

## AR- $\beta$ 2 Polyclonal Antibody

<b>Catalog No :</b>	YT0361
<b>Reactivity :</b>	Human;Rat;Mouse;
<b>Applications :</b>	WB;IHC;IF;FCM;ELISA
<b>Target :</b>	Adrenergic Receptor $\beta$ 2
<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 Swiss Prot No :</b>	P18762
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Adrenergic Receptor beta2. AA range:321-370
<b>Specificity :</b>	AR- $\beta$ 2 Polyclonal Antibody detects endogenous levels of AR- $\beta$ 2 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>Dilution :</b>	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.
<b>Purification :</b>	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],

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**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

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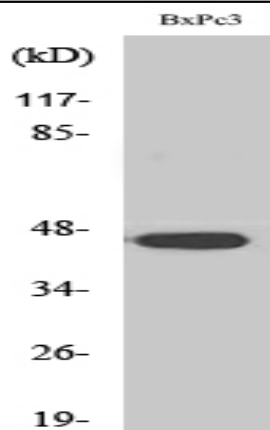
**Subcellular Location :** Cell membrane ; Multi-pass membrane protein . Early endosome . Golgi apparatus . Colocalizes with VHL at the cell membrane (PubMed:19584355). Activated receptors are internalized into endosomes prior to their degradation in lysosomes (PubMed:20559325). Activated receptors are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

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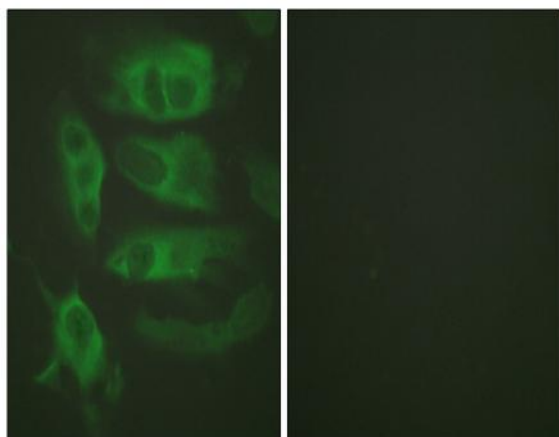
**Expression :** Blood,Brain,Fetal brain,Heart,Leukocyte,Prostate,Thyroid,

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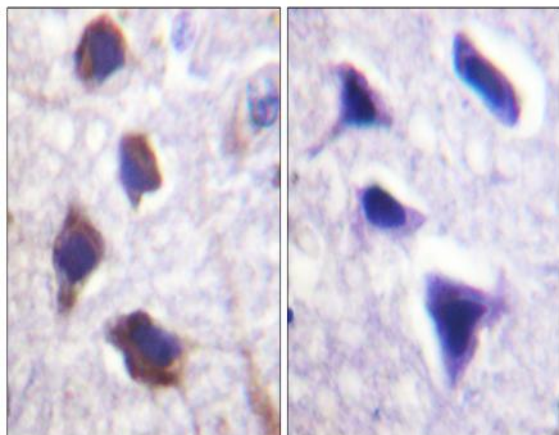
## Products Images



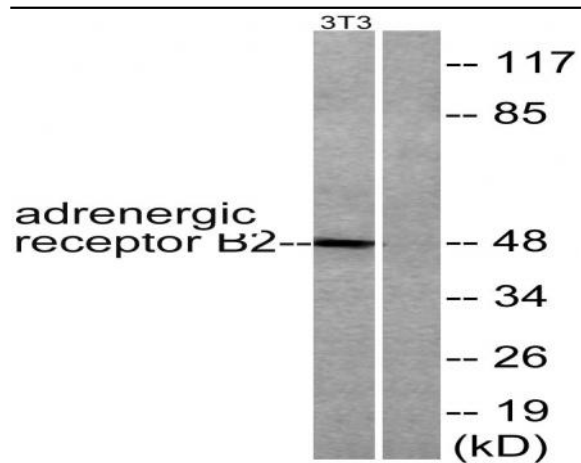
Western Blot analysis of various cells using AR- $\beta$ 2 Polyclonal Antibody



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.