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ADCY10 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5862c

Product Information

Application	FC, WB, E
Primary Accession	Q96PN6
Other Accession	NP_001161221.1, NP_060887.2
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22128
Calculated MW	187149
Antigen Region	557-583

Additional Information

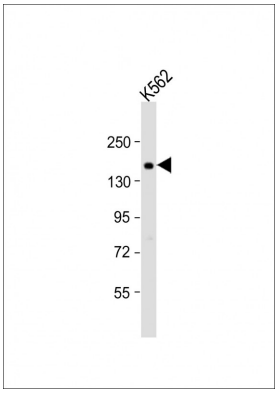
Gene ID	55811
Other Names	Adenylate cyclase type 10, AH-related protein, Adenylate cyclase homolog, Germ cell soluble adenylyl cyclase, hsAC, sAC, Testicular soluble adenylyl cyclase, ADCY10, SAC
Target/Specificity	This ADCY10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 557-583 amino acids from the Central region of human ADCY10.
Dilution	FC~~1:10~50 WB~~1:1000 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	ADCY10 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

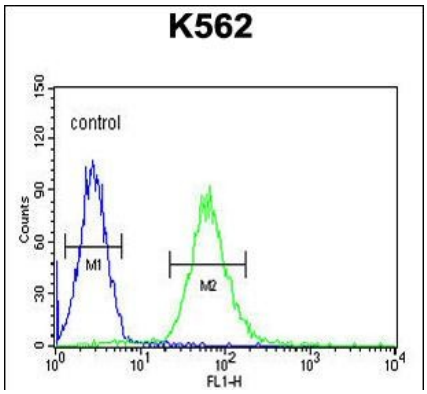
Name	ADCY10
Synonyms	SAC

Function	Catalyzes the formation of the signaling molecule cAMP (PubMed: 12609998, PubMed:15659711, PubMed:24567411, PubMed:24616449, PubMed:25040695). May function as sensor that mediates responses to changes in cellular bicarbonate and CO(2) levels (PubMed:15659711, PubMed:17591988). Has a critical role in mammalian spermatogenesis by producing the cAMP which regulates cAMP-responsive nuclear factors indispensable for sperm maturation in the epididymis. Induces capacitation, the maturational process that sperm undergo prior to fertilization (By similarity). Involved in ciliary beat regulation (PubMed:17591988).
Cellular Location	Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytoskeleton. Cytoplasm, perinuclear region. Nucleus. Cell projection, cilium. Cytoplasm Mitochondrion. Note=Distributed to subcellular compartments containing cAMP targets. Found as a plasma membrane-associated protein, protein concentrated in the perinuclear region and protein colocalized with actin or tubulin
Tissue Location	Detected in airway epithelial cells and testis (at protein level) (PubMed:17591988). Weakly expressed in multiple tissues Expressed in brain, heart, kidney, liver, lung, pancreas, peripheral blood leukocytes, placenta, skeletal muscle, stomach, thymus, airway epithelial cells, duodenum, jejunum and ileum. Very low level of expression in bone.

Images



Anti-ADCY10 Antibody (Center) at 1:1000 dilution + K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 187 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



ADCY10 Antibody (Center) (Cat. #AP5862c) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Novel biallelic ADCY10 variants cause asthenozoospermia with excessive residual cytoplasm and hydronephrosis in humans
- Sodium-hydrogen exchanger NHA1 and NHA2 control sperm motility and male fertility.

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