

## **Goat Anti-ADRA2A Antibody**

Peptide-affinity purified goat antibody Catalog # AF1031a

### **Specification**

# **Goat Anti-ADRA2A Antibody - Product Information**

Application IF, ICC, E
Primary Accession P08913

Other Accession <u>NP\_000672</u>, <u>150</u>

Reactivity

Predicted Human, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG Calculated MW 50647

# Goat Anti-ADRA2A Antibody - Additional Information

#### Gene ID 150

## **Other Names**

Alpha-2A adrenergic receptor, Alpha-2 adrenergic receptor subtype C10, Alpha-2A adrenoreceptor, Alpha-2A adrenoceptor, Alpha-2AAR, ADRA2A, ADRA2R, ADRAR

#### **Dilution**

IF~~1:50~200 ICC~~N/A E~~N/A

#### **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-ADRA2A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Goat Anti-ADRA2A Antibody - Protein Information**

Name ADRA2A (HGNC:281)

Synonyms ADRA2R, ADRAR



#### **Function**

Alpha-2 adrenergic receptors mediate the catecholamine- induced inhibition of adenylate cyclase through the action of G proteins. The rank order of potency for agonists of this receptor is oxymetazoline > clonidine > epinephrine > norepinephrine > phenylephrine > dopamine > p-synephrine > p-tyramine > serotonin = p- octopamine. For antagonists, the rank order is yohimbine > phentolamine = mianserine > chlorpromazine = spiperone = prazosin > propanolol > alprenolol = pindolol.

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein

# **Goat Anti-ADRA2A Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### Goat Anti-ADRA2A Antibody - Images

## Goat Anti-ADRA2A Antibody - Background

Alpha-2-adrenergic receptors are members of the G protein-coupled receptor superfamily. They include 3 highly homologous subtypes: alpha2A, alpha2B, and alpha2C. These receptors have a critical role in regulating neurotransmitter release from sympathetic nerves and from adrenergic neurons in the central nervous system. Studies in mouse revealed that both the alpha2A and alpha2C subtypes were required for normal presynaptic control of transmitter release from sympathetic nerves in the heart and from central noradrenergic neurons; the alpha2A subtype inhibited transmitter release at high stimulation frequencies, whereas the alpha2C subtype modulated neurotransmission at lower levels of nerve activity. This gene encodes alpha2A subtype and it contains no introns in either its coding or untranslated sequences.

### Goat Anti-ADRA2A Antibody - References

Regional differences in cerebral perfusion associated with the alpha-2A-adrenergic receptor genotypes in attention deficit hyperactivity disorder. Kim BN, et al. J Psychiatry Neurosci, 2010 Sep. PMID 20731965.

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.

Insertion/insertion genotype of  $\square$ (2B)-adrenergic receptor gene polymorphism is associated with silent myocardial ischemia in patients with type 2 diabetes mellitus. Chen QJ, et al. Clin Biochem, 2010 Oct. PMID 20692245.

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Resting sympathetic nerve activity is related to age, sex and arterial pressure but not to 2-adrenergic receptor subtype. Maqbool A, et al. J Hypertens, 2010 Oct. PMID 20613626.