

ERK 5 Polyclonal Antibody

Catalog No :	YN5604
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF
Target :	ERK 5
Fields :	>>MAPK signaling pathway;>>Gap junction;>>IL-17 signaling pathway;>>Neurotrophin signaling pathway;>>GnRH signaling pathway;>>Oxytocin signaling pathway;>>MicroRNAs in cancer;>>Fluid shear stress and atherosclerosis
Gene Name :	MAPK7,ERK5
Protein Name :	Mitogen-activated protein kinase 7
Human Gene Id :	5598
Human Swiss Prot No :	Q13164
Mouse Swiss Prot No :	Q9WVS8
Rat Swiss Prot No :	P0C865
Immunogen :	Recombinant Protein of ERK 5
Specificity :	The antibody detects endogenous ERK 5 protein.
Formulation :	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:1000-2000 IHC 1:200-500. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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

Observed Band : 89-115kD

Cell Pathway : MAPK_ERK_Growth;MAPK_G_Protein;Gap junction;Neurotrophin;GnRH;

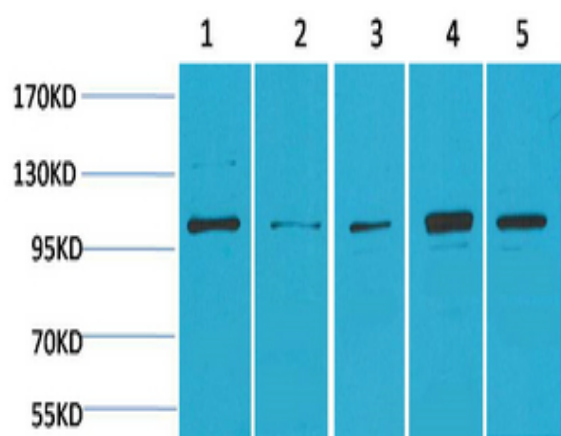
Background : The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase is specifically activated by mitogen-activated protein kinase kinase 5 (MAP2K5/MEK5). It is involved in the downstream signaling processes of various receptor molecules including receptor type kinases, and G protein-coupled receptors. In response to extracellular signals, this kinase translocates to cell nucleus, where it regulates gene expression by phosphorylating, and activating different transcription factors. Four alternatively spliced transcript variants of this gene encoding two distinct isoforms have been reported. [provided by RefSeq, Jul 2008],

Function : catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,domain:The second proline-rich region may interact with actin targeting the kinase to a specific location in the cell.,domain:The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.,enzyme regulation:Activated by tyrosine and threonine phosphorylation (By similarity). Activated in response to hyperosmolarity, hydrogen peroxide, and epidermal growth factor (EGF).,function:Plays a role in various cellular processes such as proliferation, differentiation and cell survival. The upstream activator of MAPK7 is the MAPK kinase MAP2K5. Upon activation, it translocates to the nucleus and phosphorylates various downstream targets including MEF2C. EGF activates MAPK7 through a Ras-independent and MAP2K5-dependent pathway. May have a role in muscle cell differentiation

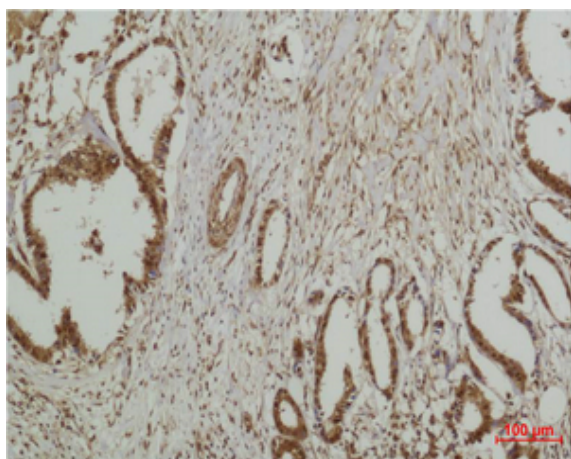
Subcellular Location : Cytoplasm. Nucleus. Nucleus, PML body. Translocates to the nucleus upon activation.

Expression : Expressed in many adult tissues. Abundant in heart, placenta, lung, kidney and skeletal muscle. Not detectable in liver.

Products Images



Western blot analysis of 1) Hela, 2) 293T, 3) Mouse Skeletal Muscle, 4) Rat Kidney, 5) Rat Skeletal Muscle using ERK 5 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human Breast carcinoma using ERK 5 Polyclonal Antibody.