



ERK 1/2 (phospho Tyr222/205) rabbit pAb

Cat No.:ES1441

For research use only

Overview

Product Name	ERK 1/2 (phospho Tyr222/205) rabbit pAb
Host species	Rabbit
Applications	IF;WB;IHC;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	IF: 1:50-200 WB 1:500-2000, IHC 1:50-300 IHC 1:50-300
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human ERK 1/2 (phospho Tyr222/205)
Specificity	Phospho-ERK 1/2 (Y222/205) Polyclonal Antibody detects endogenous levels of ERK 1/2 protein only when phosphorylated at Y222/205.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C . Avoid repeated freeze-thaw cycles.
Protein Name	Mitogen-activated protein kinase 1
Gene Name	MAPK1/MAPK3
Cellular localization	Cytoplasm, cytoskeleton, spindle . Nucleus . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm . Membrane, caveola . Cell junction, focal adhesion . Associated with the spindle during prometaphase and metaphase (By similarity). PEA15-binding and phosphorylated DAPK1 promote its cytoplasmic retention. Phosphorylation at Ser- 246 and Ser-248 as well as autophosphorylation at Thr-190 promote nuclear localization. .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	44kD





Human Gene ID

5594/5595

Human Swiss-Prot Number

P28482/P27361

Alternative Names

MAPK1; ERK2; PRKM1; PRKM2; Mitogen-activated protein kinase 1; MAP kinase 1; MAPK 1; ERT1; Extracellular signal-regulated kinase 2; ERK-2; MAP kinase isoform p42; p42-MAPK; Mitogen-activated protein kinase 2; MAP kinase 2; MAPK 2; MAPK3; ER

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 reported

