

ERK3 / MAPK6 Antibody (internal region, near C-Term)

Peptide-affinity purified goat antibody Catalog # AF3922a

Specification

ERK3 / MAPK6 Antibody (internal region, near C-Term) - Product Information

Application WB, IP Primary Accession 016659

Other Accession NP 002739.1, 5597, 50772 (mouse), 58840

<u>(rat)</u> Mouse

Reactivity Mouse Predicted Human, Rat, Pig, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 82681

ERK3 / MAPK6 Antibody (internal region, near C-Term) - 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

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

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 / MAPK6 Antibody (internal region, near C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

ERK3 / MAPK6 Antibody (internal region, near C-Term) - 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

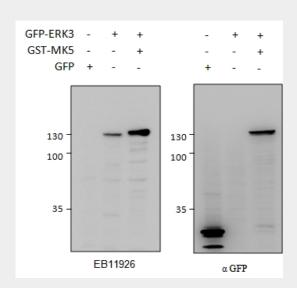
Highest expression in the skeletal muscle, followed by the brain. Also found in heart, placenta, lung, liver, pancreas, kidney and skin fibroblasts

ERK3 / MAPK6 Antibody (internal region, near C-Term) - Protocols

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

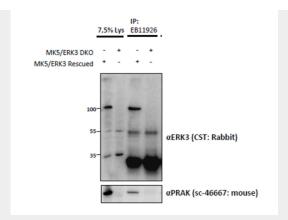
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ERK3 / MAPK6 Antibody (internal region, near C-Term) - Images



HEK293 lysate (10ug protein in RIPA buffer) overexpressing GFP-fused Mouse ERK3 probed with AF3922a (0.5ug/ml) in left panel and with anti-GFP in right panel. GFP-only exression in the first lane. Primary incubations were for 2 hours. Detected by chemiluminescence.





AF3922a (1.5ug) immunoprecipitation from lysates of MK5/ERK3 double knockout MEFs, with (third lane) and without (fourth lane) rescued MK5/ERK3 expression through retroviral transduction. The corresponding lysates (first and second lane resp.) were analyzed in parallel in this Western blot labelled with rabbit anti-Erk3 (and co-precipitation was measured using mouse anti-MK5/PRAK in the lower panel).

ERK3 / MAPK6 Antibody (internal region, near C-Term) - Background

Reported variants represent identical protein (NP_056621.4; NP_081694.1).

ERK3 / MAPK6 Antibody (internal region, near C-Term) - References

The extracellular signal-regulated kinase 3 (mitogen-activated protein kinase 6 [MAPK6])-MAPK-activated protein kinase 5 signaling complex regulates septin function and dendrite morphology. Brand F, Schumacher S, Kant S, Menon MB, Simon R, Turgeon B, Britsch S, Meloche S, Gaestel M, Kotlyarov A. Mol Cell Biol. 2012 Jul;32(13):2467-78. PMID: 22508986