10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ERK3 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1545a

Specification

ERK3 Antibody - Product Information

Application	**E, WB, FC**
Primary Accession	Q16659
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**105kDa KDa**

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.

ERK3 Antibody - 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
E~~1/10000
WB~~1/500 - 1/2000
FC~~1/200 - 1/400

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.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ERK3 Antibody - 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).

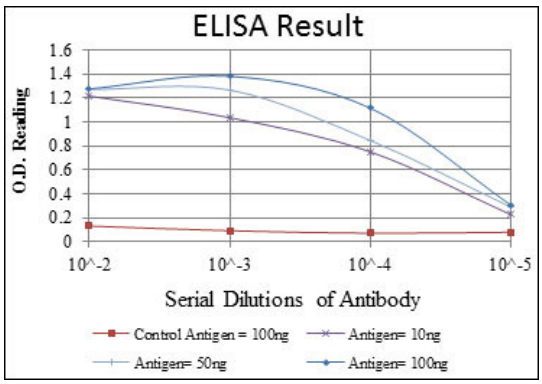
Cellular Location
Cytoplasm. Nucleus. Note=Translocates to the cytoplasm following interaction with MAPKAPK5

Tissue Location
Highest expression in the skeletal muscle, followed by the brain. Also found in heart, placenta, lung, liver, pancreas, kidney and skin fibroblasts

ERK3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

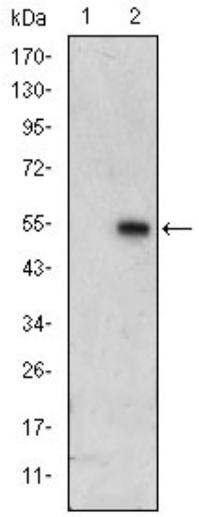


Figure 1: Western blot analysis using ERK3 mAb against HEK293 (1) and ERK3(AA: 347-582)-hIgGFc transfected HEK293 (2) cell lysate.

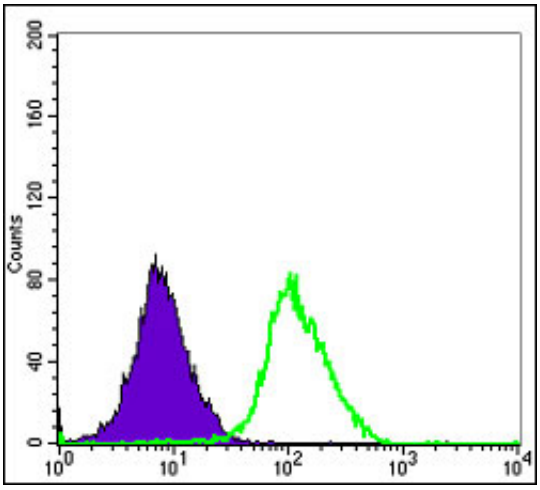


Figure 2: Flow cytometric analysis of Hela cells using ERK3 mouse mAb (green) and negative control (purple).

ERK3 Antibody - 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.