

## Goat Anti-PAR6alpha / PARD6A Antibody

Peptide-affinity purified goat antibody Catalog # AF1785a

### **Specification**

## Goat Anti-PAR6alpha / PARD6A Antibody - Product Information

Application IHC
Primary Accession O9NPB6

Other Accession <u>NP\_001032358</u>, <u>50855</u>

Reactivity Human
Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 37388

# Goat Anti-PAR6alpha / PARD6A Antibody - Additional Information

### **Gene ID 50855**

### **Other Names**

Partitioning defective 6 homolog alpha, PAR-6, PAR-6 alpha, PAR-6A, PAR6C, Tax interaction protein 40, TIP-40, PARD6A, PAR6A

#### **Format**

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Goat Anti-PAR6alpha / PARD6A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-PAR6alpha / PARD6A Antibody - Protein Information

### Name PARD6A

### **Synonyms PAR6A**

#### **Function**

Adapter protein involved in asymmetrical cell division and cell polarization processes. Probably involved in the formation of epithelial tight junctions. Association with PARD3 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





(PubMed:<a href="http://www.uniprot.org/citations/10873802" target="\_blank">10873802</a>). Regulates centrosome organization and function. Essential for the centrosomal recruitment of key proteins that control centrosomal microtubule organization (PubMed:<a href="http://www.uniprot.org/citations/20719959" target=" blank">20719959</a>).

### **Cellular Location**

Cytoplasm. Cell membrane. Cell projection, ruffle. Cell junction, tight junction. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Note=Colocalizes with GTP-bound CDC42 or RAC1 at membrane ruffles and with PARD3 and PRKCI at epithelial tight junctions. Recruited to the centrosome by a microtubule and dynein-dynactin-dependent mechanism

#### **Tissue Location**

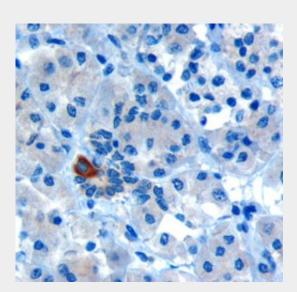
Expressed in pancreas, skeletal muscle, brain and heart. Weakly expressed in kidney and placenta

# Goat Anti-PAR6alpha / PARD6A Antibody - Protocols

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

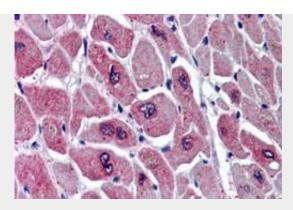
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Goat Anti-PAR6alpha / PARD6A Antibody - Images



AF1785a (10  $\mu$ g/ml) staining of paraffin embedded Human Pancreas. Microwaved antigen retrieval with Tris/EDTA buffer pH9, HRP-staining.





AF1785a (5  $\mu$ g/ml) staining of paraffin embedded Human Heart. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

## Goat Anti-PAR6alpha / PARD6A Antibody - Background

This gene is a member of the PAR6 family and encodes a protein with a PSD95/Discs-large/ZO1 (PDZ) domain and a semi-Cdc42/Rac interactive binding (CRIB) domain. This cell membrane protein is involved in asymmetrical cell division and cell polarization processes as a member of a multi-protein complex. The protein also has a role in the epithelial-to-mesenchymal transition (EMT) that characterizes the invasive phenotype associated with metastatic carcinomas. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

## Goat Anti-PAR6alpha / PARD6A Antibody - References

A role for the TGFbeta-Par6 polarity pathway in breast cancer progression. Viloria-Petit AM, et al. Proc Natl Acad Sci U S A, 2009 Aug 18. PMID 19667198.

Ect2 links the PKCiota-Par6alpha complex to Rac1 activation and cellular transformation. Justilien V, et al. Oncogene, 2009 Oct 15. PMID 19617897.

Regulation of planar cell polarity by Smurf ubiquitin ligases. Narimatsu M, et al. Cell, 2009 Apr 17. PMID 19379695.

The polarity protein Par6 induces cell proliferation and is overexpressed in breast cancer. Nolan ME, et al. Cancer Res, 2008 Oct 15. PMID 18922891.

Neph-Nephrin proteins bind the Par3-Par6-atypical protein kinase C (aPKC) complex to regulate podocyte cell polarity. Hartleben B, et al. J Biol Chem, 2008 Aug 22. PMID 18562307.