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Product datasheet for AM06412SU-N

ERK1 / ERK2 Mouse Monoclonal Antibody [Clone ID: 3F8]

Product data:

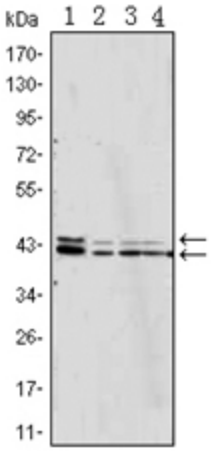
Product Type:	Primary Antibodies
Clone Name:	3F8
Applications:	ELISA, FC, IHC, WB
Recommended Dilution:	**ELISA:** 1/10000. **Western Blot:** 1/500 - 1/2000. **Flow Cytometry:** 1/200 - 1/400. **Immunohistochemistry on Paraffin Sections:** 1/200 - 1/1000.
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human MAPK expressed in E. Coli.
Specificity:	Recognizes p44/42 MAPK (Erk1/2).
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% Sodium Azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	42 kDa

View online »

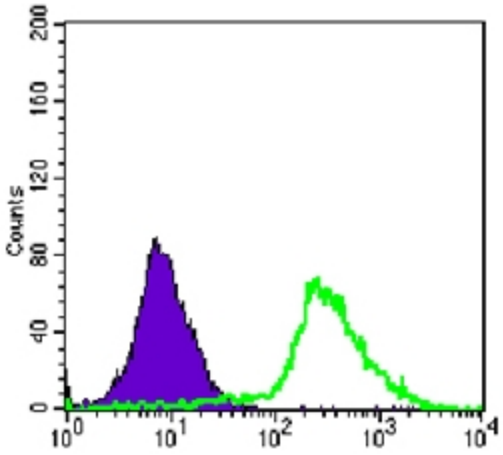
Background: Mitogen-activated protein kinases (MAPKs) are a widely conserved family of serine/threonine protein kinases involved in many cellular programs such as cell proliferation, differentiation, motility, and death. The p44/42 MAPK (Erk1/2) signaling pathway can be activated in response to a diverse range of extracellular stimuli including mitogens, growth factors, and cytokines and is an important target in the diagnosis and treatment of cancer. Upon stimulation, a sequential three-part protein kinase cascade is initiated, consisting of a MAP kinase kinase kinase (MAPKKK or MAP3K), a MAP kinase kinase (MAPKK or MAP2K), and a MAP kinase (MAPK). Multiple p44/42 MAP3Ks 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 p44 and p42 through phosphorylation of activation loop residues Thr202/Tyr204 and Thr185/Tyr187, respectively. Several downstream targets of p44/42 have been identified, including p90RSK and the transcription factor Elk-1. p44/42 are negatively regulated by a family of dual-specificity (Thr/Tyr) MAPK phosphatases, known as DUSPs or MKPs, along with MEK inhibitors such as U0126 and PD98059.

Synonyms: ERK-1/ERK-2, Extracellular signal-regulated kinase, Insulin-stimulated MAP2 kinase, MAPK1/MAPK2, Mitogen-activated protein kinase, P42/P44-MAP

Product images:



Western blot analysis using p44/42 MAPK antibody Cat.-No AM06412SU-N against Jurkat (Lane 1), Hela (Lane 2), A431 (Lane 3) and NIH/3T3 (Lane 4) cell lysate.



Flow Cytometric analysis of Jurkat cells using p44/42 MAPK antibody Cat.-No AM06412SU-N (green) and negative control (purple).