



# AR-β2 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-13151
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;IHC;IF;FCM;ELISA
<b>Gene Name</b>	ADRB2
<b>Protein Name</b>	Beta-2 adrenergic receptor
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Adrenergic Receptor beta2. AA range:321-370
<b>Specificity</b>	AR-β2 Polyclonal Antibody detects endogenous levels of AR-β2 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. Flow cytometry: 1/200 - 1/400. ELISA: 1/5000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	ADRB2; ADRB2R; B2AR; Beta-2 adrenergic receptor; Beta-2 adrenoreceptor; Beta-2 adrenoceptor
<b>Observed Band</b>	47kD
<b>Cell Pathway</b>	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). .
<b>Tissue Specificity</b>	Blood,Brain,Fetal brain,Heart,Leukocyte,Prostate,Thyroid,
<b>Function</b>	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

**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],

**matters needing attention**

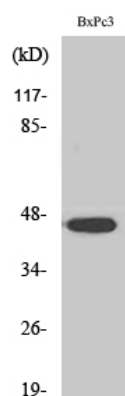
Avoid repeated freezing and thawing!

**Usage suggestions**

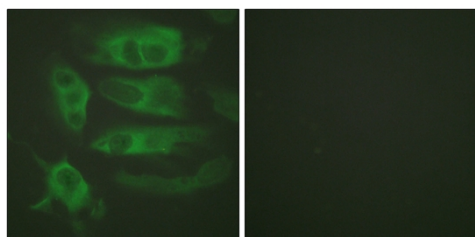
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



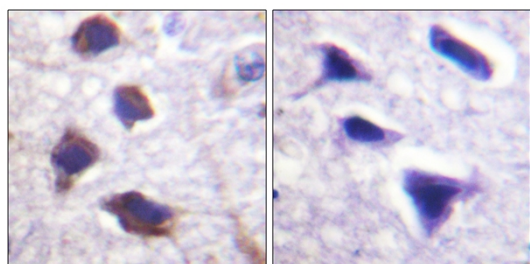
## Products Images



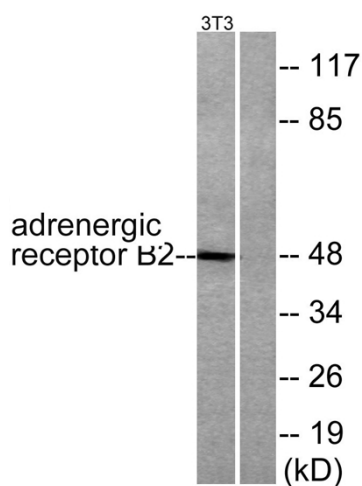
Western Blot analysis of various cells using AR-β2 Polyclonal Antibody



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.