

A Cyclase IV Polyclonal Antibody

YT0030 Catalog No:

Reactivity: Human; Mouse; Rat

WB;ELISA **Applications:**

Target: A Cyclase IV

Fields: >>Purine metabolism;>>Metabolic pathways;>>Endocrine resistance;>>Rap1

signaling pathway;>>Calcium signaling pathway;>>cGMP-PKG signaling

pathway;>>cAMP signaling pathway;>>Chemokine signaling

pathway;>>Phospholipase D signaling pathway;>>Oocyte meiosis;>>Longevity

regulating pathway;>>Longevity regulating pathway - multiple

species;>>Adrenergic signaling in cardiomyocytes;>>Vascular smooth muscle

contraction;>>Apelin signaling pathway;>>Gap junction;>>Platelet activation;>>Circadian entrainment;>>Thermogenesis;>>Retrograde endocannabinoid signaling;>>Glutamatergic synapse;>>Cholinergic

synapse;>>GABAergic synapse;>>Taste transduction;>>Inflammatory mediator

regulation of TRP channels;>>Insulin secretion;>>GnRH signaling pathway;>>Ovarian steroidogenesis;>>Progesterone-mediated oocyte

maturation;>>Estrogen signaling pathway;>>Melanogenesis;>>Thyroid hormone

synthesis;>>Oxytocin signaling pathway;>>Regulation of lipolysis in adipocytes;>>Aldosterone synthesis and secretion;>>Relaxin sig

Gene Name: ADCY4

Protein Name: Adenylate cyclase type 4

Human Gene Id: 196883

Human Swiss Prot

Q8NFM4

Q91WF3

No:

Mouse Gene Id: 104110

Mouse Swiss Prot

No:

Rat Swiss Prot No: P26770

Immunogen: The antiserum was produced against synthesized peptide derived from human

ADCY4. AA range:195-244



Specificity: A Cyclase IV Polyclonal Antibody detects endogenous levels of A Cyclase IV

protein.

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

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 120kD

Cell Pathway: Purine metabolism; Calcium; Chemokine; Oocyte meiosis; Vascular smooth

muscle contraction; Gap junction; Taste transduction; GnRH; Progesterone-mediated oocyte maturation; Melanogenesis; Dilated cardiomy opathy;

Background: This gene encodes a member of the family of adenylate cyclases, which are

membrane-associated enzymes that catalyze the formation of the secondary messenger cyclic adenosine monophosphate (cAMP). Mouse studies show that adenylate cyclase 4, along with adenylate cyclases 2 and 3, is expressed in olfactory cilia, suggesting that several different adenylate cyclases may couple to

olfactory receptors and that there may be multiple receptor-mediated

mechanisms for the generation of cAMP signals. Alternative splicing results in

transcript variants. [provided by RefSeq, Nov 2010],

Function: catalytic activity:ATP = 3',5'-cyclic AMP + diphosphate.,cofactor:Binds 2

magnesium ions per subunit.,enzyme regulation:Insensitive to

calcium/calmodulin. Stimulated by the G protein beta and gamma subunit complex.,function:This is a membrane-bound, calmodulin-insensitive adenylyl cyclase.,similarity:Belongs to the adenylyl cyclase class-4/guanylyl cyclase

family., similarity: Contains 2 guanylate cyclase domains.,

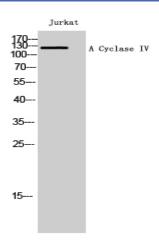
Subcellular Location : Cell membrane; Multi-pass membrane protein. Cytoplasm.

Expression: Detected in the zona glomerulosa and the zona fasciculata in the adrenal gland

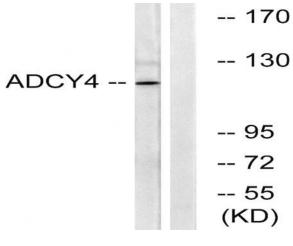
(at protein level).



Products Images



Western Blot analysis of Jurkat cells using A Cyclase IV Polyclonal Antibody



Western blot analysis of lysates from Jurkat cells, using ADCY4 Antibody. The lane on the right is blocked with the synthesized peptide.