

# CRUM2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5724b

### **Product Information**

Application WB, IHC-P, E Primary Accession Q5IJ48

Other Accession Q80YA8, NP\_775960.4
Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB27068
Calculated MW 134265
Antigen Region 1258-1285

# **Additional Information**

**Gene ID** 286204

Other Names Protein crumbs homolog 2, Crumbs-like protein 2, CRB2

**Target/Specificity** This CRUM2 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 1258-1285 amino acids of human

CRUM2.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 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** CRUM2 Antibody (C-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

### **Protein Information**

Name CRB2 ( <u>HGNC:18688</u>)

**Function** Apical polarity protein that plays a central role during the

epithelial-to-mesenchymal transition (EMT) at gastrulation, when newly specified mesodermal cells move inside the embryo (By similarity). Acts by promoting cell ingression, the process by which cells leave the epithelial

epiblast and move inside the embryo to form a new tissue layer (By similarity). The anisotropic distribution of CRB2 and MYH10/myosin-IIB at cell edges define which cells will ingress: cells with high apical CRB2 are probably extruded from the epiblast by neighboring cells with high levels of apical MYH10/myosin-IIB (By similarity). Plays a role in the maintenance of retinal neuroepithelium organization, structural integrity, adhesion, photoreceptor polarity and retinal photoreceptor layer thickness (By similarity). May play a role in determining the length of cone photoreceptor outer segments and proliferation of late-born progenitor cells (By similarity). Also required for maintenance of the apical polarity complex during development of the cortex (By similarity). Inhibits gamma-secretase- dependent cleavage of APP and secretion of amyloid-beta peptide 40 and amyloid-beta peptide 42, and thereby inhibits gamma-secretase-dependent Notch transcription (PubMed:20299451).

## **Cellular Location**

[Isoform 1]: Apical cell membrane {ECO:0000250 | UniProtKB:Q80YA8}; Single-pass type I membrane protein. Cytoplasm {ECO:0000250 | UniProtKB:Q80YA8}. Cell junction {ECO:0000250 | UniProtKB:Q80YA8}. Note=O-glucosylation is required for localization at the apical plasma membrane (By similarity). Distributed in a complex anisotropic pattern on apical cell edges: the level of CRB2 on a cell edge is inversely correlated with the level of MYH10/myosin-IIB (By similarity). {ECO:0000250 | UniProtKB:Q80YA8}

#### **Tissue Location**

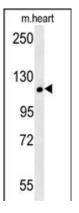
Expressed in glomeruli, podocytes of the glomerular capillary loops, and parietal glomerular epithelial cells in the kidney (at protein level) (PubMed:27942854, PubMed:29473663). Expressed in retina, fetal eye and brain (PubMed:15851977). Also expressed in kidney, RPE/choroid, and at low levels in lung, placenta, and heart (PubMed:15851977).

# **Background**

May play a role in polarized cells morphogenesis.

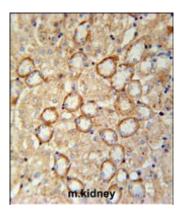
### References

# **Images**



CRUM2 Antibody (C-term) (Cat. #AP5724b) western blot analysis in mouse heart tissue lysates (15ug/lane). This demonstrates the CRUM2 antibody detected CRUM2 protein (arrow).

CRUM2 Antibody (C-term) (Cat. #AP5724b) immunohistochemistry analysis in formalin fixed and



paraffin embedded mouse kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CRUM2 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

# **Citations**

• Defects of CRB2 Cause Steroid-Resistant Nephrotic Syndrome.

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