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Anti-Bestrophin Antibody

Catalog # AP61629

Product Information

Application	WB, IF/IC
Primary Accession	O76090
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67684

Additional Information

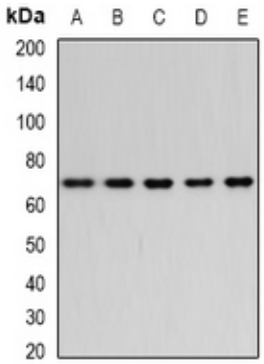
Gene ID	7439
Other Names	VMD2; Bestrophin-1; TU15B; Vitelliform macular dystrophy protein 2
Target/Specificity	Recombinant fusion protein of human Bestrophin
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

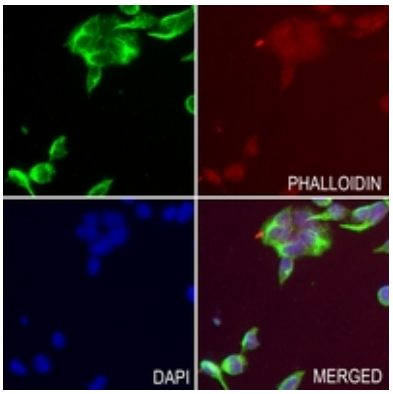
Name	BEST1 (HGNC:12703)
Function	Ligand-gated anion channel that allows the movement of anions across cell membranes when activated by calcium (Ca2+) (PubMed:11904445, PubMed:12907679, PubMed:18179881, PubMed:18400985, PubMed:19853238, PubMed:21330666, PubMed:26200502, PubMed:26720466, PubMed:35789156). Allows the movement of chloride and hydrogencarbonate (PubMed:11904445, PubMed:12907679, PubMed:18179881, PubMed:18400985, PubMed:19853238, PubMed:21330666, PubMed:26200502, PubMed:26720466, PubMed:35789156). Found in a partially open conformation leading to significantly smaller chloride movement (PubMed:35789156). 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:O88870}
Tissue Location	Predominantly expressed in the basolateral membrane of the retinal pigment epithelium

Images



Western blot analysis of Bestrophin expression in THP1 (A), BT474 (B), Hela (C), mouse heart (D), mouse lung (E) whole cell lysates. (Predicted band size: 67 kD; Observed band size: 67 kD)



Immunofluorescent analysis of Bestrophin staining in HEK293T cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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