

## BEST2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP9246b

### Product Information

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Application	WB, IHC-P, E
Primary Accession	<a href="#">Q8NFU1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24342
Calculated MW	57139
Antigen Region	374-403

### Additional Information

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Gene ID	54831
Other Names	Bestrophin-2, Vitelliform macular dystrophy 2-like protein 1, BEST2, VMD2L1
Target/Specificity	This BEST2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 374-403 amino acids from the C-terminal region of human BEST2.
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	BEST2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

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Name	BEST2 ( <a href="#">HGNC:17107</a> )
Synonyms	VMD2L1
Function	Ligand-gated anion channel that allows the movement of anions across cell membranes when activated by calcium (Ca <sup>2+</sup> ) (PubMed: <a href="#">11904445</a> , PubMed: <a href="#">18400985</a> , PubMed: <a href="#">32251414</a> , PubMed: <a href="#">35789156</a> ,

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:[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).

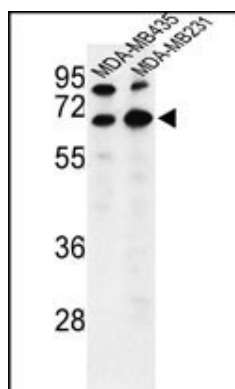
## Background

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.

## References

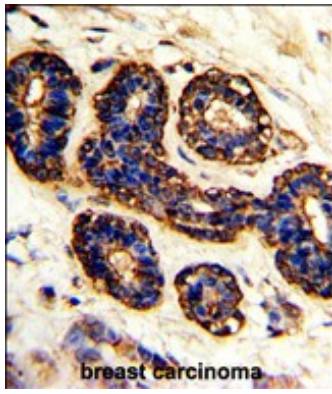
Zhang,Y., et.al, Mol. Vis. 16, 200-206 (2010)  
Marsey,L.L. et.al, J. Physiol. (Lond.) 587 (PT 10), 2211-2224 (2009)

## Images



Western blot analysis of BEST2 Antibody (C-term) (Cat. #AP9246b) in MDA-MB435,MDA-MB231 cell line lysates (35ug/lane).BEST2 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human breast carcinoma with BEST2 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



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