

Product datasheet for AP20397PU-N

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OriGene Technologies, Inc.

ADCY5 (+ADCY6) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, IHC, WB

Recommended Dilution: Western Blot: 1/500-1/1000.

Immunofluorescence: 1/50-1/200.

Immunohistochemistry on Paraffin Sections: 1/50-1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Immunogen: Synthetic peptide, corresponding to amino acids 1111-1160 of Human ADCY 5.

Specificity: This antibody detects endogenous levels of A Cyclase V/VI protein.

(region surrounding Phe1052)

Formulation: Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE)

Preservative: 0.05% Sodium Azide

Concentration: 1.0 mg/ml

Purification: Affinity Chromatography using epitope-specific immunogen

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: ~ 138 kDa

Gene Name: adenylate cyclase 5

Database Link: Entrez Gene 64532 RatEntrez Gene 224129 MouseEntrez Gene 111 Human

O95622





Background:

A cyclase V, also known as ADCY5, is a 1,261 amino acid Adenylyl cyclase that localizes to cellular membranes and contains two guanylate cyclase domains. Similar to other A cyclase proteins, A cyclase V uses magnesium as a cofactor to catalyze the conversion of ATP to cAMP. A cyclase VI, also known as ADCY6 (adenylate cyclase type 6), is a 1,168 amino acid A cyclase that localizes to the membrane and contains two guanylate cyclase domains. Using magnesium as a cofactor, A cyclase VI functions as a calcium-inhibitable A cyclase that catalyzes the conversion of ATP to 3',5'-cyclic AMP and diphosphate and plays a role in a variety of events throughout the body. Multiple isoforms of A cyclase VI exist due to alternative splicing events.

Synonyms: ADCY5, Adenylate cyclase type V, ATP pyrophosphate-lyase 5, Adenylyl cyclase 5

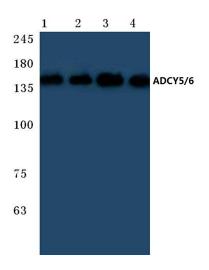
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Chemokine signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling

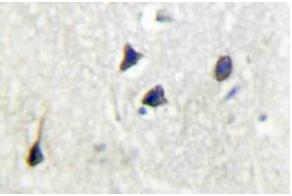
pathway, Melanogenesis, Oocyte meiosis, Progesterone-mediated oocyte maturation, Purine

metabolism, Vascular smooth muscle contraction

Product images:



Western blot (WB) analysis of ADCY 5/6 antibody at 1/500 dilution Lane 1:Hela cell lysate Lane 2:Raw264.7 cell lysate Lane 3:PC12 cell lysate Lane 4:Rat brain tissue lysate



Immunohistochemistry analysis of A Cyclase V/VI Antibody in paraffin-embedded human brain tissue.