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Bestrophin-1 Polyclonal Antibody

Catalog # AP63623

Product Information

Application	WB, IHC-P
Primary Accession	O76090
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67684

Additional Information

Gene ID	7439
Other Names	Bestrophin-1 (TU15B) (Vitelliform macular dystrophy protein 2)
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

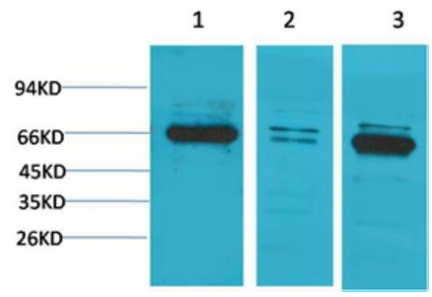
Name	BEST1 (HGNC:12703)
Function	Ligand-gated anion channel that allows the movement of anions across cell membranes when activated by calcium (Ca2+) (PubMed:11904445, PubMed:12907679, PubMed:18179881, PubMed:18400985, PubMed:19853238, PubMed:21330666, PubMed:26200502, PubMed:26720466, PubMed:35789156). 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

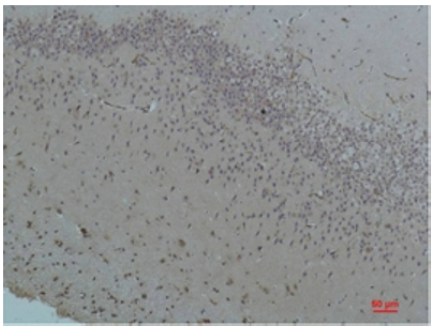
Background

Forms calcium-sensitive chloride channels. Highly permeable to bicarbonate.

Images



Western blot analysis of 1) PC3, 2)Mouse Brain Tissue, 3) Rat Brain Tissue with Bestrophin-1 Rabbit pAb diluted at 1:2,000.



Immunohistochemical analysis of paraffin-embedded Rat Brain Tissue using Bestrophin-1 Rabbit pAb diluted at 1:200.