

# Product datasheet

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# ARG11109 anti-Adenylate cyclase 3 antibody

Package: 50 μl Store at: -20°C

## Summary

Product Description Chicken Polyclonal antibody recognizes Adenylate cyclase 3

Tested Reactivity Ms, Rat

Tested Application IHC-Fr

Host Chicken

Clonality Polyclonal

Isotype IgY

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	1:5000 - 1:10000
'''	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form Liquid

Purification Affinity 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

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 ot olfactory cilia.

N-glycosylated.

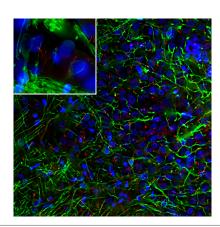
Rapidly phosphorylated after stimulation by odorants or forskolin. Phosphorylation by CaMK2 at

Ser-1076 down-regulates enzyme activity. [UniProt]

Cell membrane; Multi-pass membrane protein. Cytoplasm. Cell projection, cilium. Golgi apparatus.

Note=Also detected in the cytoplasm, close to lipid droplets. [UniProt]

#### **Images**



#### ARG11109 anti-Adenylate cyclase 3 antibody IHC-Fr image

Immunohistochemistry: Frozen section of Rat cortex tissue stained with ARG11109 anti-Adenylate cyclase 3 antibody (red) at 1:10000 dilution, and costained with <u>ARG11063</u> anti-CNPase antibody [1H10] (green) at 1:1000 dilution. Hoechst (blue) for nuclear staining.