

Mouse Pkn2 Antibody (Center) Blocking Peptide Synthetic peptide Catalog # BP16109c

Specification

Mouse Pkn2 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>Q8BWW9</u>

Mouse Pkn2 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 109333

Other Names

Serine/threonine-protein kinase N2, PKN gamma, Protein kinase C-like 2, Protein-kinase C-related kinase 2, Pkn2, Prk2, Prkcl2

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.

Mouse Pkn2 Antibody (Center) Blocking Peptide - Protein Information

Name Pkn2

Synonyms Prk2, Prkcl2

Function

PKC-related serine/threonine-protein kinase and Rho/Rac effector protein that participates in specific signal transduction responses in the cell. Plays a role in the regulation of cell cycle progression, actin cytoskeleton assembly, cell migration, cell adhesion, tumor cell invasion and transcription activation signaling processes. Phosphorylates CTTN in hyaluronan-induced astrocytes and hence decreases CTTN ability to associate with filamentous actin. Phosphorylates HDAC5, therefore lead to impair HDAC5 import. Direct RhoA target required for the regulation of the maturation of primordial junctions into apical junction formation in bronchial epithelial cells. Required for G2/M phases of the cell cycle progression and abscission during cytokinesis in a ECT2-dependent manner. Stimulates FYN kinase activity that is required for establishment of skin cell-cell adhesion during keratinocytes differentiation. Regulates epithelial bladder cells speed and direction of movement during cell migration and tumor cell invasion. Inhibits Akt pro-survival-induced kinase activity. Mediates Rho protein-induced transcriptional activation via the c-fos serum response factor (SRF). Involved in the negative regulation of ciliogenesis (By similarity).



Cellular Location

Cytoplasm. Nucleus {ECO:0000250|UniProtKB:Q16513}. Membrane Cell projection, lamellipodium {ECO:0000250|UniProtKB:Q16513} Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q16513}. Cleavage furrow {ECO:0000250|UniProtKB:Q16513}. Midbody {ECO:0000250|UniProtKB:Q16513} Cell junction {ECO:0000250|UniProtKB:Q16513}. Note=Colocalizes with PTPN13 in lamellipodia-like structures, regions of large actin turnover. Accumulates during telophase at the cleavage furrow and concentrates finally around the midbody in cytokinesis. Recruited to nascent cell-cell contacts at the apical surface of cells {ECO:0000250|UniProtKB:Q16513}

Tissue Location Ubiquitous. Highly expressed in liver and lung Expressed in astrocytes (at protein level). Ubiquitous

Mouse Pkn2 Antibody (Center) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

Mouse Pkn2 Antibody (Center) Blocking Peptide - Images

Mouse Pkn2 Antibody (Center) Blocking Peptide - Background

Pkn2 exhibits a preference for highly basic protein substrates (By similarity).

Mouse Pkn2 Antibody (Center) Blocking Peptide - References

McPhee, J.B., et al. Infect. Immun. 78(8):3529-3539(2010)Torbett, N.E., et al. J. Biol. Chem. 278(34):32344-32351(2003)Stryke, D., et al. Nucleic Acids Res. 31(1):278-281(2003)Hasenkrug, K.J., et al. Virology 272(2):244-249(2000)Quilliam, L.A., et al. J. Biol. Chem. 271(46):28772-28776(1996)