Anti-p44/42 MAPK (Erk1/2) Antibody

RT1453

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IP, IF
Molecular Wt:	ERK 1: 44 kDa, ERK 2: 42 kDa

Description: Mitogen-activated protein kinase (MAPK) signaling pathways involve two closely related MAP kinases, known as extracellular-signal-related kinase 1 (ERK 1, p44) and 2 (ERK 2, p42). Growth factors, steroid hormones, G proteincoupled receptor ligands and neurotransmitters can initiate MAPK signaling pathways. Activation of ERK 1 and ERK 2 requires phosphorylation by upstream kinases such as MAP kinasekinase (MEK), MEK kinase and Raf-1. ERK 1 and ERK 2 phosphorylation can occur at specific tyrosine and threonine sites mapping within consensus motifs that include the threonine-glutamatetyrosine motif. ERK activation leads to dimerization with other ERKs and subsequent localization to the nucleus. Active ERK dimers phosphorylate serine and threonine residues on nuclear proteins and influence a host of responses that include proliferation, differentiation, transcription regulation and development. The human ERK 1 gene maps to chromosome 16p11.2 and encodes a 379 amino acid protein that shares 83% sequence identity to ERK 2.

Immunogen: Amino acids 101-172 mapping near the N-terminus of ERK 2 of human origin.

Subcellular location: Cytoplasm, Nucleus

Database links: SwissProt: P28482 Human

Recommended Dilutions:

WB	1:100-1:1,000
IP	1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)
IF	1:50-1:500

Storage Buffer: 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Storage Instruction: Store at +4℃

Purity: Immunogen affinity purified.

No Images

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Attia-Vigneau, J., et al. 2014. Regeneration of human dermis by a multiheaded peptide. J. Invest. Dermatol. 134: 58-67.
2. Tsai, T., et al. 2013. 7,8-Dihydroxyflavone leads to survival of cultured embryonic motoneurons by activating intracellular signaling pathways. Mol. Cell. Neurosci. 56: 18-28.