

## Anti-A Cyclase V/VI antibody

---



|                           |                                                                                                                                                |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Description</b>        | Rabbit polyclonal to A Cyclase V/VI.                                                                                                           |
| <b>Model</b>              | STJ91398                                                                                                                                       |
| <b>Host</b>               | Rabbit                                                                                                                                         |
| <b>Reactivity</b>         | Human, Mouse, Rat                                                                                                                              |
| <b>Applications</b>       | ELISA, IF, IHC                                                                                                                                 |
| <b>Immunogen</b>          | Synthesized peptide derived from human A Cyclase V/VI                                                                                          |
| <b>Immunogen Region</b>   | 900-980 aa, C-terminal                                                                                                                         |
| <b>Gene ID</b>            | <a href="#">112</a>                                                                                                                            |
| <b>Gene Symbol</b>        | <a href="#">ADCY6</a>                                                                                                                          |
| <b>Dilution range</b>     | IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000                                                                                                    |
| <b>Specificity</b>        | A Cyclase V/VI Polyclonal Antibody detects endogenous levels of A Cyclase V/VI protein.                                                        |
| <b>Tissue Specificity</b> | Detected in peripheral blood mononuclear leukocytes (at protein level) .<br>Detected in thyroid .                                              |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                          |
| <b>Note</b>               | For Research Use Only (RUO).                                                                                                                   |
| <b>Protein Name</b>       | Adenylate cyclase type 6 ATP pyrophosphate-lyase 6 Adenylate cyclase type VI Adenylyl cyclase 6 Ca <sup>2+</sup> -inhibitable adenylyl cyclase |
| <b>Molecular Weight</b>   | 130.615 kDa                                                                                                                                    |

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clonality</b>                        | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Conjugation</b>                      | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Isotype</b>                          | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Formulation</b>                      | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Concentration</b>                    | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage Instruction</b>              | Store at -20°C, and avoid repeat freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Database Links</b>                   | <a href="#">HGNC:237OMIM:600294</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Alternative Names</b>                | Adenylate cyclase type 6 ATP pyrophosphate-lyase 6 Adenylate cyclase type VI Adenylyl cyclase 6 Ca <sup>2+</sup> -inhibitable adenylyl cyclase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Function</b>                         | Catalyzes the formation of the signaling molecule cAMP downstream of G protein-coupled receptors . Functions in signaling cascades downstream of beta-adrenergic receptors in the heart and in vascular smooth muscle cells . Functions in signaling cascades downstream of the vasopressin receptor in the kidney and has a role in renal water reabsorption. Functions in signaling cascades downstream of PTH1R and plays a role in regulating renal phosphate excretion. Functions in signaling cascades downstream of the VIP and SCT receptors in pancreas and contributes to the regulation of pancreatic amylase and fluid secretion . Signaling mediates cAMP-dependent activation of protein kinase PKA. This promotes increased phosphorylation of various proteins, including AKT. Plays a role in regulating cardiac sarcoplasmic reticulum Ca(2+) uptake and storage, and is required for normal heart ventricular contractibility. May contribute to normal heart function . Mediates vasodilatation after activation of beta-adrenergic receptors by isoproterenol . Contributes to bone cell responses to mechanical stimuli . |
| <b>Sequence and Domain Family</b>       | 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Cellular Localization</b>            | Cell membrane Cell projection, cilium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Post-translational Modifications</b> | Phosphorylation by RAF1 increases enzyme activity. Phosphorylation by PKA at Ser-662 inhibits the GNAS-mediated increase in catalytic activity. Phosphorylation by PKC at Ser-556, Ser-662 and Thr-919 inhibits catalytic activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |