

## A Cyclase VIII Polyclonal Antibody

Catalog No :	YT0035
Reactivity :	Human;Mouse;Rat
Applications :	IHC;IF;ELISA
Target :	A Cyclase VIII
Fields :	>>Purine metabolism;>>Metabolic pathways;>>Endocrine resistance;>>Rap1 signaling pathway;>>Calcium signaling pathway;>>cGMP-PKG signaling pathway;>>CAMP signaling pathway;>>Chemokine signaling pathway;>>Phospholipase D signaling pathway;>>Oocyte meiosis;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Adrenergic signaling in cardiomyocytes;>>Vascular smooth muscle contraction;>>Apelin signaling pathway;>>Gap junction;>>Platelet activation;>>Circadian entrainment;>>Thermogenesis;>>Long-term potentiation;>>Retrograde endocannabinoid signaling;>>Glutamatergic synapse;>>Cholinergic synapse;>>GABAergic synapse;>>Taste transduction;>>Inflammatory mediator regulation of TRP channels;>>Insulin secretion;>>GnRH signaling pathway;>>Ovarian steroidogenesis;>>Progesterone-mediated oocyte maturation;>>Estrogen signaling pathway;>>Regulation of lipolysis in adipocytes;>>Aldosterone synthesis an
Gene Name :	ADCY8
Protein Name :	Adenylate cyclase type 8
Human Gene Id :	114
Human Swiss Prot	P40145
Mouse Gene Id :	11514
Mouse Swiss Prot	P97490
Rat Gene Id :	29241
Rat Swiss Prot No :	P40146



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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
Dilution :	IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:40000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity- chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	140kD
Cell Pathway :	Purine metabolism;Calcium;Chemokine;Oocyte meiosis;Vascular smooth muscle contraction;Gap junction;Long-term potentiation;Taste transduction;GnRH;Progesterone-mediated oocyte maturation;Melanogenesis;
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],
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.,
Subcellular Location :	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).

## Expression : Detected in brain cortex (PubMed:1715695). Expressed in islet (PubMed:25403481).

## **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.