

Product datasheet for **TA389128**

MAPK1 Mouse Antibody [Clone ID: M233]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M233
Applications:	ICC, IHC, WB
Recommended Dilution:	WB: 1:1000 ICC: 1:100
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
Immunogen:	Clone (M233) was generated from a recombinant human ERK1 protein that included amino acids residues in the C-terminal region. This sequence is conserved in rat and mouse ERK1, and has low homology to ERK2, as well as other ERK family members.
Specificity:	The antibody detects a 44 kDa* protein corresponding to ERK1 on SDS-PAGE immunoblots of human A431 epithelial cells. It does not detect ERK2.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Concentration:	lot specific
Purification:	Protein A 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:	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:

Protein G purified tissue culture supernatant.