



## Anti-Phospho-p44/42 MAPK (ERK1/2)

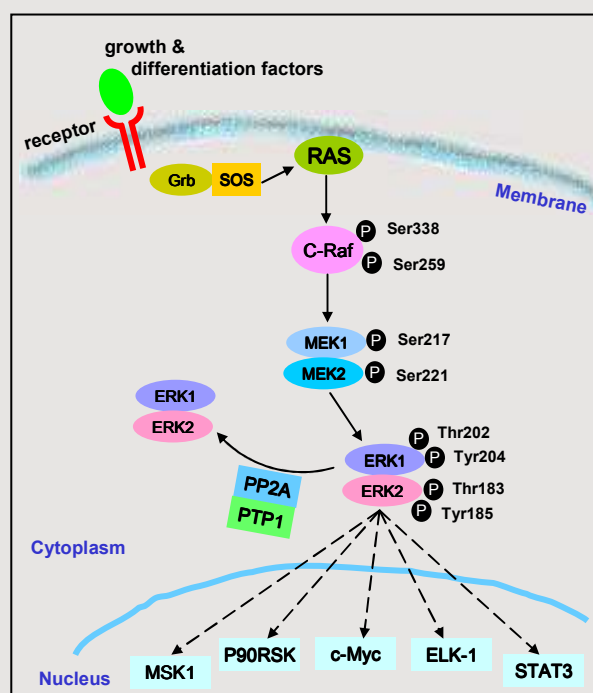
**Background :** ERK1 and ERK2 are widely expressed and are involved in the regulation of meiosis, mitosis, and postmitotic functions in differentiated cells. Many different stimuli, including growth factors, cytokines, virus infection, ligands for heterotrimeric guanine nucleotide-binding protein (G protein)-coupled receptors and transforming agents, activate the ERK1 and ERK2 pathways.

When growth factors bind to the receptor tyrosine kinase, Ras interacts with Raf, the serine/threonine protein kinase and activates it as well. Once activated, Raf phosphorylates serine residue in 2 further kinases, MEK1/2, which in turn phosphorylates tyrosine/threonine in extracellular-signal regulated kinase(ERK) 1/2. Upon activation, the ERKs either phosphorylate a number of cytoplasmic targets or migrate to the nucleus, where they phosphorylate and activate a number of transcription factors such as c-Fos and Elk-1.

**Immunogen :** Synthetic phospholyrated peptide (KLH coupled) corresponding to residues around Thr202/Tyr204 of human p44 MAP kinase (Erk1)

**Host :** Rabbit

**Size :** 100 µl



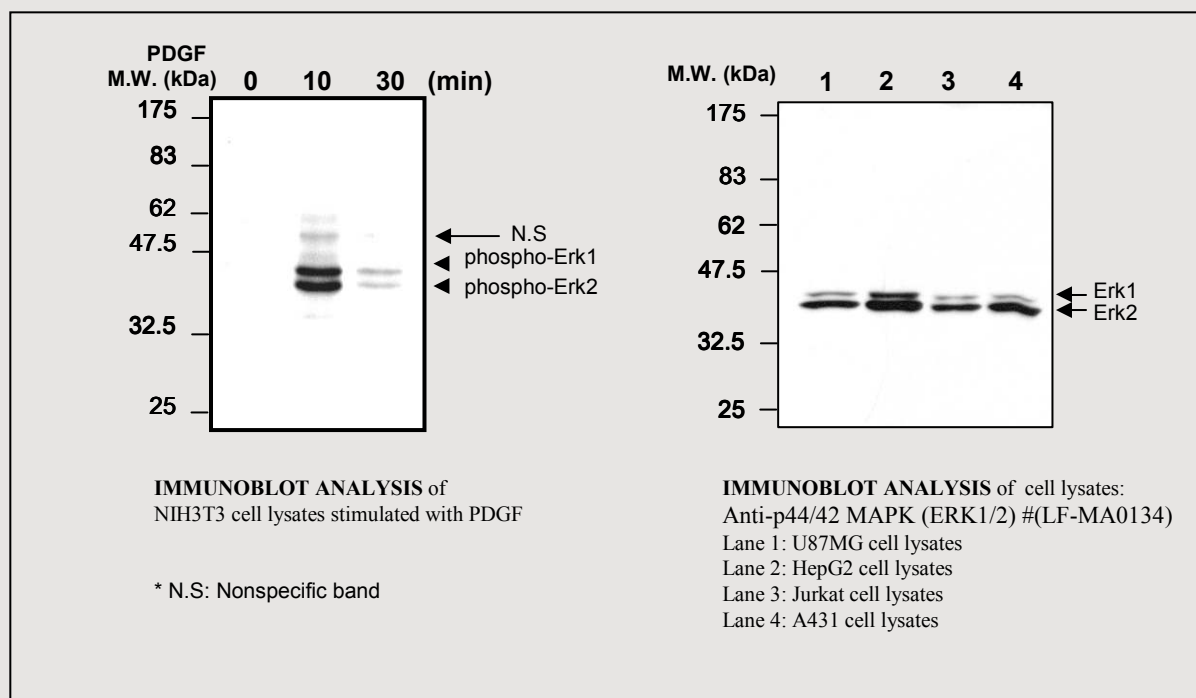
**Composition :** PBS containing 50% glycerol

**Positive control :** NIH3T3 cell lysates stimulated with PDGF

**Storage :** stable for 1 year at -20°C from date of shipment

### Species cross reactivity

Human	Mouse	Rat
+	+	+



### Applications :

Western Blotting (1:5,000)

### Background Reference:

- 1) Smalley, K. (2003) Int. J. Cancer, 104, 527-532
- 2) Johnson, G.L. and Lapadat, R. (2002) Science, 298, 1911-1912
- 3) Kolch, W. (2000) Biochem. J. 351, 289-305