

Anti-MEKKK6 Antibody

Catalog # AP60483

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q8N4C8
Reactivity	Human, Mouse, Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	149822

Additional Information

Gene ID	50488
Other Names	B55; MAP4K6; MINK; YSK2; ZC3; Misshapen-like kinase 1; GCK family kinase MiNK; MAPK/ERK kinase kinase kinase 6; MEK kinase kinase 6; MEKKK 6; Misshapen/NIK-related kinase; Mitogen-activated protein kinase kinase kinase 6
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human MEKKK6. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	MINK1 (HGNC:17565)
Function	Serine/threonine kinase which acts as a negative regulator of Ras-related Rap2-mediated signal transduction to control neuronal structure and AMPA receptor trafficking (PubMed: 10708748 , PubMed: 16337592). Required for normal synaptic density, dendrite complexity, as well as surface AMPA receptor expression in hippocampal neurons (By similarity). Can activate the JNK and MAPK14/p38 pathways and mediates stimulation of the stress-activated protein kinase MAPK14/p38 MAPK downstream of the Raf/ERK pathway. Phosphorylates TANC1 upon stimulation by RAP2A, MBP and SMAD1 (PubMed: 18930710 , PubMed: 21690388). Has an essential function in negative selection of thymocytes, perhaps by coupling NCK1 to activation of JNK1 (By similarity). 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](#)).

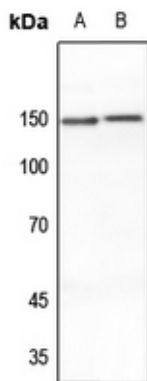
Cellular Location

Cytoplasm. Postsynaptic density. Cell projection, axon. Cell projection, dendrite

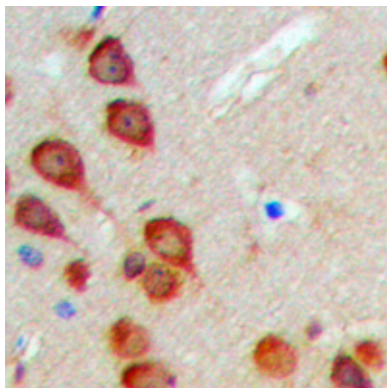
Tissue Location

Expressed in the brain, isoform 2 is more abundant than isoform 1. Isoform 3 is ubiquitously expressed. Isoform 1 is most abundant in the skeletal muscle. Isoform 4 is ubiquitously expressed with relative high levels in brain, skeletal muscle, pancreas and testis.

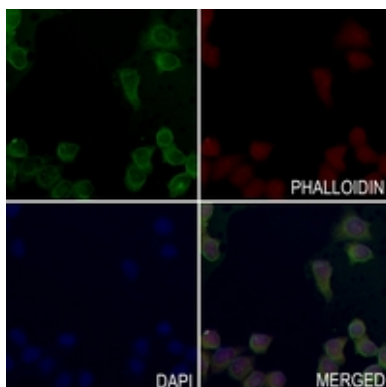
Images



Western blot analysis of MEKKK6 expression in mouse brain (A), rat brain (B) whole cell lysates. (Predicted band size: 149 kD; Observed band size: 150 kD)

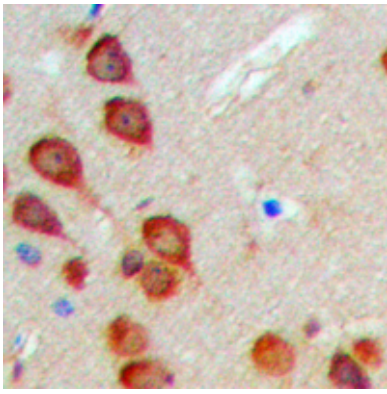


Immunohistochemical analysis of MEKKK6 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of MEKKK6 staining in LO2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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