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DOG1

Rabbit Monoclonal antibody(Mab)
Catalog # AD80045

Product Information

Application	IHC-P
Primary Accession	Q5XXA6
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Clone Names	759B8C7
Calculated MW	114078

Additional Information

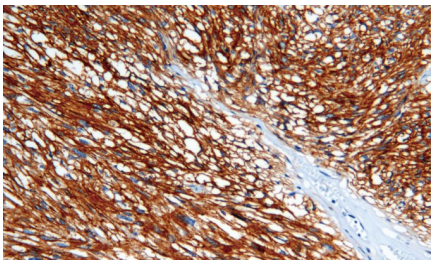
Gene ID	55107
Gene Name	ANO1
Other Names	Anoctamin-1, Discovered on gastrointestinal stromal tumors protein 1, Oral cancer overexpressed protein 2, Transmembrane protein 16A, Tumor-amplified and overexpressed sequence 2, ANO1
Dilution	IHC-P~~Ready-to-use
Storage	Maintain refrigerated at 2-8°C.
Precautions	DOG1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ANO1
Function	Calcium-activated chloride channel (CaCC) (PubMed: 20056604, PubMed:22178883, PubMed:22946059, PubMed:32487539). Plays a role in transepithelial anion transport and smooth muscle contraction. Required for the normal functioning of the interstitial cells of Cajal (ICCs) which generate electrical pacemaker activity in gastrointestinal smooth muscles. Acts as a major contributor to basal and stimulated chloride conductance in airway epithelial cells and plays an important role in tracheal cartilage development. Required for CFTR activation by enhancing endoplasmic reticulum Ca(2+) store release and is also required for CFTR membrane expression (PubMed:28963502). Required for basal and ATP-dependent mucus secretion in airways and intestine, probably by controlling exocytosis of mucus-filled granules by providing Ca(2+) to an apical signaling compartment (By similarity). Contributes to airway mucus expression induced by interleukins IL3 and IL8 and by the asthma-associated protein CLCA1 and is required for expression of mucin MUC5AC (PubMed:33026825). However, was shown in

	another study not to be required for MUC5AC expression (PubMed:31732694). Plays a role in the propagation of Ca(2+) waves in Kolliker's organ in the cochlea and contributes to the refinement of auditory brainstem circuitries prior to hearing onset (By similarity). In vomeronasal sensory neurons, modulates spontaneous firing patterns in the absence of stimuli as well as the firing pattern of pheromone- evoked activity (By similarity). Responsible for calcium-activated chloride channel activity in type I taste cells of the vallate papillae (By similarity). Acts as a heat sensor in nociceptive neurons (By similarity). In dorsal root ganglion neurons, plays a role in mediating non-histaminergic Mas-related G-protein coupled receptor (MRGPR)- dependent itching, acting as a downstream effector of MRGPRs (By similarity). In the developing brain, required for the Ca(2+)-dependent process extension of radial glial cells (By similarity).
Cellular Location	Apical cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q8BHY3}. Presynapse {ECO:0000250|UniProtKB:Q8BHY3}. Note=In differentiating airway epithelial cells, predominantly intracellular at day 0 but is apically localized by day 30. Expressed in the presynapse of retinal neurons (By similarity). {ECO:0000250|UniProtKB:Q8BHY3}
Tissue Location	Expressed in nasal epithelial cells (at protein level) (PubMed:32487539). In the kidney, expressed in the collecting duct (at protein level) (PubMed:24913262). Broadly expressed with higher levels in liver, skeletal muscle and gastrointestinal muscles (PubMed:15215166, PubMed:16906560). Expressed in eccrine sweat glands (PubMed:25220078).

Images



胃肠道间质瘤