

ERK1/2 (PT0510R) PT® Rabbit mAb

Catalog No: YM8336

Reactivity: Human; Mouse; Rat;

Applications: WB;IHC;IF;IP;ELISA

Target: ERK 1/2

Fields: >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine

resistance;>>Platinum drug resistance;>>MAPK signaling pathway;>>ErbB signaling pathway;>>Ras signaling pathway;>>cGMP-PKG signaling pathway;>>cAMP signaling pathway;>>Chemokine signaling pathway;>>HIF-1 signaling pathway;>>FoxO signaling pathway;>>Sphingolipid

signaling pathway;>>Phospholipase D signaling pathway;>>Oocyte

meiosis;>>Autophagy - animal;>>mTOR signaling pathway;>>PI3K-Akt signaling

pathway;>>Apoptosis;>>Cellular senescence;>>Adrenergic signaling in

cardiomyocytes;>>Vascular smooth muscle contraction;>>TGF-beta signaling pathway;>>Axon guidance;>>VEGF signaling pathway;>>Apelin signaling

pathway;>>Osteoclast differentiation;>>Focal adhesion;>>Adherens

junction;>>Gap junction;>>Signaling pathways regulating pluripotency of stem cells;>>Platelet activation;>>Neutrophil extracellular trap formation;>>Toll-like receptor signaling pathway;>>C-type

lectin recep

Gene Name: MAPK1/MAPK3

Protein Name: Mitogen-activated protein kinase 3

Human Gene Id: 5595/5594

Human Swiss Prot P28482,P27361

No:

Mouse Gene Id: 26417/26413

Rat Gene Id: 50689/116590

Rat Swiss Prot No: P21708/P63086

Specificity: endogenous

1/3



Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Source : Monoclonal, rabbit, IgG, Kappa

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;

Purification: Protein A

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 43kD,41kD

Observed Band: 43kD,41kD

Cell Pathway: Regulates Angiogenesis; Regulation_Microtubule; Regulation of Actin

Dynamics; Stem cell pathway; T Cell Receptor; Insulin Receptor; Cell Growth;

Toll_Like; MAPK_ERK_Growth; MAPK_G_Protein; B_Cell_Antig

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],

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

Subcellular Location:

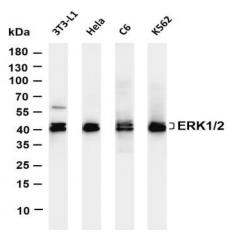
Cytoplasm, Nucleus

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

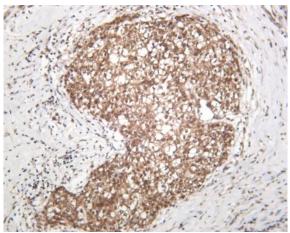
2/3



Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-ERK1/2 (PT0510R) 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 (PT0510R) rabbit antibody