P44/42 MAPK (ERK1/2) Monoclonal Antibody

E20-53518

Catalog Number:E20-53518

Product name:P44/42 MAPK (ERK1/2) Monoclonal Antibody

Amount:100ul

Applications:IHC-p,WB

Reactivity:,Human,Rat,Mouse

Human Gene Id:5594/5595

Human Swiss Prot No:P27361/P28482

Immunogen: Synthetic Peptide of P44/42 MAPK (ERK1/2)

Specificity:P44/42 MAPK(ERK1/2) protein detects endogenous levels of P44/42 MAPK(ERK1/2)

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Mouse

Dilution:WB 1:1000-2000, IHC 1:50-100

Purification: The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.

Concentration:1 mg/ml

Storage Stability:-20°C/1 year

Other Names:MAPK3; ERK1; PRKM3; Mitogen-activated protein kinase 3; MAP kinase 3; MAPK 3; ERT2; Extracellular signal-regulated kinase 1; ERK-1; Insulin-stimulated MAP2 kinase; MAP kinase isoform p44; p44-MAPK; Microtubule-associated protein 2 kinase;

Observed Band(KD):44,42

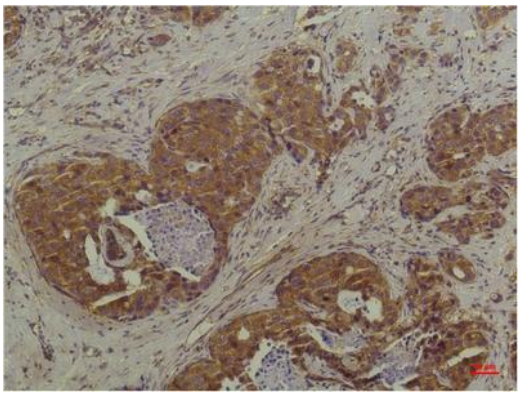
Background:mitogen-activated protein kinase 3(MAPK3) Homo sapiens The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, 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].

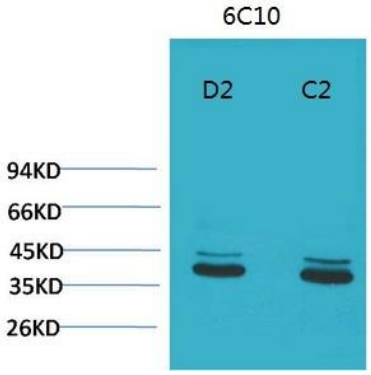
Function:catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,domain:The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.,enzyme regulation:Activated by tyrosine phosphorylation in response to insulin and NGF.,function:Involved 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).

Subcellular Location:intracellular, nucleus, nuclear envelope, nucleoplasm, mitochondrion, early endosome, late endosome,Golgi apparatus, cytosol, cytoskeleton, caveola,focal adhesion,microtubule cytoskeleton.

Expression: Epithelium,Eye,Hepatoma,Human cervix,Lymph.



Immunohistochemical analysis of paraffin-embedded Human Breast Carcinoma using P44/42 MAPK (ERK1/2) Mouse mAb diluted at 1:200.



Western blot analysis of 1)Mouse Brain Tissue, 2) Rat Brain Tissue with P44/42 MAPK(ERK1/2) Mouse mAb diluted at 1:2,000.