ARG63852
anti-ADRB2 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes ADRB2
Tested Reactivity	Hu
Predict Reactivity	Cow, Dog
Tested Application	WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	ADRB2
Species	Human
Immunogen	C-HQGTVPSDNIDSQ
Conjugation	Un-conjugated
Alternate Names	B2AR; BAR; BETA2AR; Beta-2 adrenergic receptor; ADRB2R; ADRBR; Beta-2 adrenoceptor; Beta-2 adrenoreceptor

Application Instructions

Application table

Application	Dilution
WB	0.3 - 1 µg/ml

Application Note

WB: Recommend incubate at RT for 1h.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

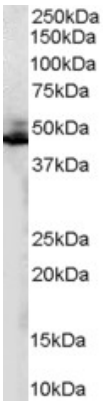
Properties

Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

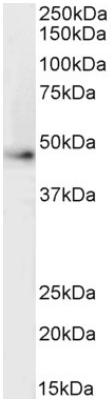
Database links	GeneID: 154 Human Swiss-port # P07550 Human
Background	This gene encodes beta-2-adrenergic receptor which is a member of the G protein-coupled receptor superfamily. This receptor is directly associated with one of its ultimate effectors, the class C L-type calcium channel Ca(V)1.2. This 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]
Research Area	Cell Biology and Cellular Response antibody; Signaling Transduction antibody
Calculated Mw	46 kDa
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. Phosphorylated by PKA and BARK upon agonist stimulation, which mediates homologous desensitization of the receptor. PKA-mediated phosphorylation seems to facilitate phosphorylation by BARK. 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 (PubMed:19424180, PubMed:20559325). 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.

Images



ARG63852 anti-ADRB2 antibody WB image

Western blot: Human liver lysate (35 µg protein in RIPA buffer) stained with ARG63852 anti-ADRB2 antibody at 0.2 µg/ml dilution.



ARG63852 anti-ADRB2 antibody WB image

Western blot: 35 µg of HepG2 cell lysate (in RIPA buffer) stained with ARG63852 anti-ADRB2 antibody at 0.5 µg/ml dilution and incubated at RT for 1 hour.