10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CRUM2 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP5724b

Specification

CRUM2 Antibody (C-term) Blocking peptide - Product Information

Primary Accession	Q5IJ48
Other Accession	NP_775960.4

CRUM2 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 286204

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CRUM2 Antibody (C-term) Blocking peptide - Protein Information

Name CRB2 (HGNC:18688)

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:29473663, PubMed:27942854). 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).

CRUM2 Antibody (C-term) Blocking peptide - Protocols

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

- Blocking Peptides

CRUM2 Antibody (C-term) Blocking peptide - Images

CRUM2 Antibody (C-term) Blocking peptide - Background

The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated ion channels that mediate fast signal transmission at synapses. The nAChRs are thought to be (hetero)pentamers composed of homologous subunits. After binding Acetylcholine, the Nicotinic Acetylcholine Receptor (AChR) responds by an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane. Neuronal AChR seems to be composed of two different type of subunits: alpha and beta.

CRUM2 Antibody (C-term) Blocking peptide - References

Pardossi-Piquard, R., et al. Biochemistry 46(48):13704-13710(2007)Botuyan, M.V., et al. Cell 127(7):1361-1373(2006)van den Hurk, J.A., et al. Mol. Vis. 11, 263-273 (2005) :Humphray, S.J., et al. Nature 429(6990):369-374(2004)Katoh, M., et al. Int. J. Oncol. 24(3):743-749(2004)