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PARD3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8678b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8TEW0
Other Accession	Q9Z340, Q99NH2
Reactivity	Human, Mouse
Predicted	Rat, Rabbit, Chicken, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21955
Calculated MW	151423
Antigen Region	1329-1356

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	This PARD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1329-1356 amino acids from the C-terminal region of human PARD3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PARD3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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..

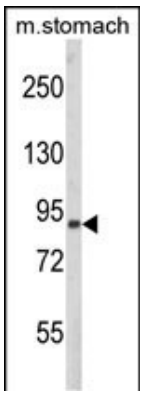
Background

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.

References

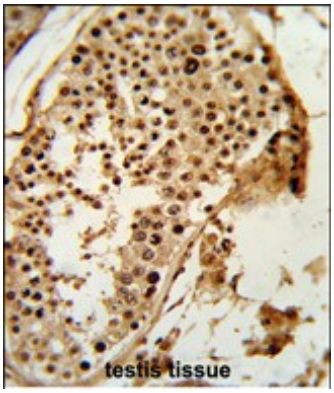
Noda,Y., et.al., Genes Cells 6 (2), 107-119 (2001)
Beausoleil,S.A., et.al., Proc. Natl. Acad. Sci. U.S.A. 101 (33), 12130-12135 (2004)

Images

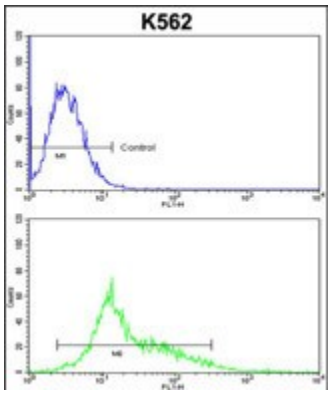


Western blot analysis of PARD3 Antibody (C-term) (Cat. #AP8678b) in mouse stomach tissue lysates (35ug/lane). PARD3 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human testis tissue reacted with PARD3 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use



of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



PARD3 Antibody (C-term) (Cat. #AP8678b) flow cytometric analysis of k562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.