

Phospho-ERK3-S189 Antibody Blocking Peptide Synthetic peptide

Catalog # BP3098a

Specification

Phospho-ERK3-S189 Antibody Blocking Peptide - Product Information

Primary Accession

<u>Q16659</u>

Phospho-ERK3-S189 Antibody Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody AP3098a was selected from the region of human Phospho-ERK3-S189. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-ERK3-S189 Antibody Blocking Peptide - 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

Phospho-ERK3-S189 Antibody Blocking Peptide - Protocols

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

Blocking Peptides

Phospho-ERK3-S189 Antibody Blocking Peptide - Images

Phospho-ERK3-S189 Antibody Blocking Peptide - 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.

Phospho-ERK3-S189 Antibody Blocking Peptide - References

Rai, R., et al., Oral Oncol. 40(7):705-712 (2004).Coulombe, P., et al., Mol. Cell. Biol. 24(14):6140-6150 (2004).Coulombe, P., et al., Mol. Cell. Biol. 23(13):4542-4558 (2003).Julien, C., et al., J. Biol. Chem. 278(43):42615-42624 (2003).Robinson, M.J., et al., J. Biol. Chem. 277(7):5094-5100 (2002).