



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

Cat#: orb764316 (Manual)

For research use only. Not intended for diagnostic use.

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)

Phospho-ERK 1/2 (Y222/205) Polyclonal Antibody detects endogenous **Specificity**

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..

Store at -20°C. Avoid repeated freeze-thaw cycles. **Storage**

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. .



www.biorbyt.com

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

epitope-specific immunogen. chromatography using

Polyclonal **Clonality**

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 reporte