

AR- β 2 Polyclonal Antibody

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| Catalog No : | YT0361 |
| Reactivity : | Human;Rat;Mouse; |
| Applications : | WB;IHC;IF;FCM;ELISA |
| Target : | Adrenergic Receptor β 2 |
| 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. AA range:321-370 |
| Specificity : | AR- β 2 Polyclonal Antibody detects endogenous levels of AR- β 2 protein. |
| 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. Flow cytometry: 1:200 - 1:400. ELISA: 1:5000. 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 : 47kD

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

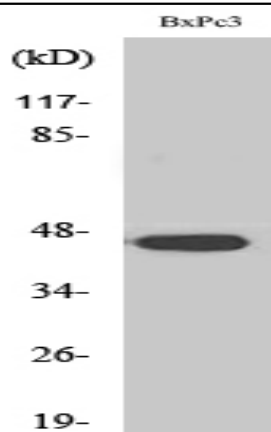
Background : This gene encodes beta-2-adrenergic receptor which is a member of the G protein-coupled receptor superfamily. This receptor is directly associated with one of its ultimate effectors, the class C L-type calcium channel Ca(V)1.2. This receptor-channel complex also contains a G protein, an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

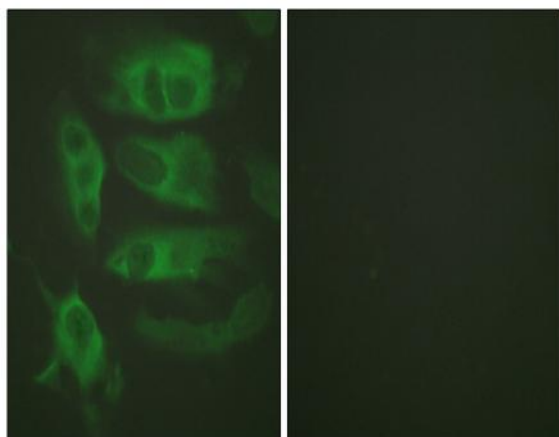
Subcellular Location : Cell membrane ; Multi-pass membrane protein . Early endosome . Golgi apparatus . Colocalizes with VHL at the cell membrane (PubMed:19584355). Activated receptors are internalized into endosomes prior to their degradation in lysosomes (PubMed:20559325). Activated receptors are also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

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

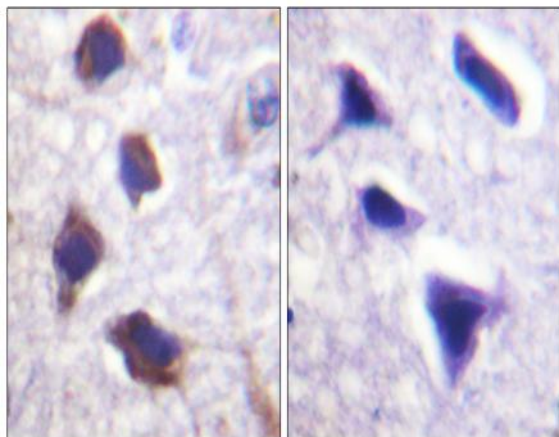
Products Images



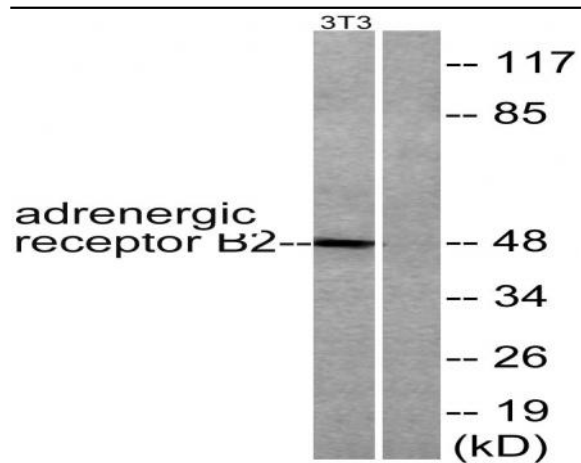
Western Blot analysis of various cells using AR- β 2 Polyclonal Antibody



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.