

Anti-Alpha 2A Adrenergic Receptor Antibody

Catalog # ABO11507

Specification

Anti-Alpha 2A Adrenergic Receptor Antibody - Product Information

ApplicationWBPrimary AccessionP08913HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Alpha-2A adrenergic receptor(ADRA2A) detection. Tested withWB in Human;Mouse;Rat.WB

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Alpha 2A Adrenergic Receptor 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

Calculated MW 48957 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization Cell membrane ; Multi-pass membrane protein .

Protein Name Alpha-2A adrenergic receptor

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human alpha 2a Adrenergic Receptor(213-228aa ILVYVRIYQIAKRRTR), identical to the related mouse and rat sequences.

Purification Immunogen affinity purified.



Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the G-protein coupled receptor 1 family. Adrenergic receptor subfamily. ADRA2A sub-subfamily.

Anti-Alpha 2A Adrenergic Receptor Antibody - Protein Information

Name ADRA2A (<u>HGNC:281</u>)

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

Anti-Alpha 2A Adrenergic Receptor Antibody - Protocols

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

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

Anti-Alpha 2A Adrenergic Receptor Antibody - Images





Anti-alpha 2a Adrenergic Receptor antibody, ABO11507, Western blottingLane 1: HELA Cell LysateLane 2: PANC Cell Lysate

Anti-Alpha 2A Adrenergic Receptor Antibody - Background

The alpha-2A adrenergic receptor, also known as ADRA2A denotes the human gene encoding it. This gene is mapped to 10q25.2. 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. Alpha-2 adrenergic receptors mediate the catecholamine-induced inhibition of adenylate cyclase through the action of G proteins.