



ERK 1/2 (phospho Tyr204) Polyclonal Antibody

Catalog No	YP-Ab-14306
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	MAPK1/MAPK3
Protein Name	Mitogen-activated protein kinase 3
Immunogen	The antiserum was produced against synthesized peptide derived from human p44/42 MAP Kinase around the phosphorylation site of Tyr204. AA range:170-219
Specificity	Phospho-ERK 1/2 (Y204) Polyclonal Antibody detects endogenous levels of ERK 1/2 protein only when phosphorylated at Y204.
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	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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; p
Observed Band	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.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinas

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

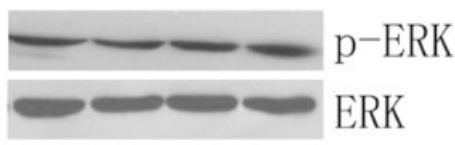
Avoid repeated freezing and thawing!

Usage suggestions

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

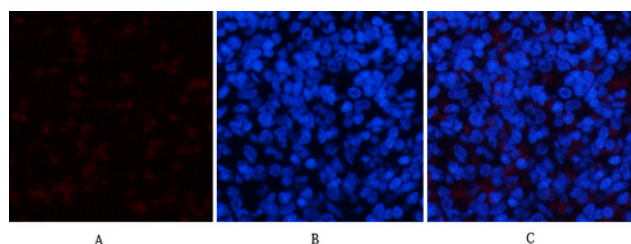
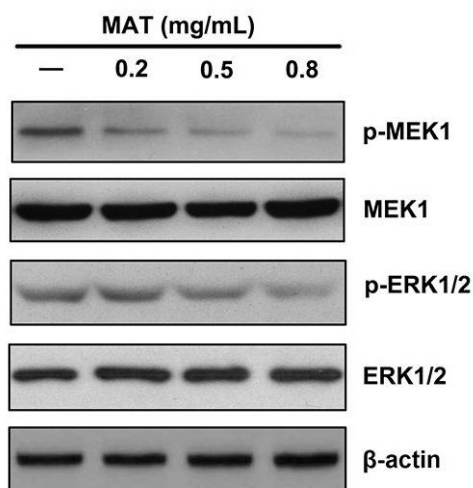


Products Images

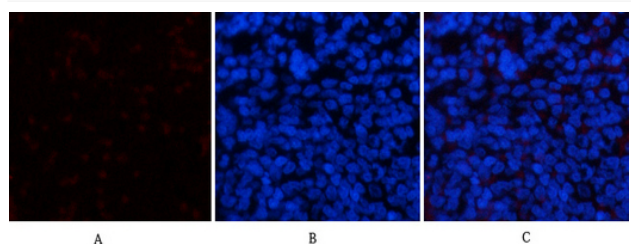


Wang, Xinzhaoh, et al. "Ad-p53 enhances the sensitivity of triple-negative breast cancer MDA-MB-468 cells to the EGFR inhibitor gefitinib." *Oncology reports* 33.2 (2015): 526-532.

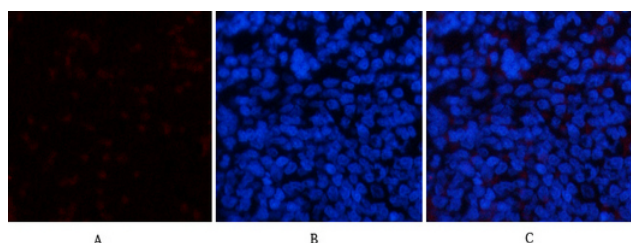
Ma, Lingdi, et al. "Matrine inhibits BCR/ABL mediated ERK/MAPK pathway in human leukemia cells." *Oncotarget* 8.65 (2017): 108880.



Immunofluorescence analysis of rat-spleen tissue. 1, ERK 1/2 (phospho Tyr204) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



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Immunofluorescence analysis of mouse-spleen tissue. 1, ERK 1/2 (phospho Tyr204) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B