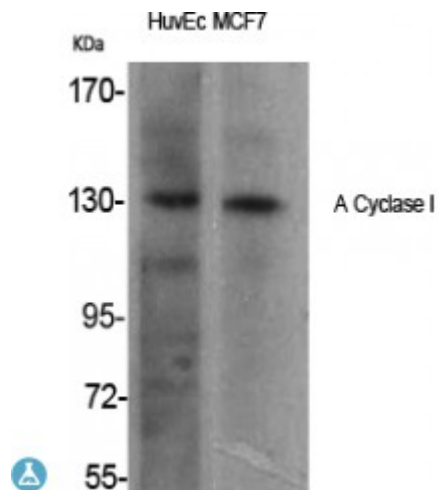


Anti-A Cyclase I antibody



Description	Rabbit polyclonal to A Cyclase I.
Model	STJ91394
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human A Cyclase I
Immunogen Region	200-280 aa, Internal
Gene ID	107
Gene Symbol	ADCY1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000
Specificity	A Cyclase I Polyclonal Antibody detects endogenous levels of A Cyclase I protein.
Tissue Specificity	Detected in zona glomerulosa and zona fasciculata in the adrenal gland (at protein level) . Brain, retina and adrenal medulla.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Adenylate cyclase type 1 ATP pyrophosphate-lyase 1 Adenylate cyclase type I Adenylyl cyclase 1 Ca ²⁺ /calmodulin-activated adenylyl cyclase
Molecular Weight	130 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:232OMIM:103072
Alternative Names	Adenylate cyclase type 1 ATP pyrophosphate-lyase 1 Adenylate cyclase type I Adenylyl cyclase 1 Ca ²⁺ /calmodulin-activated adenylyl cyclase
Function	Catalyzes the formation of the signaling molecule cAMP in response to G-protein signaling. Mediates responses to increased cellular Ca(2+)/calmodulin levels . May be involved in regulatory processes in the central nervous system. May play a role in memory and learning. Plays a role in the regulation of the circadian rhythm of daytime contrast sensitivity probably by modulating the rhythmic synthesis of cyclic AMP in the retina .
Sequence and Domain Family	The protein contains two modules with six transmembrane helices each; both are required for catalytic activity. Isolated N-terminal or C-terminal guanylate cyclase domains have no catalytic activity, but when they are brought together, enzyme activity is restored. The active site is at the interface of the two domains. Both contribute substrate-binding residues, but the catalytic metal ions are bound exclusively via the N-terminal guanylate cyclase domain.
Cellular Localization	Membrane Cell membrane Cytoplasm Membrane raft. Expressed in the cytoplasm of supporting cells and hair cells of the cochlea vestibule, as well as to the cochlear hair cell nuclei and stereocilia.
Post-translational Modifications	N-glycosylated.