

AR-β2 Polyclonal Antibody

Catalog No: YT0361

Reactivity: Human; Rat; Mouse;

Applications: WB;IHC;IF;FCM;ELISA

Target: Adrenergic Receptor β2

Fields: >>Calcium signaling pathway;>>cGMP-PKG signaling pathway;>>cAMP

signaling pathway;>>Neuroactive ligand-receptor interaction;>>Adrenergic signaling in cardiomyocytes;>>Regulation of lipolysis in adipocytes;>>Renin secretion;>>Salivary secretion;>>Chemical carcinogenesis - receptor activation

Gene Name: ADRB2

Protein Name: Beta-2 adrenergic receptor

P07550

P18762

Human Gene Id: 154

Human Swiss Prot

No:

Mouse Swiss Prot

No:

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

Adrenergic Receptor beta2. AA range:321-370

Specificity: AR-β2 Polyclonal Antibody detects endogenous levels of AR-β2 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. IHC 1:100 - 1:300. IF 1:200 - 1:1000. Flow cytometry: 1:200

- 1:400. ELISA: 1:5000. 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: 47kD

Cell Pathway: Calcium; Neuroactive ligand-receptor interaction; Endocytosis;

Background: This gene encodes beta-2-adrenergic receptor which is a member of the G

protein-coupled receptor superfamily. This receptor is directly associated with one of its ultimate effectors, the class C L-type calcium channel Ca(V)1.2. This receptor-channel complex also contains a G protein, an adenylyl cyclase, cAMP-dependent kinase, and the counterbalancing phosphatase, PP2A. The assembly of the signaling complex provides a mechanism that ensures specific and rapid signaling by this G protein-coupled receptor. This gene is intronless. Different polymorphic forms, point mutations, and/or downregulation of this gene are associated with nocturnal asthma, obesity and type 2 diabetes. [provided by

RefSeq, Jul 2008],

Function: disease:Polymorphic forms of ADRB2 could impart some form of nocturnal

asthma.,function:Beta-adrenergic receptors mediate the catecholamine-induced

activation of adenylate cyclase through the action of G proteins. The

beta-2-adrenergic receptor binds epinephrine with an approximately 30-fold greater affinity than it does norepinephrine.,PTM:Palmitoylated; may reduce accessibility of Ser-345 and Ser-346 by anchoring Cys-341 to the plasma membrane. Agonist stimulation promotes depalmitoylation and further allows Ser-345 and Ser-346 phosphorylation.,PTM:Phosphorylated by PKA and BARK upon agonist stimulation, which mediates homologous desensitization of the

receptor. PKA-mediated phosphorylation seems to facilitate phosphorylation by

BARK. Phosphorylated upon DNA damage, probably by ATM or

ATR.,PTM:Phosphorylation of Tyr-141 is induced by insulin and leads to

supersensitization of the recep

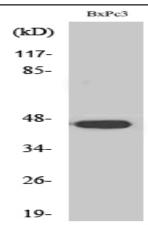
Subcellular Location:

Cell membrane; Multi-pass membrane protein. Early endosome. Golgi apparatus. Colocalizes with VHL at the cell membrane (PubMed:19584355). Activated receptors are internalized into endosomes prior to their degradation in lysosomes (PubMed:20559325). Activated receptors are also detected within the

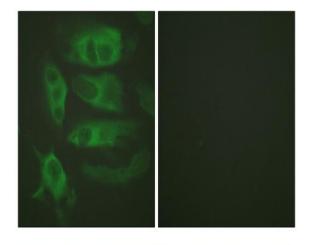
Golgi apparatus (PubMed:27481942)...

Expression: Blood, Brain, Fetal brain, Heart, Leukocyte, Prostate, Thyroid,

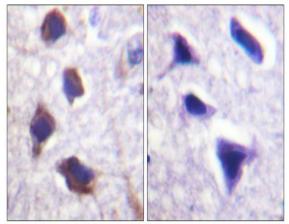
Products Images



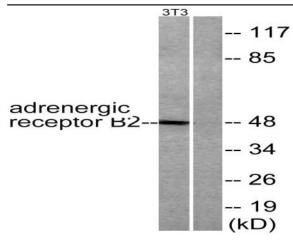
Western Blot analysis of various cells using AR- β 2 Polyclonal Antibody



Immunofluorescence analysis of HeLa cells, using Adrenergic Receptor beta2 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Adrenergic Receptor beta2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from NIH/3T3 cells, using Adrenergic Receptor beta2 Antibody. The lane on the right is blocked with the synthesized peptide.