

# Anti-Adenylate Cyclase III Antibody

Our Anti-Adenylate Cyclase III primary antibody from PhosphoSolutions is rabbit polyclonal. It detects Catalog # AN1298

## Product Information

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<b>Application</b>	WB, IHC, ICC
<b>Primary Accession</b>	<a href="#">P21932</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Calculated MW</b>	128936

## Additional Information

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<b>Gene ID</b>	64508
<b>Other Names</b>	AC-III antibody, AC3 antibody, ADCY3 antibody, ADCY3_HUMAN antibody, adenylate cyclase 3 antibody, Adenylate cyclase antibody, Adenylate cyclase type 3 antibody, Adenylate cyclase type III antibody, Adenylyl cyclase 3 antibody, ATP pyrophosphate lyase antibody, ATP pyrophosphate-lyase 3 antibody, olfactory type antibody
<b>Target/Specificity</b>	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).
<b>Dilution</b>	WB~~1:1000 IHC~~1:100~500 ICC~~N/A
<b>Format</b>	Antigen Affinity Purified
<b>Storage</b>	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.
<b>Precautions</b>	Anti-Adenylate Cyclase III Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
<b>Shipping</b>	Blue Ice

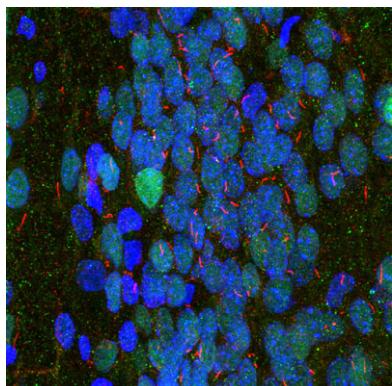
## Background

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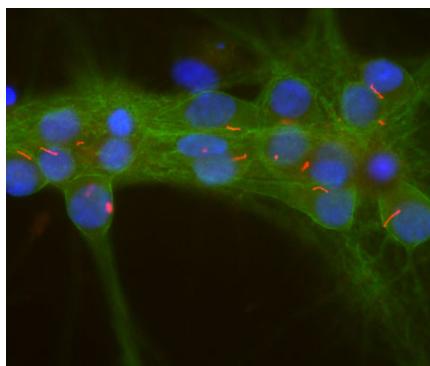
Adenylate cyclase is the enzyme which produces the "second messenger" signaling molecule, cAMP from ATP. Type III adenylate cyclase is localized to the membranes surrounding neuronal cilia. Much is currently unknown about the function of primary cilia in vertebrates, however, recent work has begun to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

## Images

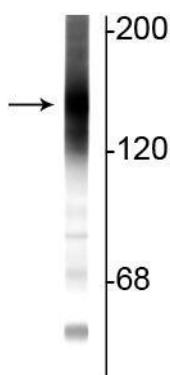
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Immunofluorescence of a section of rat hippocampus selectively labeling the neuronal cilia with anti-adenylate cyclase III (cat. AN1298, 1:10,000, red), labeling nuclei with anti-MECP2 (cat. 1205-MeCP2, 1:1000, green), and Hoechst staining of nuclear DNA.



Immunostaining of cultured rat neurons and glia showing strong staining of neuronal cilia using our anti-adenylate cyclase III antibody (cat. AN1298, 1:500, red) and axonal and dendritic staining of alpha II spectrin (cat. 98-A2SM, 1:500, green) revealing the submembranous cytoskeleton and DNA (blue).



Western blot of rat cortical lysate showing specific immunolabeling of the ~160 kDa adenylate cyclase III protein.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.