

PARD3 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51413

Specification

PARD3 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, ICC, IHC-P, E <u>O8TEW0</u> Human, Mouse, Rat Rabbit Polyclonal 151 KDa

PARD3 Antibody - 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

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human PARD3. The exact sequence is proprietary.

Dilution WB~~1:1000 ICC~~N/A IHC-P~~N/A E~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

PARD3 Antibody - 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:<a



href="http://www.uniprot.org/citations/27925688" target="_blank">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 - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PARD3 Antibody - Images

PARD3 Antibody - Background

Adapter protein involved in asymmetrical cell division and cell polarization processes. Seems to play a central role in the formation of epithelial tight junctions. Targets the phosphatase PTEN to cell junctions (By similarity). Association with PARD6B may prevent the interaction of PARD3 with F11R/JAM1, thereby preventing tight junction assembly. The PARD6-PARD3 complex links GTP-bound Rho small GTPases to atypical protein kinase C proteins. Required for establishment of neuronal polarity and normal axon formation in cultured hippocampal neurons.

PARD3 Antibody - References

Joberty G., et al.Nat. Cell Biol. 2:531-539(2000). Fang C.M., et al.Cell Res. 11:223-229(2001). Kohjima M., et al.Biochem. Biophys. Res. Commun. 299:641-646(2002). Gao L., et al.Gene 294:99-107(2002). Deloukas P., et al.Nature 429:375-381(2004).