

# anti-Erk1/2 (phospho-Thr202/Tyr204)

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## Overview

**Product Name** : anti-Erk1/2 (phospho-Thr202/Tyr204)

**Product Type** : Primary Antibodies

**Description** : Rabbit polyclonal to Erk1/2 (phospho-Thr202/Tyr204)

## Product Information

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

**Clonality** : Polyclonal Antibody

**Host** : Rabbit

**Isotype / Subtype** : IgG

**Application(추가정보)** : WB (1:5,000)

**Reactivity** : Human, Mouse, Rat

**Positive control** : NIH3T3 cell treated with PDGF-BB

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

**Composition** : HEPES with 0.15M NaCl, 0.01% BSA, 0.03% sodium azide, and 50% glycerol

**Conjugation** unconjugated

## Target

**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 two 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.

**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

**Research area** : Cell Signaling Neuroscience

**Database link - GenElid** 5595

**Database link - SwissProt no.** P27361, P28482

**Function** : Involved in both the initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors such as Elk-1. Phosphorylates EIF4EBP1; required for initiation of translation. Phosphorylates microtubule-associated protein 2 (MAP2). Phosphorylates SPZ1. Phosphorylates heat shock factor protein 4 (HSF4).

