

### **Goat Anti-ADRB1 Antibody**

Peptide-affinity purified goat antibody Catalog # AF1032a

## **Specification**

# **Goat Anti-ADRB1 Antibody - Product Information**

Application WB, IHC, IF Primary Accession P08588

Other Accession
Reactivity
Predicted

NP\_000675, 153
Human, Mouse, Rat
Dog

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 51224

# **Goat Anti-ADRB1 Antibody - Additional Information**

#### Gene ID 153

#### **Other Names**

Beta-1 adrenergic receptor, Beta-1 adrenoreceptor, Beta-1 adrenoceptor, ADRB1, ADRB1R, B1AR

#### **Format**

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

Goat Anti-ADRB1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Goat Anti-ADRB1 Antibody - Protein Information**

Name ADRB1 (HGNC:285)

Synonyms ADRB1R, B1AR

#### **Function**

Beta-adrenergic receptors mediate the catecholamine-induced activation of adenylate cyclase through the action of G proteins. This receptor binds epinephrine and norepinephrine with approximately equal affinity. Mediates Ras activation through G(s)-alpha- and cAMP-mediated signaling. Involved in the regulation of sleep/wake behaviors (PubMed:<a



href="http://www.uniprot.org/citations/31473062" target=" blank">31473062</a>).

### **Cellular Location**

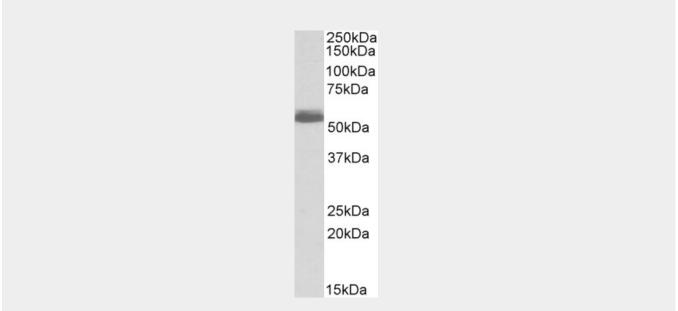
Cell membrane {ECO:0000250|UniProtKB:P18090}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P18090}. Early endosome. Note=Colocalizes with RAPGEF2 at the plasma membrane (By similarity). Localized at the plasma membrane. Found in the Golgi upon GOPC overexpression.

# **Goat Anti-ADRB1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

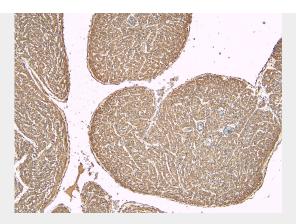
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Goat Anti-ADRB1 Antibody - Images

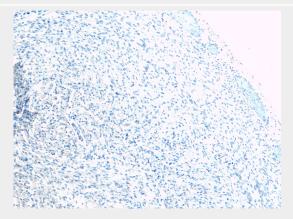


AF1032a (0.5  $\mu$ g/ml) staining of human heart lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





AF1032a ( $6\mu g/ml$ ) staining of paraffin embedded Human Heart. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.

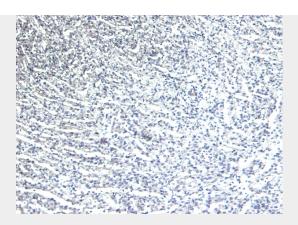


AF1032a Negative Control showing staining of paraffin embedded Human Heart, with no primary antibody.

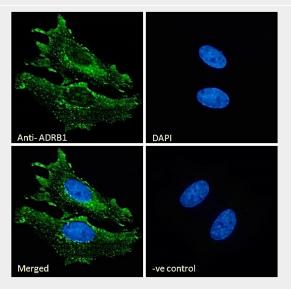


EB07133 ( $6\mu g/ml$ ) staining of paraffin embedded Human Heart. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.





EB07133 Negative Control showing staining of paraffin embedded Human Heart, with no primary antibody.



EB07133 Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing membrane and cytoplasmic staining. The nuclear sta

## Goat Anti-ADRB1 Antibody - Background

The adrenergic receptors (subtypes alpha 1, alpha 2, beta 1, and beta 2) are a prototypic family of guanine nucleotide binding regulatory protein-coupled receptors that mediate the physiological effects of the hormone epinephrine and the neurotransmitter norepinephrine. Specific polymorphisms in this gene have been shown to affect the resting heart rate and can be involved in heart failure.

#### Goat Anti-ADRB1 Antibody - References

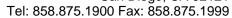
Functional effects of beta(1)-adrenoceptor polymorphisms on the hemodynamic response to dobutamine with and without beta-blocker administration. Kindermann M, et al. Clin Res Cardiol, 2010 Sep 6. PMID 20821015.

The Arg16Gly-□(2)-adrenoceptor single nucleotide polymorphism: exercise capacity and survival in patients with end-stage heart failure. Leineweber K, et al. Naunyn Schmiedebergs Arch Pharmacol, 2010 Oct. PMID 20803192.

Association of the beta-1 adrenergic receptor carboxyl terminal variants with left ventricular hypertrophy among diabetic and non-diabetic survivors of acute myocardial infarction. Hakalahti AE, et al. Cardiovasc Diabetol, 2010 Aug 23. PMID 20731869.

Association between Genetic Polymorphisms of Adrenergic Receptor and Diurnal Intraocular







Pressure in Japanese Normal-Tension Glaucoma. Gao Y, et al. Ophthalmology, 2010 Aug 10. PMID 20705341.

Polymorphic variants of beta1 adrenergic receptor gene (Ser49Gly & Arg389Gly) in healthy Tamilian volunteers. Ramu P, et al. Indian J Med Res, 2010 Jul. PMID 20693591.