

### 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:<a href="http://www.uniprot.org/citations/10954424" target="\_blank">10954424</a>, PubMed:<a href="http://www.uniprot.org/citations/27925688" target="\_blank">27925688</a>). 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</a>). 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:<a href="http://www.uniprot.org/citations/10934474" target="\_blank">10934474</a>). Required for establishment of neuronal polarity and normal axon formation in cultured hippocampal neurons (PubMed:<a href="http://www.uniprot.org/citations/19812038" target="\_blank">19812038</a>, PubMed:<a href="http://www.uniprot.org/citations/27925688" target="\_blank">27925688</a>).

#### **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).