

For Research Use Only

# ADCY3 Polyclonal antibody

Catalog Number: 19492-1-AP **12 Publications**



## Basic Information

<b>Catalog Number:</b> 19492-1-AP	<b>GenBank Accession Number:</b> NM_004036	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 1000 µg/ml by 109 Nanodrop;	<b>GeneID (NCBI):</b> UNIPROT ID: O60266	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:20-1:200 IF 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> adenylate cyclase 3	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 129 kDa	
	<b>Observed MW:</b> 170-180 kDa	

## Applications

<b>Tested Applications:</b> WB, IP, IF, IHC, ELISA	<b>Positive Controls:</b> WB : mouse skeletal muscle tissue, human brain tissue IP : MDCK cells, IHC : human kidney tissue, human heart tissue IF : MDCK cells, rat brain tissue, Mouse embryonic fibroblasts
<b>Cited Applications:</b> WB, IF, IHC	
<b>Species Specificity:</b> human, mouse, rat, canine	
<b>Cited Species:</b> human, rat, mouse	

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

ADCY3 is an adenylate cyclase (AC) functioning to convert ATP to cAMP in response to signals initiated by activation of Gs-coupled receptors. To date, 10 isoforms of AC have been cloned in mammals. Initially identified in olfactory cilia, ADCY3 is regarded as the olfactory isoform and required for detection of odorants. Recently it has been found that outside of the olfactory epithelium the olfactory-like signaling pathway including AC3 may also have a key role in spermatogenesis and spermatozoa functions. In addition, the ciliary location of AC3 makes it as a prominent marker for primary cilia in brain. AC3 is typically found at 130 kDa in olfactory tissues. In nonolfactory tissues (such as sperm), this protein is reported to migrate with a molecular mass of 55 kDa, occasionally accompanied by additional bands at either 90 or 130 kDa (PMID:9539154).

## Notable Publications

Author	Pubmed ID	Journal	Application
Casey D Gailey	32935890	Dev Dyn	IF
Alessia Di Nardo	34624412	Neurosci Res	WB
Jie Ran	35619548	Adv Sci (Weinh)	IF

## Storage

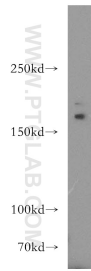
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

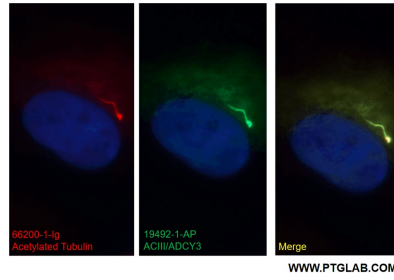
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

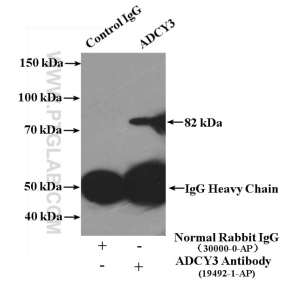
## Selected Validation Data



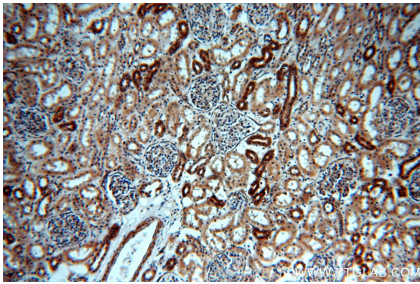
mouse skeletal muscle tissue were subjected to SDS PAGE followed by western blot with 19492-1-AP (ADCY3 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



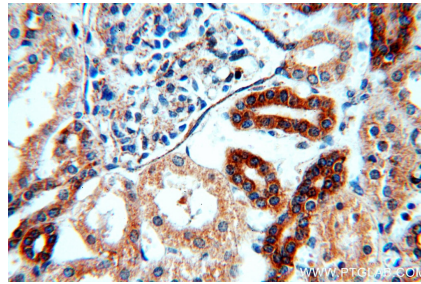
Immunofluorescent analysis of (4% PFA) fixed MDCK cells using 19492-1-AP (ADCY3 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP result of anti-ADCY3 (IP:19492-1-AP, 4ug; Detection:19492-1-AP 1:500) with MDCK cells lysate 3500ug.



Immunohistochemical analysis of paraffin-embedded human kidney using 19492-1-AP (ADCY3 antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human kidney using 19492-1-AP (ADCY3 antibody) at dilution of 1:100 (under 40x lens).