

Adenylate Cyclase 1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP50964

Product Information

Application	WB, IHC-P
Primary Accession	Q08828
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	123440

Additional Information

Gene ID	107
Other Names	Adenylate cyclase type 1, ATP pyrophosphate-lyase 1, Adenylate cyclase type I, Adenylyl cyclase 1, Ca(2+)/calmodulin-activated adenylyl cyclase, ADCY1
Dilution	WB~~1:1000 IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	ADCY1
Function	Catalyzes the formation of the signaling molecule cAMP in response to G-protein signaling. Mediates responses to increased cellular Ca(2+)/calmodulin levels (By similarity). May be involved in regulatory processes in the central nervous system. May play a role in memory and learning. Plays a role in the regulation of the circadian rhythm of daytime contrast sensitivity probably by modulating the rhythmic synthesis of cyclic AMP in the retina (By similarity).
Cellular Location	Membrane {ECO:0000250 UniProtKB:P19754}; Multi- pass membrane protein {ECO:0000250 UniProtKB:P19754}. Cell membrane; Multi-pass membrane protein. Cytoplasm {ECO:0000250 UniProtKB:O88444}. Membrane raft {ECO:0000250 UniProtKB:P19754}. Note=Expressed in the cytoplasm of supporting cells and hair cells of the cochlea vestibule, as well as to the cochlear hair cell nuclei and stereocilia {ECO:0000250 UniProtKB:O88444}
Tissue Location	Detected in zona glomerulosa and zona fasciculata in the adrenal gland (at protein level) (PubMed:11549699). Brain, retina and adrenal medulla.

Background

This is a calmodulin-sensitive adenylyl cyclase. May be involved in regulatory processes in the central nervous system. It may play a role in memory acquisition and learning.

References

Hillier L.W.,et al.Nature 424:157-164(2003).
Scherer S.W.,et al.Science 300:767-772(2003).
Villacres E.C.,et al.Genomics 16:473-478(1993).

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