10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ADCY2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11322c

Product Information

Application	WB, FC, E
Primary Accession	Q08462
Other Accession	P26769, Q80TL1, NP_065433.2
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14689
Calculated MW	123603
Antigen Region	451-481

Additional Information

Gene ID	108
Other Names	Adenylate cyclase type 2, ATP pyrophosphate-lyase 2, Adenylate cyclase type II, Adenylyl cyclase 2, ADCY2, KIAA1060
Target/Specificity	This ADCY2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 451-481 amino acids from the Central region of human ADCY2.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	ADCY2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ADCY2
Synonyms	KIAA1060

Function	Catalyzes the formation of the signaling molecule cAMP in response to G-protein signaling (PubMed:15385642). Down-stream signaling cascades mediate changes in gene expression patterns and lead to increased IL6 production. Functions in signaling cascades downstream of the muscarinic acetylcholine receptors (By similarity).
Cellular Location	Membrane; Multi- pass membrane protein. Cell membrane; Multi-pass membrane protein. Cytoplasm
Tissue Location	Detected in zona glomerulosa and zona fasciculata in the adrenal gland (at protein level) (PubMed:11549699). Expressed in brain, especially in caudate nucleus, cerebellum and hippocampus

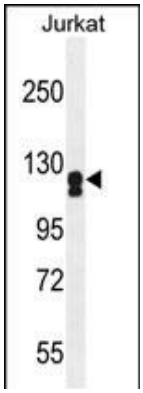
Background

This gene encodes a member of the family of adenylate cyclases, which are membrane-associated enzymes that catalyze the formation of the secondary messenger cyclic adenosine monophosphate (cAMP). This enzyme is insensitive to Ca(2+)/calmodulin, and is stimulated by the G protein beta and gamma subunit complex.

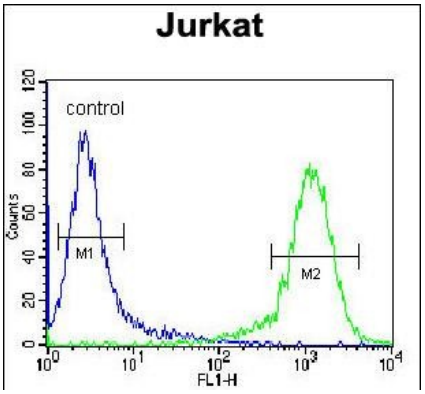
References

Halls, M.L., et al. EMBO J. 29(16):2772-2787(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Need, A.C., et al. Eur. J. Hum. Genet. 17(7):946-957(2009)
Uhl, G.R., et al. Arch. Gen. Psychiatry 65(6):683-693(2008)
Sunahara, R.K., et al. Mol. Interv. 2(3):168-184(2002)

Images



ADCY2 Antibody (Center) (Cat. #AP11322c) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the ADCY2 antibody detected the ADCY2 protein (arrow).



ADCY2 Antibody (Center) (Cat. #AP11322c) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.