

## Anti-ERK/MAPK (Thr202/Tyr204) Antibody

Our Anti-ERK/MAPK (Thr202/Tyr204) rabbit polyclonal phosphospecific primary antibody from PhosphoSol Catalog # AN1379

### Specification

## Anti-ERK/MAPK (Thr202/Tyr204) Antibody - Product Information

WB, IHC
<u>P63086</u>
Bovine
Rabbit
Polyclonal
lgG
41276

## Anti-ERK/MAPK (Thr202/Tyr204) Antibody - Additional Information

Gene ID

116590

Other Names

ERK 1 antibody, ERK 2 antibody, ERK-2 antibody, ERK1 antibody, erk1/2 antibody, ERK2 antibody, ERT1 antibody, ERT2 antibody, Extracellular signal regulated kinase 1 antibody, Extracellular signal-regulated kinase 2 antibody, MAP kinase 1 antibody, MAP kinase 2 antibody, MAP kinase isoform p42 antibody, MAP kinase isoform p44 antibody, MAPK 1 antibody, MAPK 2 antibody, MAPK 3 antibody, Mapk1 antibody, MAPK2 antibody, MAPK3 antibody, Mitogen-activated protein kinase 1 antibody, Mitogen-activated protein kinase 2 antibody, MK01\_HUMAN antibody, p38 antibody, p40 antibody, p41 antibody, p42-MAPK antibody, PRKM 2 antibody

#### Target/Specificity

Extracellular-Signal Regulated Kinase/Mitogen-Activated Protein Kinase (ERK/MAPK) is an integral component of cellular signaling during mitogenesis and differentiation of mitotic cells and also is thought to play a key role in learning and memory (Adams and Sweatt, 2002; Ahn, 1993; Tanoue and Nishida, 2003; Johnson and Lapadat, 2002). The activity of this kinase is regulated by dual phosphorylation at Thr202 and Tyr204 (Ahn, 1993).

**Dilution** WB~~1:1000 IHC~~1:100~500

Format Antigen Affinity Purified from Pooled Serum

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

Anti-ERK/MAPK (Thr202/Tyr204) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping



Blue Ice

## Anti-ERK/MAPK (Thr202/Tyr204) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ERK/MAPK (Thr202/Tyr204) Antibody - Images



Immunostaining of neurons in the frontal cortex of saline treated mouse brain identifying cytoplasmic and nuclear staining of ERK/MAPK when phosphorylated at Thr202/Tyr204 (cat. p160-2024, red, 1:500). The intense nuclear staining of a few neurons shows stimulation of the neuron resulting in translocation of the protein. The blue is staining nuclei with DAPI. Photo courtesy of Robert Wine.



Immunostaining of granule cells in the dentate gyrus of the hippocampus from saline treated mouse brain staining ERK/MAPK when phosphorylated at Thr202/Tyr204 (cat. p160-2024, 1:500, red). The blue is staining nuclei with DAPI. The MAPK positive neurons show punctate staining primarily localized in the nucleus with few staining both cytoplasmic and nuclear. Photo courtesy of Robert Wine.





Immunolabeling of cultured mouse hippocampal neurons fixed and stained with anti-phospho-ERK/MAPK Thr202/Tyr204 (p160-2024, green, 1:100) and red nuclear stain Propidium Iodide. The labeling identifies an increase in ERK/MAPK phosphorylation when hippocampal neurons are treated with a specific ASIC1a activator, MitTx toxin (20 nM, 4 min). Image kindly provided by Carina Weissmann, IFIBYNE-CONICET.



Western blot of human T47D cell lysate showing specific immunolabeling of ~42-44 kDa ERK/MAPK protein phosphorylated at Thr202/Tyr204 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase ( $\lambda$ -Ptase, 1200 units for 30 min).

# Anti-ERK/MAPK (Thr202/Tyr204) Antibody - Background

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