

ERK4 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP7503a**Specification**

ERK4 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P31152](#)**ERK4 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 5596**Other Names**

Mitogen-activated protein kinase 4, MAP kinase 4, MAPK 4, Extracellular signal-regulated kinase 4, ERK-4, MAP kinase isoform p63, p63-MAPK, MAPK4, ERK4, PRKM4

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7503a](/product/products/AP7503a) was selected from the C-term region of human ERK4. 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.

ERK4 Antibody (C-term) Blocking Peptide - Protein Information**Name** MAPK4**Synonyms** ERK4, PRKM4**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, ERK4/MAPK4 is phosphorylated at Ser-186 and then mediates phosphorylation and activation of MAPKAPK5, which in turn phosphorylates ERK4/MAPK4. May promote entry in the cell cycle (By similarity).

Cellular Location

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

Tissue Location

High expression in heart and brain.

ERK4 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ERK4 Antibody (C-term) Blocking Peptide - Images**ERK4 Antibody (C-term) Blocking Peptide - Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the γ phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The CMGC group consists of 60 kinases including the cyclin-dependent kinase (CDK) and close relatives family, the MAP kinase (ERK) family, the glycogen synthase kinase 3 (GSK3) family, and the Cdc2-like kinase (CLK) family.

ERK4 Antibody (C-term) Blocking Peptide - References

Robinson, M.J., et al., Curr. Opin. Cell Biol. 9(2):180-186 (1997). Davis, R.J., Mol. Reprod. Dev. 42(4):459-467 (1995). Seger, R., et al., FASEB J. 9(9):726-735 (1995). Li, L., et al., Oncogene 9(2):647-649 (1994). Zhu, A.X., et al., Mol. Cell. Biol. 14(12):8202-8211 (1994).