**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. The activity of this kinase is regulated by dual phosphorylation at Thr^{202} and Tyr^{204}.

**IMMUNOGEN**
Synthetic phosphopeptide corresponding to amino acids residues surrounding the phospho-Thr^{202} and Tyr^{204} of ERK/MAPK.

**Western blot of 10 µg of rat brain lysate showing specific immunolabeling of ~42 - 44k ERK/MAPK protein phosphorylated at Thr^{202} and Tyr^{204}. The labeling by the antibody was specifically blocked by the Thr^{202}/Tyr^{204} phosphopeptide used as the antigen. The corresponding non-phosphopeptide did not block the immuno-labeling (not shown).**

**ORDERING INFORMATION**

**CATALOG NUMBER**
X1670P

**SIZE**
10 Miniblots

**FORM**
Affinity Purified

**HOST/CLONE**
Rabbit

**FORMULATION**
Provided in HEPES (pH 7.5) solution containing 150 mM NaCl, 100 µg per ml BSA and 50% glycerol

**CONCENTRATION**
Varies from lot to lot

**ISOTYPE**
IgG

**APPLICATIONS**
Western Blot, Dot Blot

**SPECIES REACTIVITY**
Human, Mouse, Rat, Xenopus

**ACCESSION NUMBER**
Human P28482
**Antibody** should be used at a 1:1000 dilution to provide for 10 miniblots in Western blotting and dot blots. Antibody detects only phosphorylated protein and does not detect non-phosphorylated protein as shown by the lack of ability of a non-phospho peptide to block the antibody activity. Optimal concentration may be evaluated by serial dilutions.

**COMMENTS**

Antibody should be used at a 1:1000 dilution to provide for 10 miniblots in Western blotting and dot blots. Antibody detects only phosphorylated protein and does not detect non-phosphorylated protein as shown by the lack of ability of a non-phospho peptide to block the antibody activity. Optimal concentration may be evaluated by serial dilutions.

**PURIFICATION**

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

**SHIP CONDITIONS**

Ship on gel ice, freeze upon arrival

**STORAGE CUSTOMER**

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

**STABILITY**

Products are stable for one year from purchase when stored properly

**REFERENCES**


6. Tanogue, T.J. and Nishida, E. 'Molecular recognitions in the MAP kinase cascades.' Cellular Signaling 2003, 15, 455-462


**PRODUCT SPECIFIC REFERENCES**