

Anti-ERK/MAPK (Thr202/Tyr204) Antibody

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

Product Information

Application	WB, IHC, ICC
Primary Accession	P63086
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	41276

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 ICC~~N/A
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

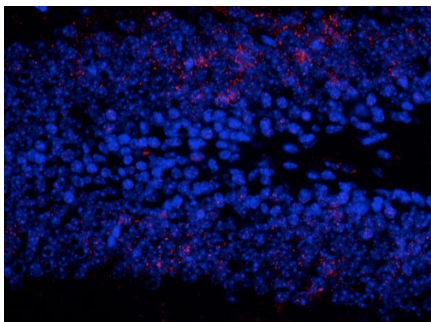
Background

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).

Images

Image not found : 202310/p160-2024-RW-mouse-dentate-gyrus-F-4.27.2008_500x375_3848affe-3f64-4750-aca4-2313fc3ec0cf_160

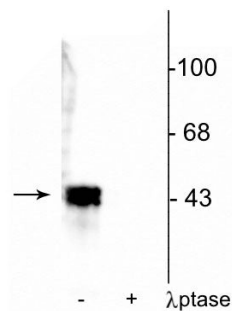
Immunostaining of neurons in the frontal cortex of saline treated mouse brain identifying cytoplasmic and nuclear staining of ERK/MAPK when phosphorylated at Thr202/Tyr204 (cat. AN1379, red, 1:500). The intense nuclear staining of a few neurons shows stimulation of the neuron resulting in translocation 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. AN1379, 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.

Image not found : 202310/p160-2024-ICC-image-Weissmann-vertical-copy_500x390_f96469e4-fba7-48a0-b5e5-1b2b107e9aa6_1600

Immunolabeling of cultured mouse hippocampal neurons fixed and stained with anti-phospho-ERK/MAPK Thr202/Tyr204 (AN1379, 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 (λ -Ptase, 1200 units for 30 min).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.