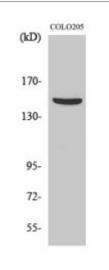


Anti-PARD3A antibody



Description Rabbit polyclonal to PARD3A.

Model STJ94955

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human PARD3A

Immunogen Region 1110-1190 aa, C-terminal

Gene ID <u>56288</u>

Gene Symbol PARD3

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000

Specificity PARD3A Polyclonal Antibody detects endogenous levels of PARD3A

protein.

Tissue Specificity Widely expressed.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Partitioning defective 3 homolog PAR-3 PARD-3 Atypical PKC isotype-

specific-interacting protein ASIP CTCL tumor antigen se2-5 PAR3-alpha

Molecular Weight 151 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:16051OMIM:182940</u>

Alternative Names Partitioning defective 3 homolog PAR-3 PARD-3 Atypical PKC isotype-

specific-interacting protein ASIP CTCL tumor antigen se2-5 PAR3-alpha

Function 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. Involved in

Schwann cell peripheral myelination . 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.

Sequence and Domain Family Contains a conserved N-terminal oligomerization domain (NTD) that is

involved in oligomerization and is essential for proper subapical membrane localization. The second PDZ domain mediates interaction with membranes

containing phosphoinositol lipids.

Cellular Localization Cytoplasm Endomembrane system Cell junction Cell junction, tight junction

Cell membrane Cytoplasm, cell cortex Cytoplasm, cytoskeleton. 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 sheat . Presence of KRIT1, CDH5 and RAP1B

is required for its localization to the cell junction.

Post-translational Acetylated. Deacetylated by SIRT2, thereby inhibiting Schwann cell **Modifications** peripheral myelination. Phosphorylation at Ser-827 by PRKCZ and Pl

peripheral myelination. Phosphorylation at Ser-827 by PRKCZ and PRKCI occurs at the most apical tip of epithelial cell-cell contacts during the initial phase of tight junction formation and may promote dissociation of the complex with PARD6. EGF-induced Tyr-1127 phosphorylation mediates dissociation from LIMK2 . Phosphorylation by AURKA at Ser-962 is required

for the normal establishment of neuronal polarity.