

# Anti-Bestrophin Antibody

Rabbit polyclonal antibody to Bestrophin Catalog # AP61629

#### **Product Information**

WB
<u>076090</u>
<u>088870</u>
Human, Mouse
Rabbit
Polyclonal
67684

### **Additional Information**

Gene ID	7439
Other Names	VMD2; Bestrophin-1; TU15B; Vitelliform macular dystrophy protein 2
Target/Specificity	Recognizes endogenous levels of Bestrophin protein.
Dilution	WB~~1:1000
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

#### **Protein Information**

Name	BEST1 ( <u>HGNC:12703</u> )
Function	Ligand-gated anion channel that allows the movement of anions across cell membranes when activated by calcium (Ca2+) (PubMed: <u>11904445</u> , PubMed: <u>12907679</u> , PubMed: <u>18179881</u> , PubMed: <u>18400985</u> , PubMed: <u>19853238</u> , PubMed: <u>21330666</u> , PubMed: <u>26200502</u> , PubMed: <u>26720466</u> , PubMed: <u>35789156</u> ). Allows the movement of chloride and hydrogencarbonate (PubMed: <u>11904445</u> , PubMed: <u>12907679</u> , PubMed: <u>18179881</u> , PubMed: <u>18400985</u> , PubMed: <u>19853238</u> , PubMed: <u>21330666</u> , PubMed: <u>26200502</u> , PubMed: <u>26720466</u> , PubMed: <u>35789156</u> ). Found in a partially open conformation leading to significantly smaller chloride movement (PubMed: <u>35789156</u> ). Upon F2R/PAR-1 activation, the sequestered calcium is released into the cytosol of astrocytes, leading to the (Ca2+)-dependent release of L- glutamate into the synaptic cleft that targets the neuronal postsynaptic GRIN2A/NMDAR receptor resulting in the synaptic plasticity regulation (By similarity). Upon activation of the norepinephrine- alpha-1 adrenergic receptor signaling pathway,

	transports as well D- serine than L-glutamate in a (Ca2+)-dependent manner, leading to activation of adjacent NMDAR receptors and therefore regulates the heterosynaptic long-term depression and metaplasticity during initial memory acquisition (By similarity). Releases the 4-aminobutanoate neurotransmitter in a (Ca2+)-dependent manner, and participates in its tonic release from cerebellar glial cells (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein Note=Localized at the surface membrane of microdomains adjacent to glutamatergic synapses. {ECO:0000250 UniProtKB:088870}
Tissue Location	Predominantly expressed in the basolateral membrane of the retinal pigment epithelium

## Background

Recombinant full length protein of human Bestrophin

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