

PARD3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8678b

Specification

PARD3 Antibody (C-term) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	<u>08TEW0</u>
Other Accession	<u>09Z340</u> , <u>099NH2</u>
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	151423
Antigen Region	1329-1356

PARD3 Antibody (C-term) - 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 FC~~1:10~50 IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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.

PARD3 Antibody (C-term) - Protein Information



Name PARD3 (HGNC:16051)

Synonyms PAR3, PAR3A

Function Adapter protein involved in asymmetrical cell division and cell polarization processes (PubMed:<u>10954424</u>, PubMed:<u>27925688</u>). Seems to play a central role in the formation of epithelial tight junctions (PubMed:<u>27925688</u>). 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:<u>10934474</u>). Required for establishment of neuronal polarity and normal axon formation in cultured hippocampal neurons (PubMed:<u>19812038</u>, PubMed:<u>27925688</u>).

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.

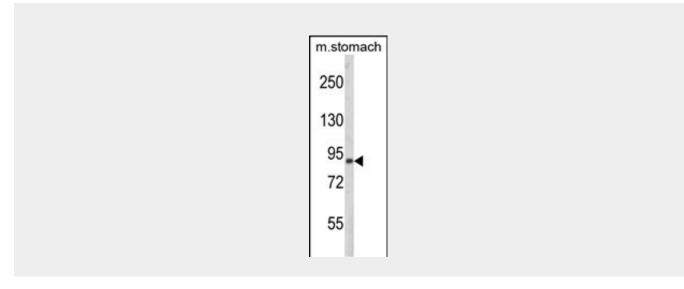
Tissue Location Widely expressed..

PARD3 Antibody (C-term) - Protocols

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

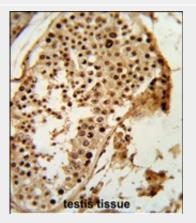
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PARD3 Antibody (C-term) - Images

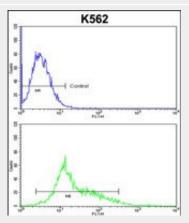




Western blot analysis of PARD3 Antibody (C-term) (Cat. #AP8678b) in mouse stomach tissue lysates (35ug/lane). PARD3 (arrow) was detected using the purified Pab.



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.

PARD3 Antibody (C-term) - 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) - 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)