

ERK1/2 monoclonal antibody

Catalog: MB0136

Host: M

Mouse

Reactivity: Human, Mouse, Rat

BackGround:

The activation of signal transduction pathways by growth factors, hormones and neurotransmitters is mediated through two closely related MAP kinases, p44 and p42, designated extracellular-signal related kinase 1 (ERK 1) and ERK 2, respectively. ERK proteins are regulated by dual phosphorylation at Tyrosine 204 and 187 and Threonine 177 and 160 residues mapping within a characteristic Thr-Glu-Tyr motif. Phosphorylation at both the Threonine 202 and Tyrosine 204 residues of ERK 1 and Threonine 185 and Tyrosine 187 residues of ERK 2 is required for full enzymatic activation. The structural consequences of dual phosphorylation in ERK 2 include active site closure, alignment of key catalytic residues that interact with ATP, and remodeling of the activation loop. In response to activation, MAP kinases phosphorylate downstream components on serine and threonine. Upstream MAP kinase regulators include MAP kinase kinase (MEK), MEK kinase and Raf-1. The ERK family has three additional members: ERK 3, ERK 5 and ERK 6.

Product:

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.03% Proclin 300, pH 7.3.

Molecular Weight:

- ~ 42, 44 kDa
- **Swiss-Prot:**

P27361/P28482

Purification&Purity:

The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:1000

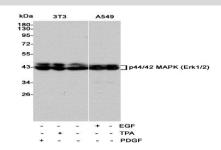
Storage&Stability:

Store at $4 \,^{\circ}{\rm C}$ short term. Aliquot and store at $-20 \,^{\circ}{\rm C}$ long term. Avoid freeze-thaw cycles.

Specificity:

This antibody detects endogenous levels of ERK1/2 and does not cross-react with related proteins.

DATA:



Western blot (WB) analysis of ERK1/2 monoclonal antibody at 1:1000 dilution

Note:

For research use only, not for use in diagnostic procedure.

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