10320 Camino Santa Fe, Suite G
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# 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. <br />

**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.

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## 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).

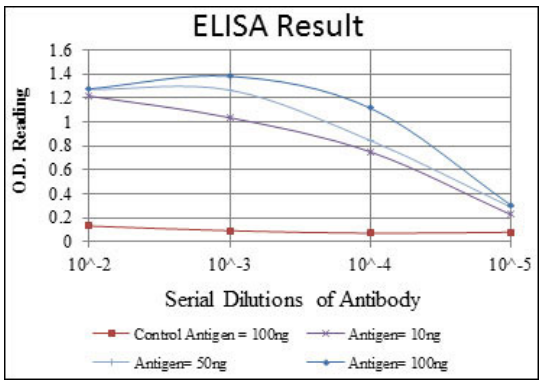
**Cellular Location**
Cytoplasm. Nucleus. Note=Translocates to the cytoplasm following interaction with MAPKAPK5

**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



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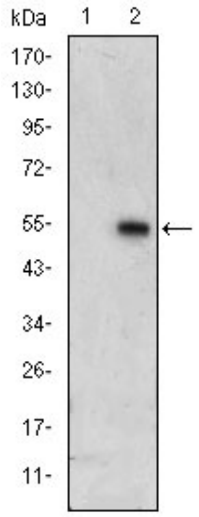



Figure 1: Western blot analysis using ERK3 mAb against HEK293 (1) and ERK3(AA: 347-582)-hIgGFc transfected HEK293 (2) cell lysate.

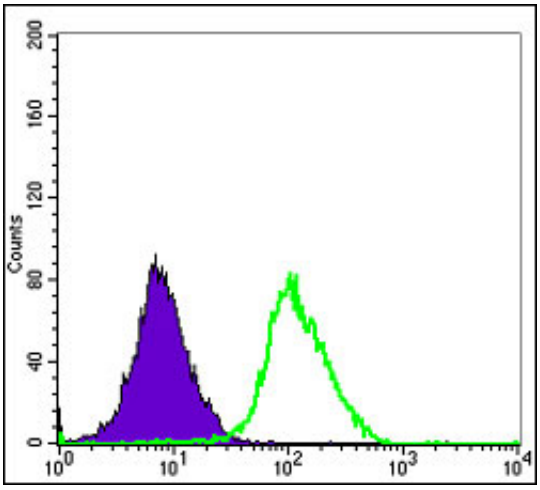



Figure 2: Flow cytometric analysis of Hela cells using ERK3 mouse mAb (green) and negative control (purple).

## 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.