

## MEK-5 Polyclonal Antibody

<b>Catalog No :</b>	YN5510
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF
<b>Target :</b>	MEK-5
<b>Fields :</b>	>>MAPK signaling pathway;>>Gap junction;>>Neurotrophin signaling pathway;>>Oxytocin signaling pathway;>>Fluid shear stress and atherosclerosis
<b>Gene Name :</b>	MAP2K5
<b>Protein Name :</b>	Dual specificity mitogen-activated protein kinase kinase 5
<b>Human Gene Id :</b>	5067
<b>Human Swiss Prot No :</b>	Q13163
<b>Mouse Swiss Prot No :</b>	Q9WVS7
<b>Rat Swiss Prot No :</b>	Q62862
<b>Immunogen :</b>	Recombinant Protein of MEK-5
<b>Specificity :</b>	The antibody detects endogenous MEK-5 protein.
<b>Formulation :</b>	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:1000-2000 IHC 1:200-500. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 49kD

**Cell Pathway :** MAPK\_ERK\_Growth;MAPK\_G\_Protein;Gap junction;Neurotrophin;

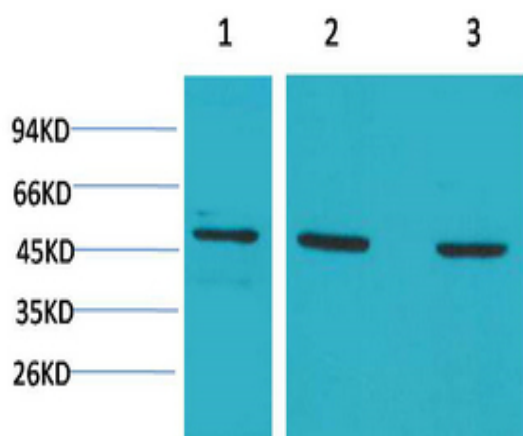
**Background :** The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase specifically interacts with and activates MAPK7/ERK5. This kinase itself can be phosphorylated and activated by MAP3K3/MEKK3, as well as by atypical protein 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],

**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

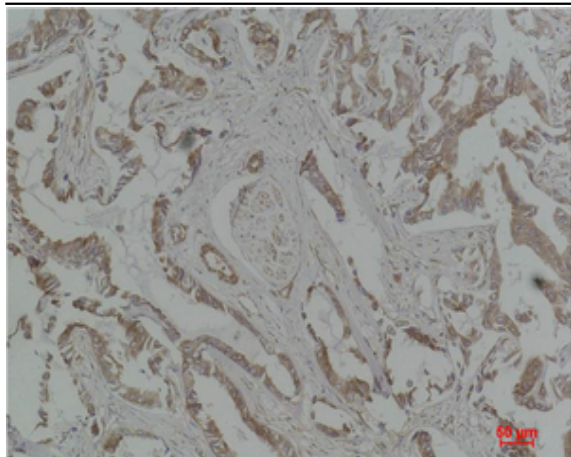
**Subcellular Location :** nucleus,cytoplasm,spindle,cytosol,

**Expression :** Expressed in many adult tissues. Abundant in heart and skeletal muscle.

## Products Images



Western blot analysis of 1) HeLa, 2) 3T3, 3) PC12 using MEK-5 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



Immunohistochemical analysis of paraffin-embedded Human Breast Carcinoma using MEK-5 Polyclonal Antibody.