Best Tools for immunology Research

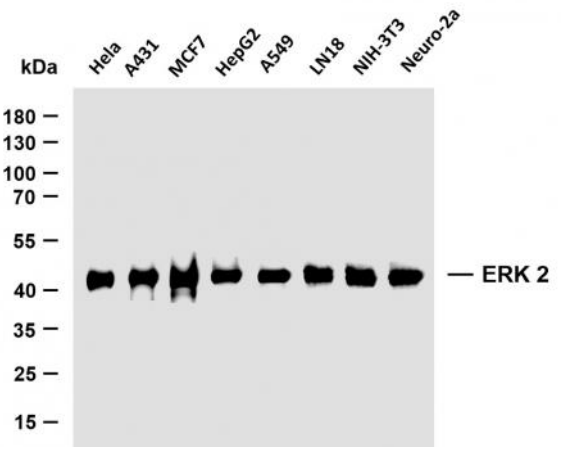
ERK 2 (PTR1173) mouse mAb

Catalog No :	YM4371
Reactivity :	Human;Mouse;Rat;
Applications :	WB;IF;ELISA
Target :	ERK 2
Fields :	>>EGFR tyrosine kinase inhibitor resistance;>>Endocrine resistance;>>Platinum drug resistance;>>MAPK signaling pathway;>>ErbB signaling pathway;>>Ras signaling pathway;>>Rap1 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;>>NOD-like receptor signaling pathway;>>C-type lectin recep
Gene Name :	MAPK1
Protein Name :	Mitogen-activated protein kinase 1
Human Gene Id :	5594
Human Swiss Prot No :	P28482
Mouse Gene Id :	26413
Mouse Swiss Prot No :	P63085
Rat Gene Id :	116590
Immunogen :	Synthesized peptide derived from human ERK 2 AA range: 150-250

Specificity :	This antibody detects endogenous levels of ERK 2.
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Mouse, Monoclonal/IgG
Dilution :	WB 1:500-2000. IF 1:100-500. ELISA 1:1000-5000
Purification :	Protein G
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	41kD
Observed Band :	42kD
Cell Pathway :	Regulates Angiogenesis; Regulation_Microtubule; Regulation of Actin Dynamics; Stem cell pathway; T_Cell_Receptor; Cell Growth; Insulin Receptor; Toll_Like; MAPK_ERK_Growth;MAPK_G_Protein; ErbB/HER; B_
Background :	This gene encodes a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. The activation of this kinase requires its phosphorylation by upstream kinases. Upon activation, this kinase translocates to the nucleus of the stimulated cells, where it phosphorylates nuclear targets. One study also suggests that this protein acts as a transcriptional repressor independent of its kinase activity. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Two alternatively spliced transcript variants encoding the same protein, but differing in the UTRs, have been reporte
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 phosphorylation on tyrosine and threonine in response to insulin and NGF. Both phosphorylations are required for activity.,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 ELK1. Phosphorylates EIF4EBP1; required for initiation of translation. Phosphorylates microtubule-associated protein 2 (MAP2). Phosphorylates SPZ1 (By similarity). Phosphorylates heat shock factor protein 4 (HSF4) and ARHGEF2.,online information:Extracellular signal-regulated kinase entry,PTM:Dually phosphorylated on Thr-185 and Tyr-187, which activates the en

Subcellular Location :	Cytoplasmic, Nuclear
Expression :	Brain,Epithelium,Lung,Platelet,T-cell,
Sort :	970
No4 :	1
Host :	Mouse
Modifications :	Unmodified

Products Images



arious whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-ERK 2 (PTR1173) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: A431 Lane 2: MCF7 Lane 3: Rat brain Lane 4: Rat brain Lane 5: Rat brain Lane 6: LN18 Lane 7: NIH-3T3 Lane 8: Neuro-2a