

Summary

Production Name	AR- β 2 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IF,IHC,WB,
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ADRB2
Alternative Names	ADRB2; ADRB2R; B2AR; Beta-2 adrenergic receptor; Beta-2 adrenoreceptor; Beta-2 adrenoceptor
Gene ID	154.0
SwissProt ID	P07550.The antiserum was produced against synthesized peptide derived from human Adrenergic Receptor beta2. AA range:321-370

Application

Dilution Ratio	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.
Molecular Weight	47kD

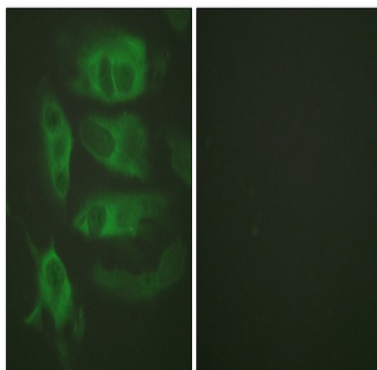
Background

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],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 receptor.,similarity:Belongs to the G-protein coupled receptor 1 family.,subunit:Binds SLC9A3R1 and GPRASP1.,

Research Area

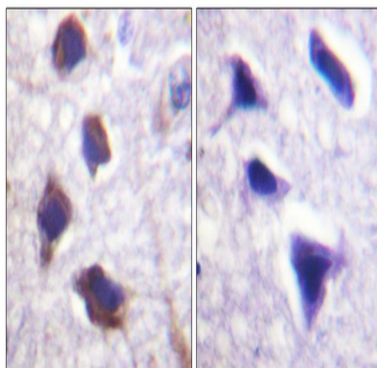
Calcium;Neuroactive ligand-receptor interaction;Endocytosis;

Image Data

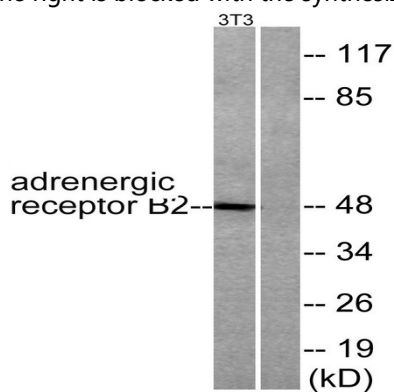


Immunofluorescence analysis of HeLa cells, using Adrenergic Receptor beta2 Antibody. The picture on the right is blocked with the synthesized peptide.

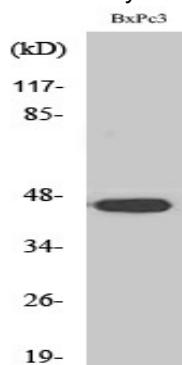
Product Name: AR- β 2 Rabbit Polyclonal Antibody
Catalog #: APRab07196



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.



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

Note

For research use only.