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

ERK3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7502a

Product Information

Application	WB, E
Primary Accession	Q16659
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB0915
Calculated MW	82681
Antigen Region	692-721

Additional Information

Gene ID	5597
Other Names	Mitogen-activated protein kinase 6, MAP kinase 6, MAPK 6, Extracellular signal-regulated kinase 3, ERK-3, MAP kinase isoform p97, p97-MAPK, MAPK6, ERK3, PRKM6
Target/Specificity	This ERK3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 692~721 amino acids from the C-terminal region of human ERK3.
Dilution	WB~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ERK3 Antibody (C-term) 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

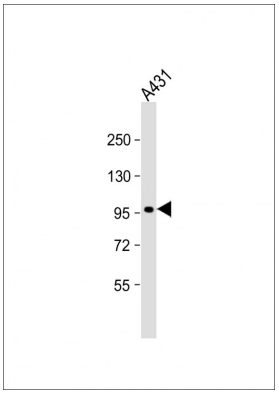
Background

ERK3 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.

References

Coulombe, P., et al., Mol. Cell. Biol. 23(13):4542-4558 (2003).
Meloche, S., et al., Oncogene 13(7):1575-1579 (1996).
Cheng, M., et al., J. Biol. Chem. 271(15):8951-8958 (1996).
Zhu, A.X., et al., Mol. Cell. Biol. 14(12):8202-8211 (1994).
Boulton, T.G., et al., Cell 65(4):663-675 (1991).

Images



Anti-ERK3 Antibody (Q707) at 1:500 dilution + A431 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 83 kDa Blocking/Dilution buffer: 5% NFDM/TBST.