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CSK Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP7700b

Specification

CSK Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P41240

CSK Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 1445

Other Names
Tyrosine-protein kinase CSK, C-Src kinase, Protein-tyrosine kinase CYL, CSK

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7700b was selected from the C-term region of human CSK . 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.

CSK Antibody (C-term) Blocking Peptide - Protein Information

Name CSK

Function
Non-receptor tyrosine-protein kinase that plays an important role in the regulation of cell growth, differentiation, migration and immune response. Phosphorylates tyrosine residues located in the C-terminal tails of Src-family kinases (SFKs) including LCK, SRC, HCK, FYN, LYN, CSK or YES1. Upon tail phosphorylation, Src-family members engage in intramolecular interactions between the phosphotyrosine tail and the SH2 domain that result in an inactive conformation. To inhibit SFKs, CSK is recruited to the plasma membrane via binding to transmembrane proteins or adapter proteins located near the plasma membrane. Suppresses signaling by various surface receptors, including T-cell receptor (TCR) and B-cell receptor (BCR) by phosphorylating and maintaining inactive several positive effectors such as FYN or LCK.

Cellular Location
Cytoplasm. Cell membrane. Note=Mainly cytoplasmic, also present in lipid rafts

Tissue Location
Expressed in lung and macrophages.

CSK Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

CSK Antibody (C-term) Blocking Peptide - Images

CSK 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 STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

CSK Antibody (C-term) Blocking Peptide - References

Lin, X., et al., J. Biol. Chem. 278(26):24072-24077 (2003).Natarajan, K., et al., J. Immunol. 170(12):6234-6243 (2003).Huang, W.C., et al., J. Immunol. 170(9):4767-4775 (2003).Vang, T., et al., J. Biol. Chem. 278(20):17597-17600 (2003).Basuroy, S., et al., J. Biol. Chem. 278(14):11916-11924 (2003).