

**AP02742PU-N****Polyclonal Antibody to ERK1 / ERK2 - Aff - Purified****Alternate names:**

ERK-1/ERK-2, Extracellular signal regulated kinase 1/2, Insulin stimulated MAP2 kinase, MAPK1/MAPK2, Microtubule associated protein 2 kinase, Mitogen activated protein kinase 1/2/3, P42/P44-MAPK

**Quantity:**

0.1 mg

**Concentration:**

1.0 mg/ml

**Background:**

Both p44 and p42 MAP kinases (Erk1 and Erk2) function in a protein kinase cascade that plays a critical role in the regulation of cell growth and differentiation. Activation of MAP kinases occurs through phosphorylation of threonine and tyrosine (202 and 204 of human MAP kinase [Erk1] or 183 and 185 of rat Erk2) at the sequence T\*EY\* by a single upstream MAP kinase kinase (MEK). Both kinases are known to weakly autophosphorylate on tyrosine.

**Host:**

Rabbit

**Immunogen:**

The antiserum was produced against synthesized non-phosphopeptide derived from human p44/42 MAP Kinase around the phosphorylation site of tyrosine 204 (T-E-YP-V-A).

**Format:**

**State:** Liquid purified IgG

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Buffer System:** PBS(without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4 containing 150mM NaCl, 0.02% sodium azide and 50% glycerol

**Applications:**

Western Blot: 1:500~1:1000.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

p44/42 MAP Kinase antibody detects endogenous levels of total p44/42 MAP Kinase protein.

**Species:** Human, Mouse, Rat.

Other species not tested.

**Storage:**

Store the antibody at -20°C.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

**General Readings:**

1. TETE HANNKEN, et al. (2000) Am Soc Nephrol 11:1387-1397

2. Omar D. PerezNature et al. (2002) Biotechnology 20: 155 - 162

3. Jingui Yu, et al. (2005) Anesth Analg 101: 315-321

4. Hironobu Ihn et al.(2000) Immunology 165: 2149-2155

**Pictures:**

Western blot analysis of extracts from NIH-3T3 cells, using p44/42 MAP Kinase antibody (Line 1 and 2) and p44/42 MAP Kinase (pTyr204) antibody (Line 3).

