



# A Cyclase VIII Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-03677
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	IHC;IF;ELISA
<b>Gene Name</b>	ADCY8
<b>Protein Name</b>	Adenylate cyclase type 8
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human ADCY8. AA range:591-640
<b>Specificity</b>	A Cyclase VIII Polyclonal Antibody detects endogenous levels of A Cyclase VIII protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	ADCY8; Adenylate cyclase type 8; ATP pyrophosphate-lyase 8; Adenylate cyclase type VIII; Adenylyl cyclase 8; AC8; Ca(2+)/calmodulin-activated adenylyl cyclase
<b>Observed Band</b>	
<b>Cell Pathway</b>	Cell membrane ; Multi-pass membrane protein . Basolateral cell membrane . Apical cell membrane . Cell junction, synapse . Cell projection, dendrite . Cell projection, axon . Cell junction, synapse, presynaptic cell membrane . Cell junction, synapse, postsynaptic density . Membrane raft . Membrane, coated pit . Cytoplasmic vesicle, clathrin-coated vesicle membrane . Membrane, caveola . Localized to dendritic arbors (By similarity). Monomeric N-glycosylated species localizes in membrane raft. In contrast, monomeric unglycosylated forms are enriched in clathrin-coated pits and vesicles. Dimers are also localized outside of membrane rafts. Membrane raft localization and integrity is indispensable for CCE-stimulated adenylate cyclase activity (By similarity). .
<b>Tissue Specificity</b>	Detected in brain cortex (PubMed:1715695). Expressed in islet (PubMed:25403481).
<b>Function</b>	catalytic activity:ATP = 3',5'-cyclic AMP + diphosphate.,cofactor:Binds 2 magnesium ions per subunit.,enzyme regulation:Activated by calcium/calmodulin.,function:This is a membrane-bound, calcium-stimulable adenylyl cyclase. May be involved in learning, in memory and in drug



dependence.,similarity:Belongs to the adenylyl cyclase class-4/guanylyl cyclase family.,similarity:Contains 2 guanylate cyclase domains.,

**Background**

Adenylate cyclase is a membrane bound enzyme that catalyses the formation of cyclic AMP from ATP. The enzymatic activity is under the control of several hormones, and different polypeptides participate in the transduction of the signal from the receptor to the catalytic moiety. Stimulatory or inhibitory receptors (Rs and Ri) interact with G proteins (Gs and Gi) that exhibit GTPase activity and they modulate the activity of the catalytic subunit of the adenylyl cyclase [provided by RefSeq, Jul 2008],

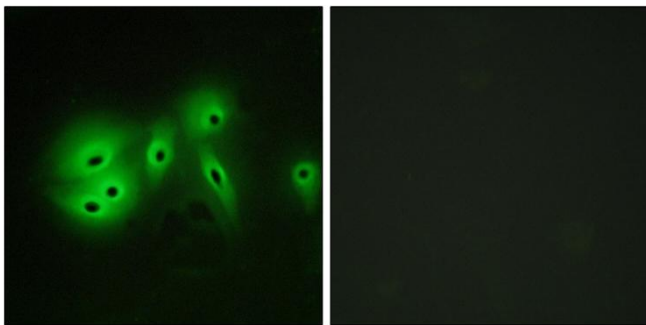
**matters needing attention**

Avoid repeated freezing and thawing!

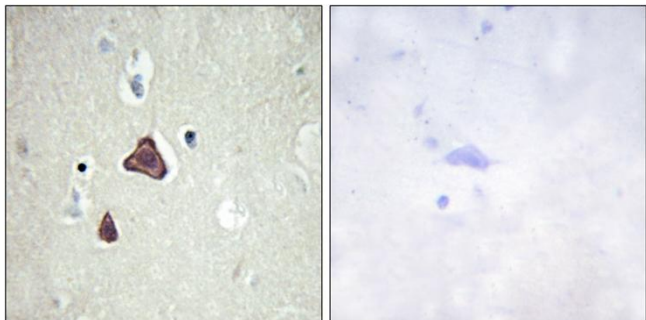
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Immunofluorescence analysis of A549 cells, using ADCY8 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using ADCY8 Antibody. The picture on the right is blocked with the synthesized peptide.