



ERK1/2 Rabbit mAb

Catalog No	YP-rAb-17816
Isotype	IgG
Reactivity	Human,Mouse,Rat,Geese
Applications	WB,IHC,IF,IP,ELISA
Gene Name	MAPK1/MAPK3
Protein Name	Mitogen-activated protein kinase 3
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:2000-1:10000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
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	43kD,41kD
Calculated Molecular Weight	43kD,41kD
Cell Pathway	Cytoplasm, Nucleus
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 kinase family. MAP kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with MORG1 (By similarity). Binds to HIV-1 Nef. This interaction inhibits its kinase activity. Interacts with HSF4 and NISCH.,

Background

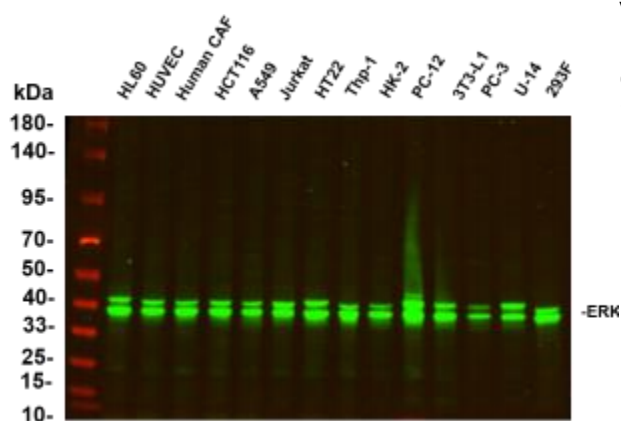
The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety 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

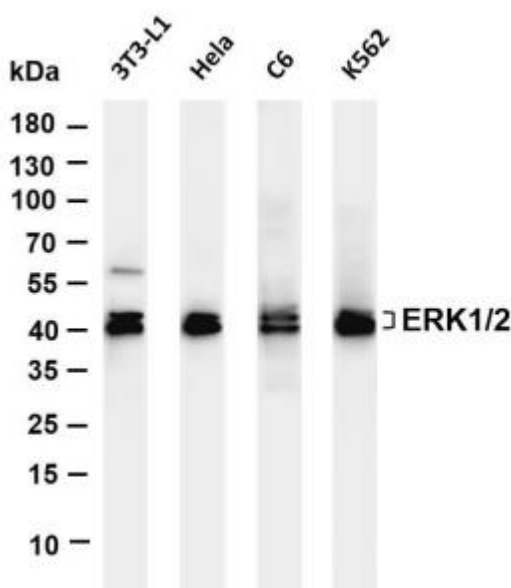
Avoid repeated freezing and thawing!

Usage suggestions

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

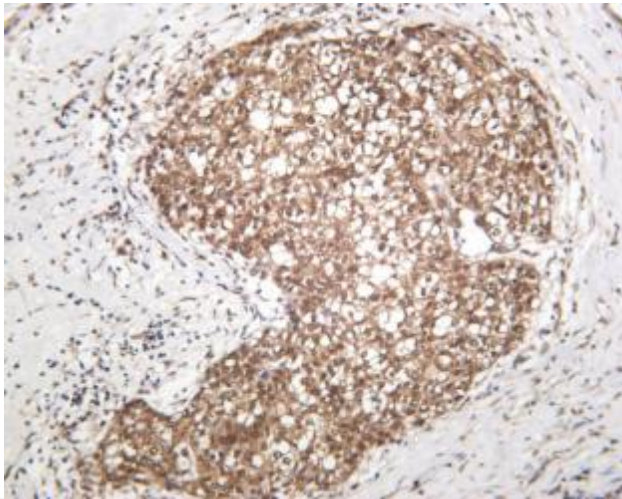


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4°C, over night with a 1:5000 dilution. The Dylight 800-conjugated Goat anti-Rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-ERK1/2 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: 3T3-L1 Lane 2: HeLa Lane 3: C6 Lane 4: K562 Predicted band size: 43,41kDa Observed band size: 43,41kDa

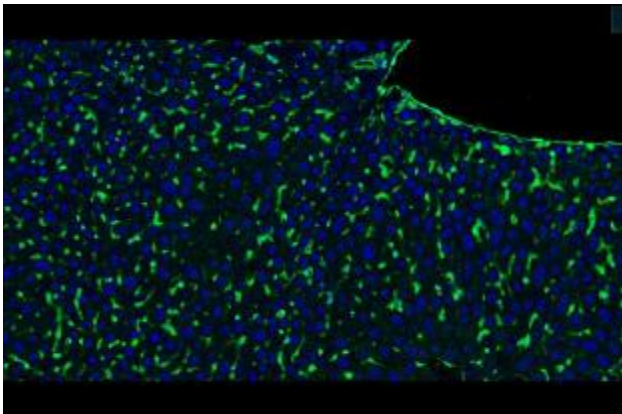




Human breast carcinoma was stained with anti-ERK1/2 rabbit antibody



Mouse liver was stained with anti-ERK1/2 Rabbit antibody



Mouse liver was stained with anti-ERK1/2 Rabbit antibody

