

**AR-β2 (phospho Ser355/S356) Polyclonal Antibody**

<b>Catalog No :</b>	YP0712
<b>Reactivity :</b>	Human;Mouse;Rat;Monkey
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Adrenergic Receptor β2
<b>Fields :</b>	>>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
<b>Gene Name :</b>	ADRB2
<b>Protein Name :</b>	Beta-2 adrenergic receptor
<b>Human Gene Id :</b>	154
<b>Human Swiss Prot No :</b>	P07550
<b>Mouse Gene Id :</b>	11555
<b>Mouse Swiss Prot No :</b>	P18762
<b>Rat Swiss Prot No :</b>	P10608
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Adrenergic Receptor B2 around the phosphorylation site of Ser355 and Ser356. AA range:331-380
<b>Specificity :</b>	Phospho-AR-β2 (S355/S356) Polyclonal Antibody detects endogenous levels of AR-β2 protein only when phosphorylated at S355/S356.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

**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;

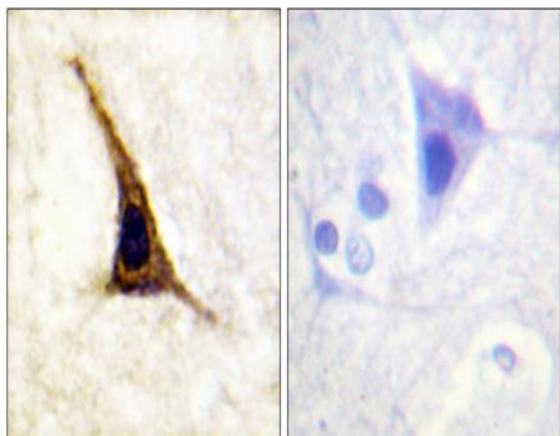
**Background :** This gene encodes beta-2-adrenergic receptor which is a member of the G protein-coupled receptor superfamily. This receptor is directly associated with one of its ultimate effectors, the class C L-type calcium channel Ca(V)1.2. This receptor-channel complex also contains a G protein,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

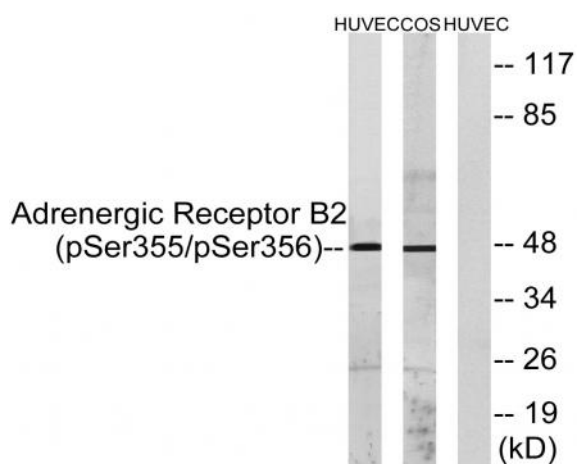
**Subcellular Location :** Cell membrane ; Multi-pass membrane protein . Early endosome . Golgi apparatus . Colocalizes with VHL at the cell membrane (PubMed:19584355). Activated receptors are internalized into endosomes prior to their degradation in lysosomes (PubMed:20559325). Activated receptors are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

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

## Products Images



Immunohistochemistry analysis of paraffin-embedded human brain, using Adrenergic Receptor B2 (Phospho-Ser355+Ser356) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HUVEC cells treated with serum 20% 15' and COS7 cells treated with serum 20% 15', using Adrenergic Receptor B2 (Phospho-Ser355+Ser356) Antibody. The lane on the right is blocked with the phospho peptide.