

Adenylate Cyclase III Antibody

Rabbit polyclonal antibody Catalog # AN1220

Specification

Adenylate Cyclase III Antibody - Product Information

Application WB, IF Primary Accession P21932

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality polyclonal
Calculated MW 160, 200 KDa

Adenylate Cyclase III Antibody - Additional Information

Gene ID 64508
Gene Name ADCY3

Other Names

Adenylate cyclase type 3, ATP pyrophosphate-lyase 3, Adenylate cyclase type III, AC-III, Adenylate cyclase, olfactive type, Adenylyl cyclase 3, AC3, Adcy3

Target/Specificity

Synthetic peptide corresponding to amino acid residues from the C-terminal region conjugated to KLH.

Dilution

WB~~ 1:2000 IF~~ 1:500

Format

Affinity purified rabbit serum.

Antibody Specificity

Specific for the ~160 kDa adenylate cyclase III protein.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Adenylate Cyclase III Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

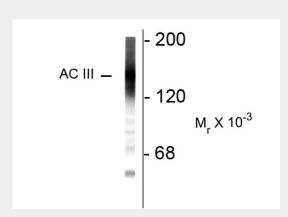
Adenylate Cyclase III Antibody - Protocols



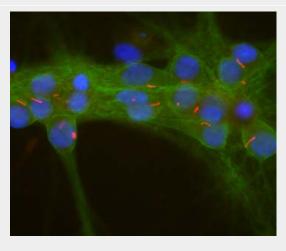
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Adenylate Cyclase III Antibody - Images



Western blot of rat cortex lysate showing specific immunolabeling of the $\sim 160 k$ adenylate cyclase III protein.

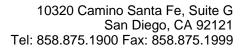


Immunofluorescence of cultured rat neurons and glia showing strong staining of neuronal cilia using our anti-adenylate cyclase III antibody (red) and axonal and dendritic staining of alpha II spectrin (green) revealing the submembraneous cytoskeleton and DNA (blue).

Adenylate Cyclase III Antibody - Background

Adenylate cyclase is the enzyme which produces the "second messenger" signaling molecule, cAMP from ATP. Type III adenylate cyclase is localized to the membranes surrounding neuronal cilia. Much is currently unknown about the function of primary cilia in vertebrates, however, recent work has begun to explore their role in neuronal signaling and neurogenesis (Fuchs and Schwark, 2004; Louvi and Grove 2011).

Adenylate Cyclase III Antibody - References





Fuchs JL, Schwark HD. (2004) Neuronal primary cilia: a review. Cell Biol Int. 28:111-8. Louvi A and Grove EA. (2011) Cilia in the CNS: the quiet organelle claims center stage. Neuron 69:1046-1060