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

Anti-Adenylate Cyclase 5/6 Antibody

Catalog # AP53655

Product Information

Application	WB, IHC, IF/IC
Primary Accession	O95622
Other Accession	O43306
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	138908

Additional Information

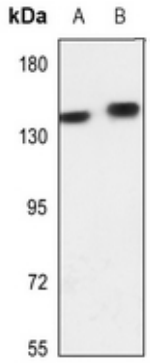
Gene ID	111
Other Names	ADCY5; Adenylate cyclase type 5; ATP pyrophosphate-lyase 5; Adenylate cyclase type V; Adenylyl cyclase 5; ADCY6; KIAA0422; Adenylate cyclase type 6; ATP pyrophosphate-lyase 6; Adenylate cyclase type VI; Adenylyl cyclase 6; Ca(2+)-inhibitable adenylyl cyclase
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Adenylate Cyclase 5/6. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

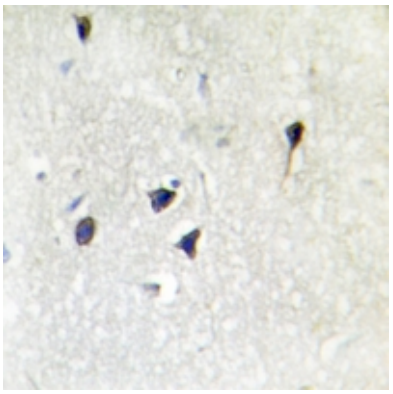
Name	ADCY5
Function	Catalyzes the formation of the signaling molecule cAMP in response to G protein signaling (PubMed:15385642, PubMed:24700542, PubMed:26206488). Mediates signaling downstream of ADRB1 (PubMed:24700542). Regulates the increase of free cytosolic Ca(2+) in response to increased blood glucose levels and contributes to the regulation of Ca(2+)-dependent insulin secretion (PubMed:24740569).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell projection, cilium {ECO:0000250|UniProtKB:P84309}
Tissue Location	Detected in pancreas islets (at protein level). Expressed in the brain, with high

expression in the corpus striatum (PubMed:26085604).

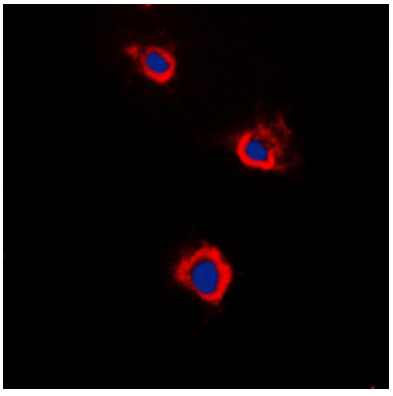
Images



Western blot analysis of Adenylate Cyclase 5/6 expression in MCF7 (A), A385 (B) whole cell lysates. (Predicted band size: 138; 130 kD; Observed band size: 139 kD)



Immunohistochemical analysis of Adenylate Cyclase 5/6 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Adenylate Cyclase 5/6 staining in Raw264.7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).