

## ARG11121 anti-Adenylate cyclase 3 antibody [1A12]

Package: 50 µl  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [1A12] recognizes Adenylate cyclase 3
Tested Reactivity	Rat
Predict Reactivity	Hu, Ms
Tested Application	IHC-Fr
Host	Mouse
Clonality	Monoclonal
Clone	1A12
Isotype	IgG1
Target Name	Adenylate cyclase 3
Species	Rat
Immunogen	KLH-conjugated synthetic peptide around the C-terminal region of Rat Adenylate cyclase 3. (C-PAAFPNGSSVTLPHQVVDNP)
Conjugation	Un-conjugated
Alternate Names	AC-III; Adenylate cyclase type III; AC3; ATP pyrophosphate-lyase 3; Adenylate cyclase, olfactive type; Adenylyl cyclase 3; EC 4.6.1.1; Adenylate cyclase type 3

### Application Instructions

Application table	Application	Dilution
	IHC-Fr	1:1000

**Application Note** \* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

Form	Liquid
Purification	Purified
Buffer	PBS, 5 mM Sodium azide and 50% Glycerol.
Preservative	5 mM Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

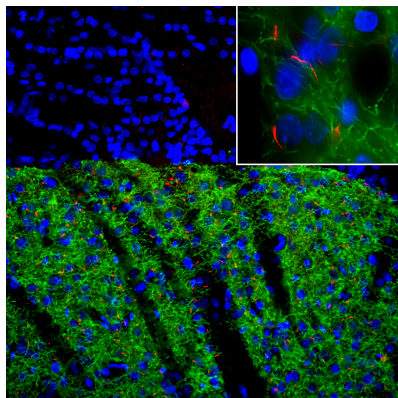
Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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Gene Symbol	ADCY3
Gene Full Name	adenylate cyclase 3
Background	This gene encodes adenylyl cyclase 3 which is a membrane-associated enzyme and catalyzes the formation of the secondary messenger cyclic adenosine monophosphate (cAMP). This protein appears to be widely expressed in various human tissues and may be involved in a number of physiological and pathophysiological metabolic processes. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2016]
Function	Catalyzes the formation of the signaling molecule cAMP in response to G-protein signaling. Participates in signaling cascades triggered by odorant receptors via its function in cAMP biosynthesis. Required for the perception of odorants. Required for normal sperm motility and normal male fertility. Plays a role in regulating insulin levels and body fat accumulation in response to a high fat diet. [UniProt]
Calculated Mw	129 kDa
PTM	Sumoylated. Sumoylation is required for targeting of olfactory cilia.  N-glycosylated.  Rapidly phosphorylated after stimulation by odorants or forskolin. Phosphorylation by CaMK2 at Ser-1076 down-regulates enzyme activity. [UniProt]
Cellular Localization	Cell membrane; Multi-pass membrane protein. Cytoplasm. Cell projection, cilium. Golgi apparatus. Note=Also detected in the cytoplasm, close to lipid droplets. [UniProt]

## Images



ARG11121 anti-Adenylate cyclase 3 antibody [1A12] IHC-Fr image

Immunohistochemistry: Frozen section of caudate/putamen region of rat brain stained with ARG11121 anti-Adenylate cyclase 3 antibody [1A12] (red), and co-stained with anti-Tyrosine Hydroxylase antibody (green). Hoechst (blue) for nuclear staining.