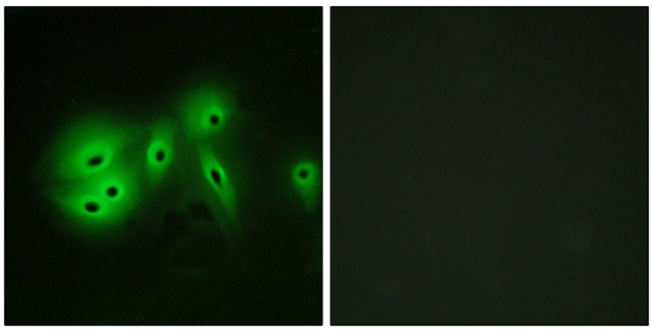
A Cyclase VIII Polyclonal Antibody

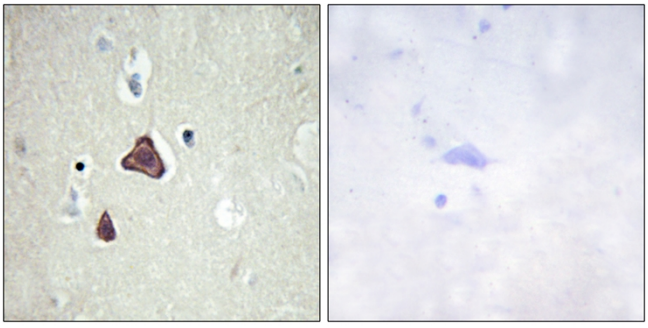
Catalog No	YP-Ab-03677
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF;ELISA
Gene Name	ADCY8
Protein Name	Adenylate cyclase type 8
Immunogen	The antiserum was produced against synthesized peptide derived from human ADCY8. AA range:591-640
Specificity	A Cyclase VIII Polyclonal Antibody detects endogenous levels of A Cyclase VIII protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ADCY8; Adenylate cyclase type 8; ATP pyrophosphate-lyase 8; Adenylate cyclase type VIII; Adenylyl cyclase 8; AC8; Ca(2+)/calmodulin-activated adenylyl cyclase
Observed Band	
Cell Pathway	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). .
Tissue Specificity	Detected in brain cortex (PubMed:1715695). Expressed in islet (PubMed:25403481).
Function	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.