



Rabbit Anti-phospho-ADRB2 (Ser346) antibody

SL3002R

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| Product Name: | phospho-ADRB2 (Ser346) |
| Chinese Name: | 磷酸化肾上腺素能受体β2抗体 |
| Alias: | β2-adrenergic receptor; ADRB2; ADRB2R; ADRBR; Adrenergic beta 2 receptor surface; B2AR; BAR; beta 2 adrenoceptor; Beta 2 adrenoceptor; BETA2AR; Catecholamine receptor; beta2-adrenergic receptor; ADRB2_HUMAN. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human,Mouse,Rat,Dog,Horse,Sheep, |
| Applications: | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 46kDa |
| Cellular localization: | cytoplasmicThe cell membrane |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated Synthesised phosphopeptide derived from human ADRB2 around the phosphorylation site of Ser346:RS(p-S)LK |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| PubMed: | PubMed |
| Product Detail: | Beta 2 Adrenergic Receptor 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 contains no introns in either its coding or untranslated sequences. Different polymorphic forms, point mutations, and/or downregulation of this gene are associated with nocturnal asthma, obesity and type 2 diabetes. Expression of the beta 2 Adrenergic Receptor has been reported in adipose, blood, brain, heart, lung, nose, pancreas, skeletal muscle, skin, and vessel.

Function:

Beta-adrenergic receptors mediate the catecholamine-induced activation of adenylyl 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.

Subunit:

Binds SLC9A3R1 and GPRASP1. Interacts with ARRB1 and ARRB2. Interacts with SRC, USP20 and USP33. Interacts with VHL; the interaction, which is increased on hydroxylation of ADRB2, ubiquitinates ADRB2 leading to its degradation. Interacts with EGLN3; the interaction hydroxylates ADRB2 facilitating VHL-E3 ligase-mediated ubiquitination.

Subcellular Location:

Cell membrane; Multi-pass membrane protein.

Post-translational modifications:

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.

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.

Phosphorylation of Tyr-141 is induced by insulin and leads to supersensitization of the receptor.

Polyubiquitinated. Agonist-induced ubiquitination leads to sort internalized receptors to the lysosomes for degradation. Deubiquitination by USP20 and USP33, leads to ADRB2 recycling and resensitization after prolonged agonist stimulation. USP20 and USP33 are constitutively associated and are dissociated immediately after agonist stimulation.

Ubiquitination by the VHL-E3 ligase complex is oxygen-dependent.

Hydroxylation by EGLN3 occurs only under normoxia and increases the interaction with VHL and the subsequent ubiquitination and degradation of ADRB2.

Similarity:

Belongs to the G-protein coupled receptor 1 family. Adrenergic receptor subfamily. ADRB2 sub-subfamily.

SWISS:
P07550

Gene ID:
154

Database links:

[Entrez Gene: 154](#) Human

[Entrez Gene: 11555](#) Mouse

[Entrez Gene: 24176](#) Rat

[Omim: 109690](#) Human

[SwissProt: P07550](#) Human

[SwissProt: P18762](#) Mouse

[SwissProt: P10608](#) Rat

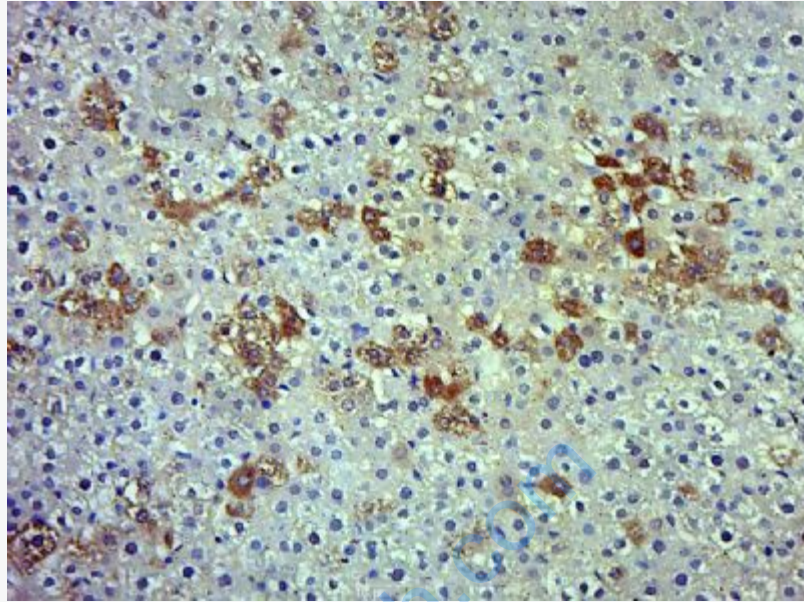
[Unigene: 2551](#) Human

[Unigene: 5598](#) Mouse

[Unigene: 10206](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-ADRB2 (Ser346)) Polyclonal Antibody, Unconjugated (SL3002R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.