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ERK3 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1545a

Product Information

Application	WB, FC, E
Primary Accession	Q16659
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	4E8
Isotype	IgG1
Calculated MW	82681
Description	The protein encoded by this gene is a member of the Ser/Thr protein kinase family, and is most closely related to mitogen-activated protein kinases (MAP kinases). MAP kinases also known as extracellular signal-regulated kinases (ERKs), are activated through protein phosphorylation cascades and act as integration points for multiple biochemical signals. This kinase is localized in the nucleus, and has been reported to be activated in fibroblasts upon treatment with serum or phorbol esters. (provided by RefSeq) Tissue specificity: Highest expression in the skeletal muscle, followed by the brain. Also found in heart, placenta, lung, liver, pancreas, kidney and skin fibroblasts
Immunogen	Purified recombinant fragment of human ERK3 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	5597
Other Names	Mitogen-activated protein kinase 6, MAP kinase 6, MAPK 6, 2.7.11.24, Extracellular signal-regulated kinase 3, ERK-3, MAP kinase isoform p97, p97-MAPK, MAPK6, ERK3, PRKM6
Dilution	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ERK3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MAPK6
Synonyms	ERK3, PRKM6
Function	Atypical MAPK protein. Phosphorylates microtubule-associated protein 2 (MAP2) and MAPKAPK5. The precise role of the complex formed with MAPKAPK5 is still unclear, but the complex follows a complex set of phosphorylation events: upon interaction with atypical MAPKAPK5, ERK3/MAPK6 is phosphorylated at Ser-189 and then mediates phosphorylation and activation of MAPKAPK5, which in turn phosphorylates ERK3/MAPK6. May promote entry in the cell cycle (By similarity).
Cellular Location	Cytoplasm. Nucleus. Note=Translocates to the cytoplasm following interaction with MAPKAPK5
Tissue Location	Highest expression in the skeletal muscle, followed by the brain. Also found in heart, placenta, lung, liver, pancreas, kidney and skin fibroblasts

References

1. J Cell Physiol. 2008 Dec;217(3):778-88. 2. Proc Natl Acad Sci U S A. 2009 Sep 29;106(39):16710-5.

Images

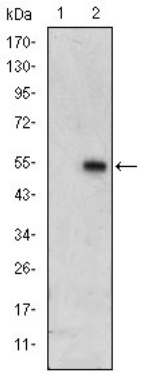

Figure 1: Western blot analysis using ERK3 mAb against HEK293 (1) and ERK3(AA: 347-582)-hIgGFc transfected HEK293 (2) cell lysate.

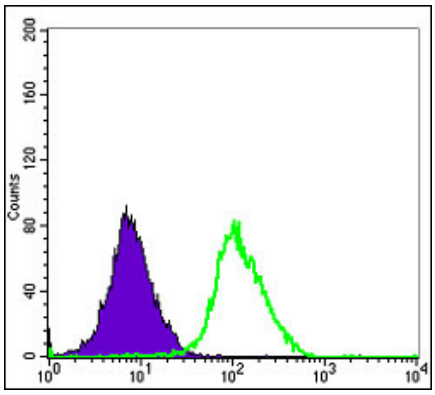

Figure 2: Flow cytometric analysis of Hela cells using ERK3 mouse mAb (green) and negative control (purple).