

CASK Antibody (Center K227)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7212c

Specification

CASK Antibody (Center K227) - Product Information

Application	WB,E
Primary Accession	O14936
Other Accession	O62915 , O70589
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	105123
Antigen Region	262-291

CASK Antibody (Center K227) - 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

This CASK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 262-291 amino acids from the Central region of human CASK.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CASK Antibody (Center K227) is for research use only and not for use in diagnostic or therapeutic procedures.

CASK Antibody (Center K227) - 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, neuroligins 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

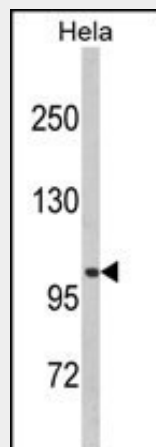
Ubiquitous. Expression is significantly greater in brain relative to kidney, lung, and liver and in fetal brain and kidney relative to lung and liver.

CASK Antibody (Center K227) - Protocols

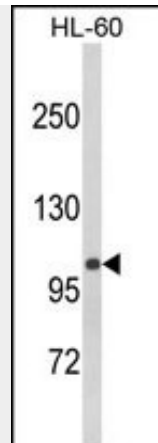
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

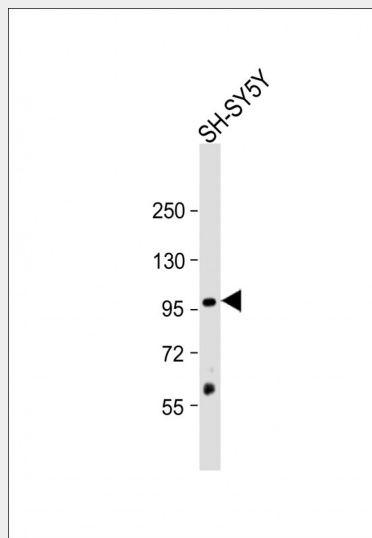
CASK Antibody (Center K227) - Images



Western blot analysis of CASK (Center K227) (Cat. #AP7212c) in HeLa cell line lysates (35ug/lane). CASK (arrow) was detected using the purified Pab.



Western blot analysis of CASK (Center K227) (Cat. #AP7212c) in HL-60 cell line lysates (35ug/lane).CASK (arrow) was detected using the purified Pab.



Anti-CASK (Center K227) Antibody at 1:1000 dilution + SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 105 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

CASK Antibody (Center K227) - 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 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) - 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).