

CASK Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7212a

Specification

CASK Antibody (C-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	O14936
Other Accession	O62915 , O70589
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	105123
Antigen Region	564-596

CASK Antibody (C-term) - 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 564-596 amino acids from the C-terminal region of human CASK.

Dilution

WB~~1:1000
IHC-P~~1:50~100

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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CASK Antibody (C-term) - 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

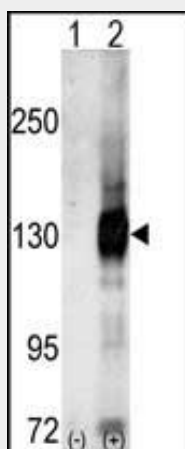
Ubiquitous. Expression is significantly greater in brain relative to kidney, lung, and liver and in fetal brain and kidney relative to lung and liver.

CASK Antibody (C-term) - Protocols

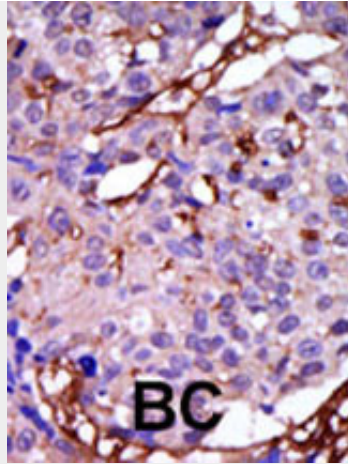
Provided below are standard protocols that you may find useful for product applications.

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

CASK Antibody (C-term) - Images



Western blot analysis of CASK (arrow) using Cask Antibody (C-term) (Cat.#AP7212a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CASK gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

CASK Antibody (C-term) - 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 Ca^{2+} /CaM and close relative family (CAMK, CAMKL, DAPK, MAPKAPK).

CASK Antibody (C-term) - 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).