase 3, MEKKK 3, MAP4K3, RAB8IPL1
Target/Specificity	This MAP4K3 antibody is generated from rabbits immunized with a recombinant protein of human MAP4K3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	MAP4K3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MAP4K3 (HGNC:6865)
Synonyms	RAB8IPL1
Function	Serine/threonine kinase that plays a role in the response to environmental stress. Appears to act upstream of the JUN N-terminal pathway (PubMed:9275185). 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).
Tissue Location	Ubiquitously expressed in all tissues examined, with high levels in heart, brain, placenta, skeletal muscle, kidney and pancreas and lower levels in lung and liver

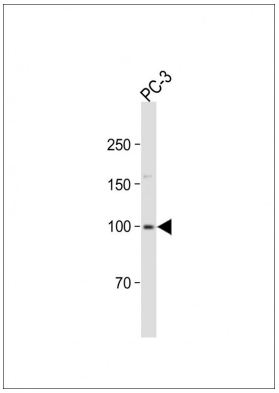
Background

MAP4K3 encodes a member of the Ste20 family of serine/threonine protein kinases. The protein belongs to the subfamily that consists of members, such as germinal center kinase (GCK), that are characterized by an N-terminal catalytic domain and C-terminal regulatory domain. The kinase activity of the encoded protein can be stimulated by UV radiation and tumor necrosis factor-alpha. The protein specifically activates the c-Jun N-terminal kinase (JNK) signaling pathway. Evidence suggests that it functions upstream of mitogen-activated protein kinase kinase kinase 1 (MEKK1). This gene previously was referred to as RAB8-interacting protein-like 1 (RAB8IPL1), but it has been renamed mitogen-activated protein kinase kinase kinase kinase 3 (MAP4K3).

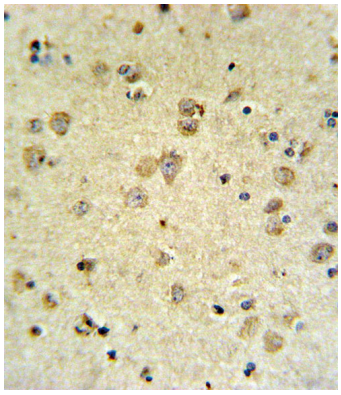
References

Yan, L., et al. Mol. Cell 37(5):633-642(2010)
Ichikawa, S., et al. J. Bone Miner. Res. (2010) In press :
Lam, D., et al. Proc. Natl. Acad. Sci. U.S.A. 106(29):11978-11983(2009)
Wu, C., et al. Proteomics 7(11):1775-1785(2007)

Images

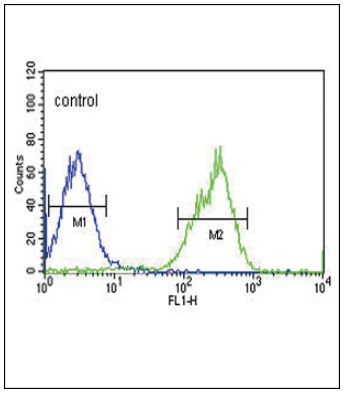


All lanes: Anti-MAP4K3 Antibody at 1:1000 dilution + PC-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 101KDa Blocking/Dilution buffer: 5% NFDM/TBST.



MAP4K3 Antibody (Cat. #AP9860a) IHC analysis in formalin fixed and paraffin embedded brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the MAP4K3 Antibody for immunohistochemistry. Clinical relevance has not been evaluated.

MAP4K3 Antibody (Cat. #AP9860a) flow cytometric



analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.