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PARD3 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51413

Product Information

Application	WB, ICC, IHC-P
Primary Accession	Q8TEW0
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	151423

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

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..

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.

References

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