



ERK1 Rabbit Polyclonal Antibody

Catalog No	YP-Ab-14281
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF
Gene Name	MAPK3 ERK1 PRKM3
Immunogen	Recombinant Protein of ERK1
Specificity	The antibody detects endogenous ERK1 protein
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 500-2000 IHC-p 1:50-300. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ERK;ERK1;ERK2;EC:2.7.11.24;ERK-1;ERK 1;MAPK3 ERK1 PRKM3;Mitogen-activated protein kinase 3 (MAP kinase 3) (MAPK 3) (EC 2.7.11.24) (ERT2) (Extracellular signal-regulated kinase 1) (ERK-1) (Insulin-stimulated MAP2 kinase) (MAP kinase isoform p44) (p44-MAPK);Mitogen-activated protein kinase 3 (MAP kinase 3;MAPK 3;EC 2.7.11.24;ERT2;Extracellular signal-regulated kinase 1;Insulin-stimulated MAP2 kinase;MAP kinase isoform p44;p44-MAPK; Microtubule-associated protein 2 kinase;p44-ERK1)
Observed Band	44kD
Calculated Molecular Weight	44kD
Cell Pathway	Cytoplasm . Nucleus. Membrane, caveola . Cell junction, focal adhesion . Autophosphorylation at Thr-207 promotes nuclear localization (PubMed:19060905). PEA15-binding redirects the biological outcome of MAPK3 kinase-signaling by sequestering MAPK3 into the cytoplasm (By similarity). .
Tissue Specificity	Epithelium, Eye, Hepatoma, Human cervix, Lymph,
Function	catalytic activity:ATP + a protein = ADP + a phosphoprotein., cofactor:Magnesium., domain:The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases., enzyme regulation:Activated by tyrosine phosphorylation in response to insulin and NGF.,



function: Involved in both the initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors such as ELK-1. Phosphorylates EIF4EBP1; required for initiation of translation. Phosphorylates microtubule-associated protein 2 (MAP2). Phosphorylates SPZ1 (By similarity). Phosphorylates heat shock factor protein 4 (HSF4). PTM: Dually phosphorylated on Thr-202 and Tyr-204, which activates the enzyme. similarity: Belongs to the protein kinase superfamily. similarity: Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinases

Background

The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described. [provided by RefSeq, Jul 2008],

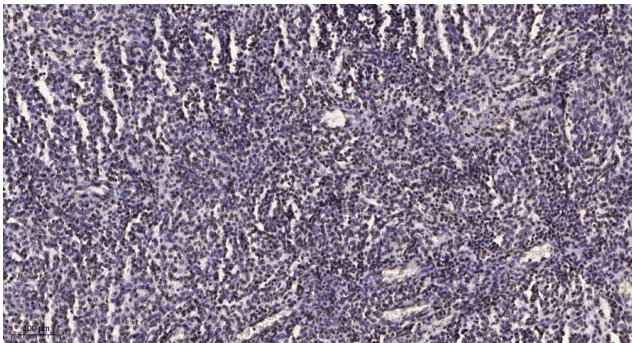
matters needing attention

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



Immunohistochemical analysis of paraffin-embedded human brain tumor. 1, Antibody was diluted at 1:200 (4° overnight). 2, Tris-EDTA, pH 9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200 (room temperature, 45min).