

p70 S6Kbeta Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP8009a

Specification

p70 S6Kbeta Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9UBS0

p70 S6Kbeta Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 6199

Other Names

Ribosomal protein S6 kinase beta-2, S6K-beta-2, S6K2, 70 kDa ribosomal protein S6 kinase 2, P70S6K2, p70-S6K 2, S6 kinase-related kinase, SRK, Serine/threonine-protein kinase 14B, p70 ribosomal S6 kinase beta, S6K-beta, p70 S6 kinase beta, p70 S6K-beta, p70-beta, RPS6KB2, STK14B

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP8009a was selected from the C-term region of human p70 S6Kbeta . 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.

p70 S6Kbeta Antibody (C-term) Blocking Peptide - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g 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 AGC kinase group consists of 63 kinases including the cyclic nucleotide-regulated protein kinase (PKA & PKG) family, the diacylglycerol-activated/phospholipid-depende nt protein kinase C (PKC) family, the related to PKA and PKC (RAC/Akt) protein kinase family, the kinases that phosphorylate G protein-coupled receptors family (ARK), and the kinases that phosphorylate ribosomal protein S6 family (RSK). The calcium/calmodulin-dependent kinase (CAMK) group consists of 75 kinases regulated by Ca2+/CaM and close relative family (CAMK, CAMKL, DAPK, MAPKAPK).

p70 S6Kbeta Antibody (C-term) Blocking Peptide - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).Lee-Fruman, K.K., et al., Oncogene 18(36):5108-5114 (1999).Saitoh, M., et al., Biochem. Biophys. Res. Commun. 253(2):470-476 (1998).Gout, I., et al., J. Biol. Chem. 273(46):30061-30064 (1998).



p70 S6Kbeta Antibody (C-term) Blocking Peptide - Protein Information

Name RPS6KB2

Synonyms STK14B

Function

Phosphorylates specifically ribosomal protein S6 (PubMed:29750193). Seems to act downstream of mTOR signaling in response to growth factors and nutrients to promote cell proliferation, cell growth and cell cycle progression in an alternative pathway regulated by MEAK7 (PubMed:<a h ref="http://www.uniprot.org/citations/29750193" target="_blank">29750193).

Cellular Location

Cytoplasm. Nucleus.

p70 S6Kbeta Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides