

Product datasheet for **TA389131**

Phospho-MAPK1 (pThr188) Rabbit Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:1000
Reactivity:	Human, Rat, Mouse, Chicken, Xenopus
Host:	Rabbit
Isotype:	IgG
Immunogen:	Phospho-ERK2 (Thr-188) synthetic peptide (coupled to carrier protein) corresponds to amino acids surrounding Thr-188 in mouse ERK2. This sequence is conserved in human, rat, chicken, and fish ERK2, and is highly conserved in ERK1 (Thr-207), ERK5 (Thr-224), and ERK7 (Thr-180).
Specificity:	The antibody detects 42 and 44 kDa* proteins corresponding to ERK1 (Thr-207) and ERK2 (Thr-188) on SDS-PAGE immunoblots of human A431 epithelial cells stimulated with calyculin A. It does not detect these ERK proteins in control cells or in blots treated with lambda phosphatase.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Concentration:	lot specific
Purification:	Antigen Affinity Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	42/44
Database Link:	P28482



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Background:

Mitogen-activated protein kinases (MAPKs) are a widely conserved family of serine/threonine protein kinases involved in many cellular programs such as cell proliferation, differentiation, motility, and death. The ERK1/2 (p44/42) signaling pathway can be activated in response to a diverse range of extracellular stimuli including mitogens, growth factors, and cytokines. Upon stimulation, a sequential three-part protein kinase cascade is initiated, consisting of a MAP kinase kinase kinase (MAPKKK), a MAP kinase kinase (MAPKK), and a MAP kinase (MAPK). Multiple ERK1/2 MAPKKs have been identified, including members of the Raf family as well as Mos and Tpl2/Cot. MEK1 and MEK2 are the primary MAPKKs in this pathway. MEK1 and MEK2 activate ERK1 and ERK2 through phosphorylation of activation loop residues Thr-202/Tyr-204 and Thr-185/Tyr-187, respectively. ERK1/2 are negatively regulated by a family of dual-specificity (Thr/Tyr) MAPK phosphatases. Several downstream targets of ERK1/2 have been identified, including p90RSK and the transcription factor Elk-1.

Note:

Antigen affinity purified rabbit serum.