



MEK-5 Monoclonal Antibody

Catalog No	YP-mAb-14277
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	MAP2K5
Protein Name	Dual specificity mitogen-activated protein kinase kinase 5
Immunogen	Recombinant Protein of MEK-5
Specificity	The antibody detects endogenous MEK-5 protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MAP2K5; MEK5; MKK5; PRKMK5; Dual specificity mitogen-activated protein kinase kinase 5; MAP kinase kinase 5; MAPKK 5; MAPK/ERK kinase 5; MEK 5
Observed Band	49kD
Cell Pathway	nucleus,cytoplasm,spindle,cytosol,
Tissue Specificity	Expressed in many adult tissues. Abundant in heart and skeletal muscle.
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,domain:Binds MAP3K2/MAP3K3 and MAPK7 via non-overlapping residues of the OPR domain. This domain also mediates interactions with SQSTM1 and PARD6A.,function:Acts as a scaffold for the formation of a ternary MAP3K2/MAP3K3-MAP3K5-MAPK7 signaling complex. Activation of this pathway appear to play a critical role in protecting cells from stress-induced apoptosis, neuronal survival and cardiac development and angiogenesis.,PTM:Activated by phosphorylation on Ser/Thr by MAP kinase kinase kinases.,PTM:Yersinia yopJ may acetylate Ser/Thr residues, preventing phosphorylation and activation, thus blocking the MAPK signaling pathway.,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily.,similarity:Contains 1 OPR domain.,similarity:Contains 1 protein kinas



Background

The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase specifically interacts with and activates MAPK7/ERK5. This kinase itself can be phosphorylated and activated by MAP3K3/MEKK3, as well as by atypical protein kinase C isoforms (aPKCs). The signal cascade mediated by this kinase is involved in growth factor stimulated cell proliferation and muscle cell differentiation. Three alternatively spliced transcript variants of this gene encoding distinct isoforms have been described. [provided by RefSeq, May 2011],

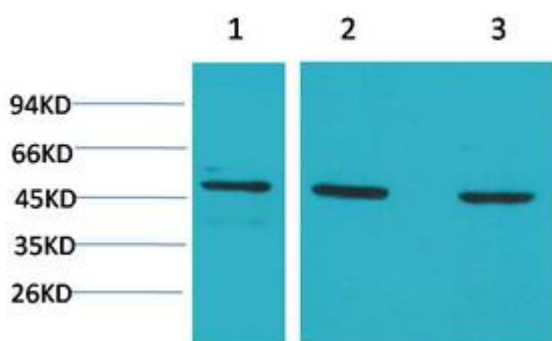
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using MEK-5 Monoclonal Antibody