



# A Cyclase I Monoclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-mAb-03671                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Gene Name</b>                   | ADCY1                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human ADCY1. AA range:231-280                                                                                                                                                                                                                                                                                      |
| <b>Specificity</b>                 | A Cyclase I Monoclonal Antibody detects endogenous levels of A Cyclase I protei                                                                                                                                                                                                                                                                                                        |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>                      | Monoclonal, mouse,IgG                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                   |
| <b>Dilution</b>                    | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                   |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Synonyms</b>                    | Adenylate cyclase 1;fetal brain;type I;3',5'-cyclic AMP synthetase;AC1;Adcy1; ADCY1_HUMAN;adenyl cyclase;adenylate cyclase 1 (brain);Adenylate cyclase type 1;Adenylate cyclase type I;Adenylyl cyclase 1;ATP pyrophosphate lyase; ATP pyrophosphate-lyase 1;Brain adenylate cyclase 1;Ca(2+)/calmodulin-activated adenylyl cyclase;deafness;autosomal recessive 44;DFNB44;A Cyclase I |
| <b>Observed Band</b>               | 130kD                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Calculated Molecular Weight</b> | 130kD                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Cell Pathway</b>                | Membrane ; Multi-pass membrane protein . Cell membrane ; Multi-pass membrane protein . 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. .                                                                                                              |
| <b>Tissue Specificity</b>          | Detected in zona glomerulosa and zona fasciculata in the adrenal gland (at protein level) (PubMed:11549699). Brain, retina and adrenal medulla.                                                                                                                                                                                                                                        |
| <b>Function</b>                    | catalytic activity:ATP = 3',5'-cyclic AMP + diphosphate.,cofactor:Binds 2 magnesium ions per subunit.,enzyme regulation:Activated by calcium/calmodulin. Inhibited by the G protein beta and gamma subunit complex.,                                                                                                                                                                   |



function: This is a calmodulin-sensitive adenylyl cyclase. May be involved in regulatory processes in the central nervous system. It may play a role in memory acquisition and learning., similarity: Belongs to the adenylyl cyclase class-4/guanylyl cyclase family., similarity: Contains 2 guanylate cyclase domains., tissue specificity: Brain, retina and adrenal medulla.,

#### Background

This gene encodes a member of the of adenylate cyclase gene family that is primarily expressed in the brain. This protein is regulated by calcium/calmodulin concentration and may be involved in brain development. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013],

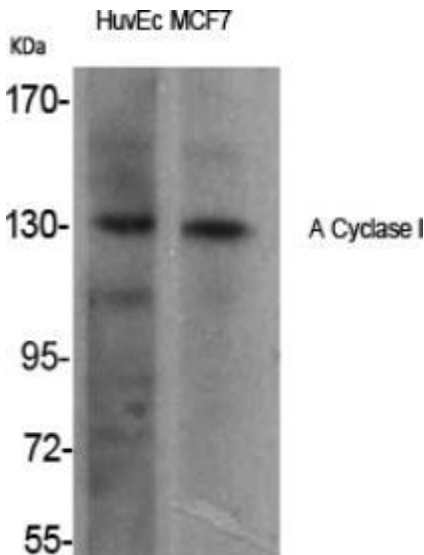
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

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

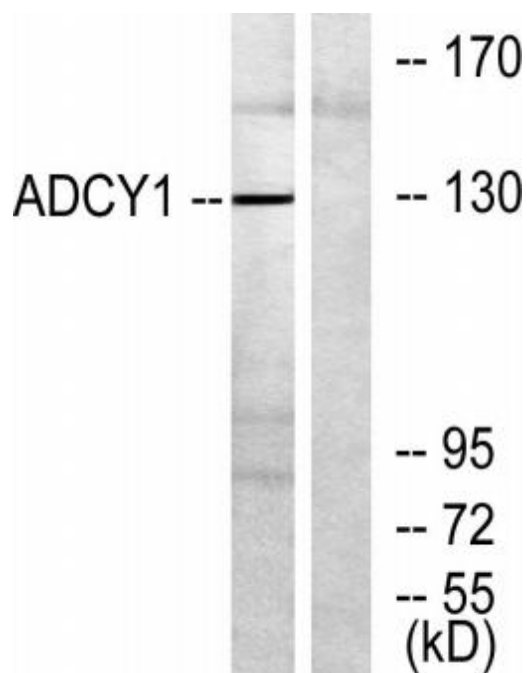
### Products Images



Western Blot analysis of various cells using A Cyclase I Monoclonal Antibody



Western Blot analysis of COLO205 cells using A Cyclase I Monoclonal Antibody



Western blot analysis of lysates from COLO205 cells, using ADCY1 Antibody. The lane on the right is blocked with the synthesized peptide.