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BEST2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9246b

Specification

BEST2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q8NFU1

BEST2 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 54831

Other Names
Bestrophin-2, Vitelliform macular dystrophy 2-like protein 1, BEST2, VMD2L1

Target/Specificity
The synthetic peptide sequence used to generate the antibody <a >AP9246b was selected from the C-term region of human BEST2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

BEST2 Antibody (C-term) Blocking Peptide - Protein Information

Name BEST2 (HGNC:17107)

Synonyms VMD2L1

Function
Ligand-gated anion channel that allows the movement of anions across cell membranes when activated by calcium (Ca2+) (PubMed:11904445, PubMed:18400985, PubMed:32251414, PubMed:35789156, PubMed:36289327). Transports a large specter of anions, namely mediates the movement of chloride, L-glutamate and iodide (PubMed:11904445, PubMed:18400985, PubMed:32251414, PubMed:<a

href="http://www.uniprot.org/citations/35789156" target="_blank">35789156, PubMed:36289327). Calcium-binding triggers the dilation of the aperture, but calcium- dependent gating is only effective when the size of the passing anion is bigger than the closed aperture (By similarity). Mediates the calcium-activated hydrogencarbonate movement and participates in colonic hydrogencarbonate secretion concomitant with mucin secretion (By similarity). In non-pigmented epithelium (NPE), mediates the efflux of intracellular L-glutamate; binding of intracellular L-glutamate activates and open both the neck and the aperture of the channel, leading to L-glutamate exit promoting chloride influx movement from the extracellular side in trans (PubMed:36289327). Also exhibits a directional permeability for intracellular glutamine, in a similar manner as for L-glutamate (PubMed:36289327).

Cellular Location
Cell membrane {ECO:0000250|UniProtKB:E1BF86}; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein

Tissue Location
Mainly confined to the retinal pigment epithelium (PubMed:12032738). Expressed in colon (PubMed:12032738, PubMed:20407206).

BEST2 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

BEST2 Antibody (C-term) Blocking Peptide - Images

BEST2 Antibody (C-term) Blocking Peptide - Background

BEST2 is a member of the bestrophin gene family of anion channels. Bestrophin genes share a similar gene structure with highly conserved exon-intron boundaries, but with distinct 3' ends. Bestrophins are transmembrane proteins that contain a homologous region rich in aromatic residues, including an invariant arg-phe-pro motif.

BEST2 Antibody (C-term) Blocking Peptide - References

Zhang,Y., et.al, Mol. Vis. 16, 200-206 (2010)Marsey,L.L. et.al, J. Physiol. (Lond.) 587 (PT 10), 2211-2224 (2009)