

## ADCYA Rabbit pAb

CatalogNo: YT6551

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB

#### MW

- 177kD (Calculated)

#### Isotype

- IgG

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### Recommended Dilution Ratios

WB 1:500-2000

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**Immunogen** Synthesized peptide derived from human ADCYA AA range: 368-418

**Specificity** This antibody detects endogenous levels of ADCYA at Human/Mouse/Rat

### Target Information

**Gene name** ADCY10 SAC

**Protein Name** ADCYA

Organism	Gene ID	UniProt ID
Human	<a href="#">55811</a> ;	<a href="#">Q96PN6</a> ;
Mouse	<a href="#">271639</a> ;	<a href="#">Q8C0T9</a> ;
Rat	<a href="#">59320</a> ;	<a href="#">Q9Z286</a> ;

**Cellular Localization**

Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Cytoplasm , cytoskeleton . Cytoplasm , perinuclear region . Nucleus . Cell projection , cilium . Cytoplasm . Mitochondrion . Distributed to subcellular compartments containing cAMP targets. Found as a plasma membrane-associated protein , protein concentrated in the perinuclear region and protein colocalized with actin or tubulin. .

**Tissue specificity**

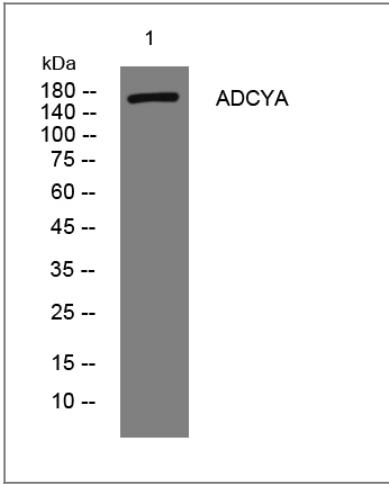
Detected in airway epithelial cells and testis (at protein level) (PubMed:17591988) . Weakly expressed in multiple tissues. Expressed in brain , heart , kidney , liver , lung , pancreas , peripheral blood leukocytes , placenta , skeletal muscle , stomach , thymus , airway epithelial cells , duodenum , jejunum and ileum. Very low level of expression in bone.

**Function**

Catalytic activity:ATP = 3',5'-cyclic AMP + diphosphate. ,cofactor: Binds 2 magnesium ions per subunit. ,Disease: Genetic variations in ADCY10 are associated with absorptive hypercalciuria type 2 (HCA2) [MIM:143870]. Absorptive hypercalciuria (AH) is a common cause of calcium oxalate nephrolithiasis. Clinically , AH is characterized by intestinal hyperabsorption of calcium in the presence of normal serum calcium and immunoreactive PTH (iPTH) . It is often accompanied by low bone mineral density (BMD) , particularly of the lumbar spine. About 50% of patients with AH present with a family history of calcium oxalate nephrolithiasis and hypercalciuria. ,enzyme regulation: Activated by manganese or magnesium ions. In the presence of magnesium ions , the enzyme is activated by bicarbonate while in the presence of manganese ions , the enzyme is inhibited by bicarbonate. In the absence of magnesium and bicarbonate , the enzyme is weakly activated by calcium. ,Function: Soluble adenylyl cyclase that has a critical role in mammalian spermatogenesis. Produces the cAMP which mediates in part the cAMP-responsive nuclear factors indispensable for maturation of sperm in the epididymis. Induces capacitation , the maturational process that sperm undergo prior to fertilization. May be the bicarbonate sensor. Involved in ciliary beat regulation. ,PTM: Cleavage may occur to generate the active 48 kDa form. ,similarity: Belongs to the adenylyl cyclase class-4/guanylyl cyclase family. ,similarity: Contains 2 guanylate cyclase domains. ,subcellular location: Distributed to subcellular compartments containing cAMP targets. Found as a plasma membrane-associated protein , protein concentrated in the perinuclear region and protein colocalized with actin or tubulin. ,tissue specificity: Weakly expressed in multiple tissues. Expressed in brain , heart , kidney , liver , lung , pancreas , peripheral blood leukocytes , placenta , skeletal muscle , stomach , thymus , airway epithelial cells , duodenum , jejunum and ileum. Very low level of expression in bone. ,

---

## Validation Data



Western blot analysis of lysates from KB cells, primary antibody was diluted at 1:1000, 4°C over night

## Contact information

Orders: [order.cn@immunoway.com](mailto:order.cn@immunoway.com)  
Support: [support.cn@immunoway.com](mailto:support.cn@immunoway.com)  
Telephone: 400-8787-807(China)  
Website: <http://www.immunoway.com.cn>  
Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:  
**ADCYA Rabbit pAb**

For Research Use Only. Not for Use in Diagnostic Procedures.

[Antibody](#) | [ELISA Kits](#) | [Protein](#) | [Reagents](#)