



ADCYA mouse mAb

Catalog No	YP-mAb-11186
Isotype	IgG
Reactivity	Human; Mouse;Rat
Applications	WB
Gene Name	ADCY10 SAC
Protein Name	ADCYA
Immunogen	Synthesized peptide derived from human ADCYA AA range: 368-418
Specificity	This antibody detects endogenous levels of ADCYA at Human/Mouse/Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	
Cell Pathway	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 inhibited by bicarbonate.

Background

The protein encoded by this gene belongs to a distinct class of adenylyl cyclases that is soluble and insensitive to G protein or forskolin regulation. Activity of this protein is regulated by bicarbonate. Variation at this gene has been observed in patients with absorptive hypercalciuria. Alternatively spliced transcript variants encoding different isoforms have been observed. There is a pseudogene of this gene on chromosome 6. [provided by RefSeq, Jul 2014],

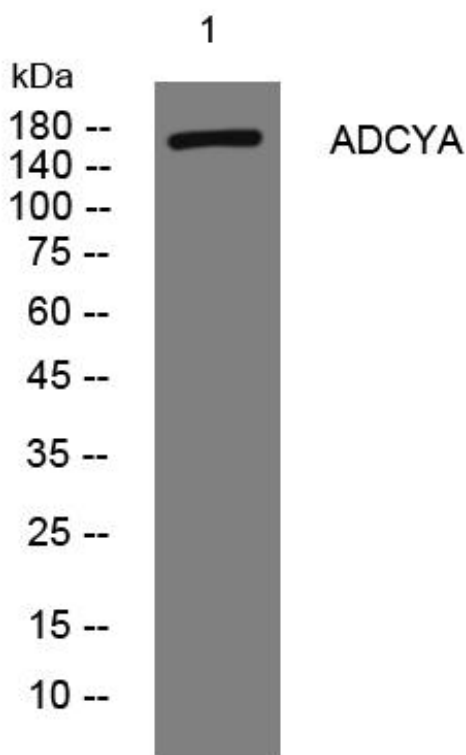
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using ADCYA mouse mAb