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CASK Antibody (Center K227) Blocking peptide
Synthetic peptide
Catalog # BP7212c

Specification

CASK Antibody (Center K227) Blocking peptide - Product Information

Primary Accession O14936

CASK Antibody (Center K227) Blocking peptide - Additional Information

Gene ID 8573

Other Names
Peripheral plasma membrane protein CASK, hCASK, Calcium/calmodulin-dependent serine protein kinase, Protein lin-2 homolog, CASK, LIN2

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7212c was selected from the Center region of human CASK (Center K227). 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.

CASK Antibody (Center K227) Blocking peptide - Protein Information

Name CASK (HGNC:1497)

Synonyms LIN2

Function
Multidomain scaffolding Mg(2+)-independent protein kinase that catalyzes the phosphotransfer from ATP to proteins such as NRXN1, and plays a role in synaptic transmembrane protein anchoring and ion channel trafficking (PubMed:18423203). Contributes to neural development and regulation of gene expression via interaction with the transcription factor TBR1. Binds to cell-surface proteins, including amyloid precursor protein, neurexins and syndecans. May mediate a link between the extracellular matrix and the actin cytoskeleton via its interaction with syndecan and with the actin/spectrin-binding protein 4.1. Component of the LIN-10-LIN-2-LIN-7 complex, which associates with the motor protein KIF17 to transport vesicles

containing N-methyl-D- aspartate (NMDA) receptor subunit NR2B along microtubules (By similarity).

Cellular Location
Nucleus {ECO:0000250|UniProtKB:Q62915}. Cytoplasm {ECO:0000250|UniProtKB:Q62915}. Cell membrane {ECO:0000250|UniProtKB:Q62915}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q62915}

Tissue Location
Ubiquitous. Expression is significantly greater in brain relative to kidney, lung, and liver and in fetal brain and kidney relative to lung and liver.

CASK Antibody (Center K227) Blocking peptide - Protocols

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

- Blocking Peptides

CASK Antibody (Center K227) Blocking peptide - Images

CASK Antibody (Center K227) 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 calcium/calmodulin-dependent kinase (CAMK) group consists of 75 kinases regulated by Ca2+/CaM and close relative family (CAMK, CAMKL, DAPK, MAPKAPK).

CASK Antibody (Center K227) Blocking peptide - References

Stevenson, D., et al., Mamm. Genome 11(10):934-937 (2000).Cohen, A.R., et al., J. Cell Biol. 142(1):129-138 (1998).Daniels, D.L., et al., Nat. Struct. Biol. 5(4):317-325 (1998).