Best Tools for immunology Research

AR-β2 (phospho Ser346) Polyclonal Antibody

Catalog No :	YP0942
Reactivity :	Human;Rat;Mouse;
Applications :	WB;IHC;IF;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
Human Gene Id :	154
Human Swiss Prot No :	P07550
Mouse Swiss Prot No :	P18762
Immunogen :	The antiserum was produced against synthesized peptide derived from human Adrenergic Receptor beta2 around the phosphorylation site of Ser346. AA range:321-370
Specificity :	Phospho-AR-β2 (S346) Polyclonal Antibody detects endogenous levels of AR-β2 protein only when phosphorylated at S346.
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. 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 : 40kD

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

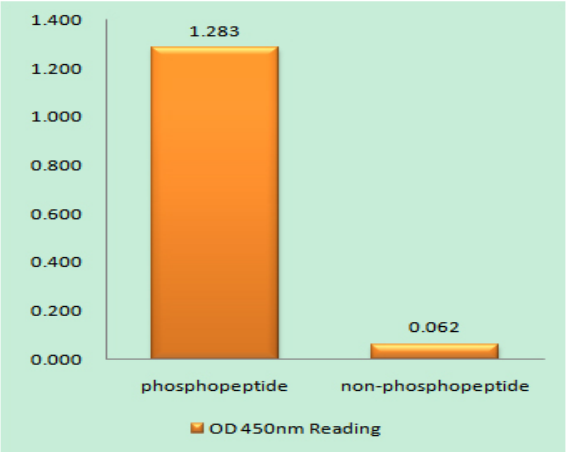
Background : This gene encodes beta-2-adrenergic receptor which is a member of the G protein-coupled receptor superfamily. This receptor is directly associated with one of its ultimate effectors, the class C L-type calcium channel Ca(V)1.2. This receptor-channel complex also contains a G protein, an 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

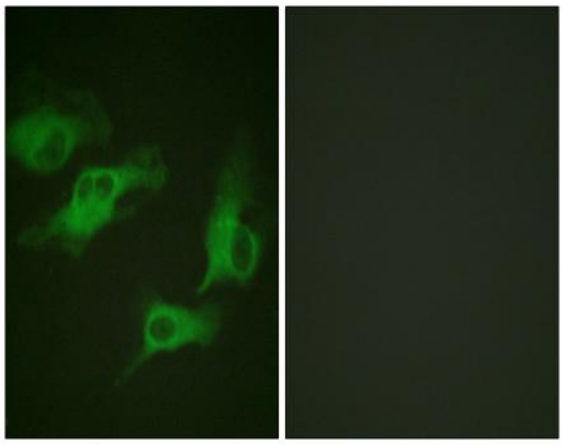
Subcellular Location : Cell membrane ; Multi-pass membrane protein . Early endosome . Golgi apparatus . Colocalizes with VHL at the cell membrane (PubMed:19584355). Activated receptors are internalized into endosomes prior to their degradation in lysosomes (PubMed:20559325). Activated receptors are also detected within the Golgi apparatus (PubMed:27481942). .

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

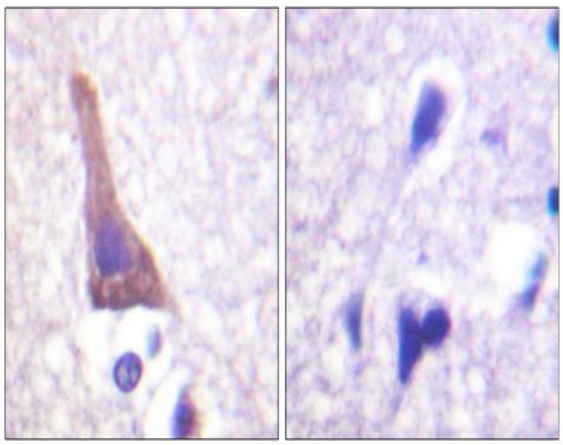
Products Images



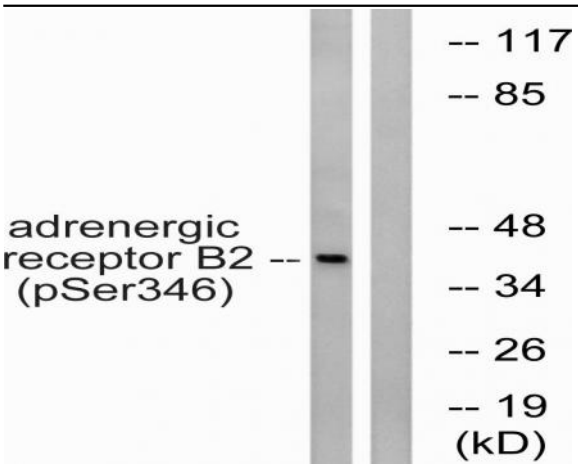
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Adrenergic Receptor beta2 (Phospho-Ser346) Antibody



Immunofluorescence analysis of HeLa cells, using Adrenergic Receptor beta2 (Phospho-Ser346) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using Adrenergic Receptor beta2 (Phospho-Ser346) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HepG2 cells treated with nocodazole 1ug/ml 16h, using Adrenergic Receptor beta2 (Phospho-Ser346) Antibody. The lane on the right is blocked with the phospho peptide.