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**anti-ERK 1**

Cat #: HM1135  
Rabbit polyclonal IgG  
0.2 µg/µl, store at 4 °C

For research use only

**BACKGROUND**

MAP kinases act as an integration point for different extracellular cues including cytokines, growth factors, neuropeptides and stresses such as cold, heat, osmolarity changes and irradiation. MAP kinases consist of several subgroups, including the extracellular-signal related kinases (ERKs), JNK, and p38 kinases. The activation of ERK1 (44 kDa) and ERK2 (42 kDa) kinases require dual tyrosine and threonine phosphorylation at a conserved T-E-Y motif. While JNK1 is activated by dual phosphorylation at a T-P-Y motif and p38 is activated by dual phosphorylation at a T-G-Y motif. Phosphorylation at both the Thr and Tyr residues is required for full enzymatic activation. 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.

**SPECIFICITY**

This antibody recognizes ERK1 of human and mouse origin. It also reacts with ERK2.

The antibody can be used in Western blotting, immunoprecipitation and immunostaining.

Molecular weight of ERK 1: 44 kDa.

Western blotting positive controls: HeLa cells; NIH/3T3 cells.

**IMMUNOGEN**

A peptide mapping at an internal regions of human ERK 1 p44.

**STORAGE**

This antibody is stable for 12 months when stored at 2-8°C.

**REFERENCES**

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