

PARD3 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP8678b

Specification

PARD3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>Q8TEW0</u>

PARD3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 56288

Other Names

Partitioning defective 3 homolog, PAR-3, PARD-3, Atypical PKC isotype-specific-interacting protein, ASIP, CTCL tumor antigen se2-5, PAR3-alpha, PARD3, PAR3, PAR3A

Target/Specificity

The synthetic peptide sequence used to generate the antibody <a >AP8678b was selected from the C-term region of human PARD3. 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.

PARD3 Antibody (C-term) Blocking Peptide - Protein Information

Name PARD3 (HGNC:16051)

Synonyms PAR3, PAR3A

Function

Adapter protein involved in asymmetrical cell division and cell polarization processes (PubMed:10954424, PubMed:27925688). Seems to play a central role in the formation of epithelial tight junctions (PubMed:27925688). Targets the phosphatase PTEN to cell junctions (By similarity). Involved in Schwann cell peripheral myelination (By similarity). Association with PARD6B may prevent the interaction of PARD3 with F11R/JAM1, thereby preventing tight junction assembly (By similarity). The PARD6-PARD3 complex links GTP-bound Rho small GTPases to atypical protein kinase C proteins (PubMed:10934474). Required for



establishment of neuronal polarity and normal axon formation in cultured hippocampal neurons (PubMed:19812038, PubMed:27925688).

Cellular Location

Cytoplasm. Endomembrane system. Cell junction. Cell junction, tight junction. Cell junction, adherens junction {ECO:0000250|UniProtKB:Q99NH2}. Cell membrane. Cytoplasm, cell cortex. Cytoplasm, cytoskeleton. Note=Localized along the cell-cell contact region. Colocalizes with PARD6A and PRKCI at epithelial tight junctions. Colocalizes with the cortical actin that overlays the meiotic spindle during metaphase I and metaphase II. Colocalized with SIRT2 in internode region of myelin sheath (By similarity). Presence of KRIT1, CDH5 and RAP1B is required for its localization to the cell junction.

Tissue Location Widely expressed..

PARD3 Antibody (C-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

PARD3 Antibody (C-term) Blocking Peptide - Images

PARD3 Antibody (C-term) Blocking Peptide - Background

PARD proteins, which were first identified in C. elegans, are essential for asymmetric cell division and polarized growth, whereas CDC42 (MIM 116952) mediates the establishment of cell polarity. The CDC42 GTPase, which is controlled by nucleotide exchange factors (GEFs; see MIM 606057) and GTPase-activating proteins (GAPs; see MIM 604980), interacts with a large set of effector proteins that typically contain a CDC42/RAC (MIM 602048)-interactive binding (CRIB) domain.

PARD3 Antibody (C-term) Blocking Peptide - References

Noda,Y., et.al., Genes Cells 6 (2), 107-119 (2001)Beausoleil,S.A., et.al., Proc. Natl. Acad. Sci. U.S.A. 101 (33), 12130-12135 (2004)