

HGK Monoclonal Antibody

Catalog No: YM0331

Reactivity: Human

Applications: WB;ELISA

Target: HGK

Fields: >>MAPK signaling pathway

O95819

P97820

Gene Name: MAP4K4

Protein Name: Mitogen-activated protein kinase kinase kinase 4

Human Gene ld: 9448

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Immunogen: Purified recombinant fragment of HGK (aa400-500) expressed in E. Coli.

Specificity: HGK Monoclonal Antibody detects endogenous levels of HGK protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.

Purification : Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 142kD

Cell Pathway: MAPK_ERK_Growth;MAPK_G_Protein;

1/2



P References:

- 1. Mol Cell Biol. 2000 Mar;20(5):1537-45.
- 2. Curr Biol. 2002 Apr 16;12(8):622-31.
- 3. J Biol Chem. 2007 Mar 16;282(11):7783-9.

Background:

mitogen-activated protein kinase kinase kinase 4(MAP4K4) Homo sapiens 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],

Function:

catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,function:Serine/threonine kinase that may play a role in the response to environmental stress and cytokines such as TNF-alpha. Appears to act upstream of the JUN N-terminal pathway.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily.,similarity:Contains 1 CNH domain.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with the SH3 domain of the adapter proteins Nck (By similarity). Binds, via its CNH regulatory domain, to the N-terminal region of SPG3A.,tissue specificity:Appears to be ubiquitous, expressed in all tissue types examined. Isoform 5 appears to be more abundant in the brain, isoform 4 is predominant in the liver, skelet

Subcellular Location:

Cytoplasm.

Expression:

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

Products Images Western Blot analysis using HGK Monoclonal Antibody against truncated Trx-HGK recombinant protein (1), MBP-HGK (aa300-400) recombinant protein (2) and HGK(aa194-436)-hlgGFc transfected CH0-K1 cell lysate(3).