

HGK Monoclonal Antibody

Catalog No :	YM0331
Reactivity :	Human
Applications :	WB;ELISA
Target :	HGK
Fields :	>>MAPK signaling pathway
Gene Name :	MAP4K4
Protein Name :	Mitogen-activated protein kinase kinase kinase 4
Human Gene Id :	9448
Human Swiss Prot No :	O95819
Mouse Swiss Prot No :	P97820
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;

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

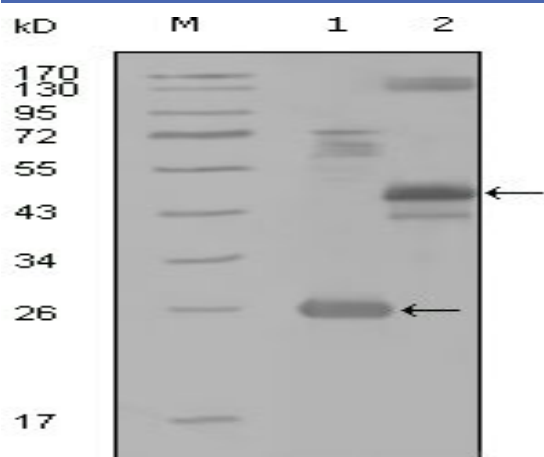
Location :

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 CHO-K1 cell lysate(3).