



ERK1/2 mouse Monoclonal Antibody(1H4)

Catalog No	YP-Ab-14263
Isotype	IgG
Reactivity	Human;Rat;Mouse;Fish
Applications	WB;IHC;IF
Gene Name	MAPK1/MAPK3
Immunogen	Synthetic Peptide of ERK1/2 at AA range of 140-220
Specificity	ERK1/2 protein detects endogenous levels of MAPK1/MAPK3
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	WB 1:1000-2000, IHC 1:100-200. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ERK2;MAPK1;EC:2.7.11.24;ERK;ERK 2;ERK 1/2;MAPK1/MAPK3
Observed Band	44,42kD
Calculated Molecular Weight	44,42kD
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.,
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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

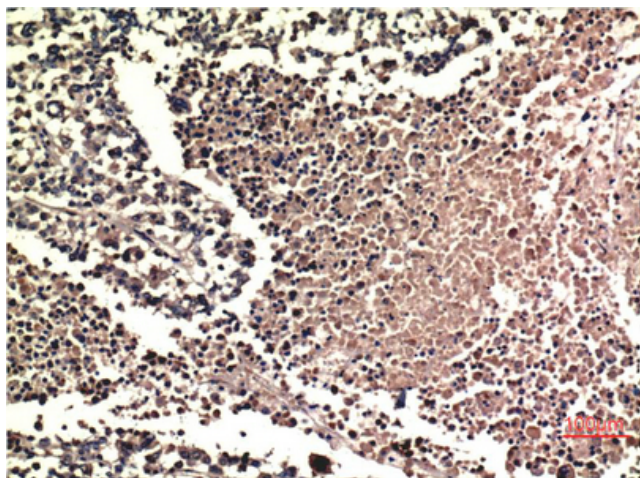
Avoid repeated freezing and thawing!

Usage suggestions

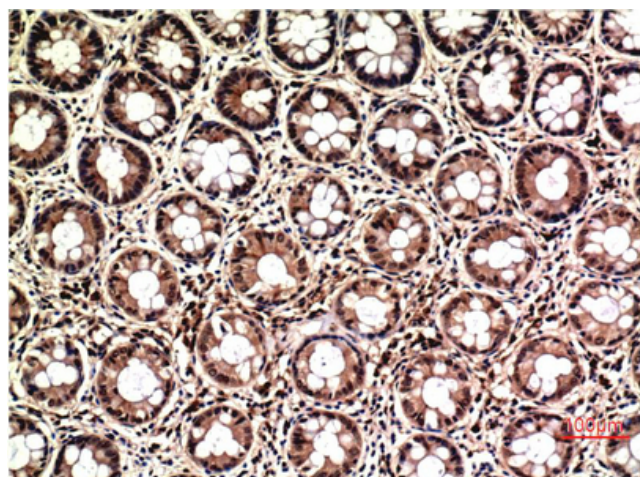
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



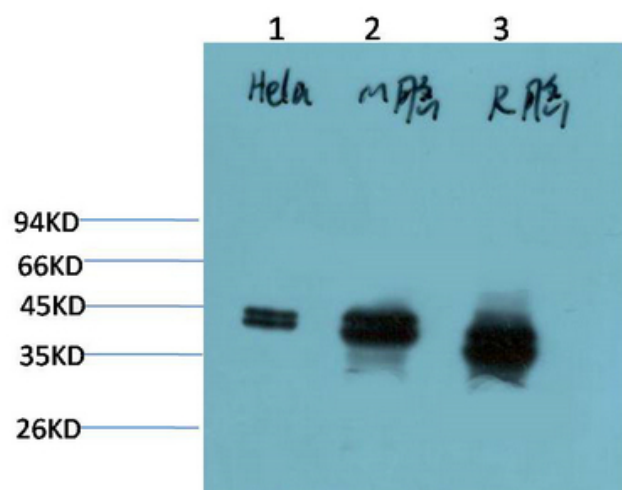
Products Images



Immunohistochemical analysis of paraffin-embedded Human Lung Carcinoma Tissue using ERK1/2 Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human Colon Carcinoma Tissue using ERK1/2 Mouse mAb diluted at 1:200.



Western blot analysis of 1) Hela Cell Lysate, 2) Mouse Brain Tissue Lysate, 3) Rat Brain Tissue Lysate using ERK1/2 Mouse mAb diluted at 1:2000.