

Anti-ADRA1A Picoband Antibody

Catalog # ABO12438

Specification

Anti-ADRA1A Picoband Antibody - Product Information

ApplicationWBPrimary AccessionP35348HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Alpha-1A adrenergic receptor(ADRA1A) detection. Tested withWB in Human; Mouse; Rat.WB

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

Anti-ADRA1A Picoband Antibody - Additional Information

Gene ID 148

Other Names Alpha-1A adrenergic receptor, Alpha-1A adrenoreceptor, Alpha-1A adrenoceptor, Alpha-1C adrenergic receptor, Alpha-adrenergic receptor 1c, ADRA1A, ADRA1C

Calculated MW 51487 MW KDa

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

Subcellular Localization

Nucleus membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Location at the nuclear membrane facilitates heterooligomerization and regulates ERK-mediated signaling in cardiac myocytes. Colocalizes with GNAQ, PLCB1 as well as LAP2 at the nuclear membrane of cardiac myocytes.

Tissue Specificity

Expressed in heart, brain, liver and prostate, but not in kidney, lung, adrenal, aorta and pituitary. Within the prostate, expressed in the apex, base, periurethral and lateral lobe. Isoform 4 is the most abundant isoform expressed in the prostate with high levels also detected in liver and heart.

Protein Name Alpha-1A adrenergic receptor

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



Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human ADRA1A (335-373aa KAFQNVLRIQCLCRKQSSKHALGYTLHPPSQAVEGQHKD), different from the related mouse and rat sequences by four amino acids.

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.

Anti-ADRA1A Picoband Antibody - Protein Information

Name ADRA1A

Synonyms ADRA1C

Function

This alpha-adrenergic receptor mediates its action by association with G proteins that activate a phosphatidylinositol- calcium second messenger system. Its effect is mediated by G(q) and G(11) proteins. Nuclear ADRA1A-ADRA1B heterooligomers regulate phenylephrine(PE)-stimulated ERK signaling in cardiac myocytes.

Cellular Location

Nucleus membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Cytoplasm Membrane, caveola. Note=Location at the nuclear membrane facilitates heterooligomerization and regulates ERK- mediated signaling in cardiac myocytes. Colocalizes with GNAQ, PLCB1 as well as LAP2 at the nuclear membrane of cardiac myocytes

Tissue Location

Expressed in heart, brain, liver and prostate, but not in kidney, lung, adrenal, aorta and pituitary. Within the prostate, expressed in the apex, base, periurethral and lateral lobe. Isoform 4 is the most abundant isoform expressed in the prostate with high levels also detected in liver and heart.

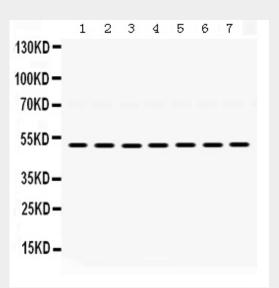
Anti-ADRA1A Picoband Antibody - Protocols

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-ADRA1A Picoband Antibody - Images





Anti- ADRA1A Picoband antibody, ABO12438, Western blottingAll lanes: Anti ADRA1A (ABO12438) at 0.5ug/mlLane 1: Rat Cardiac Muscle Tissue Lysate at 50ugLane 2: Rat Brain Tissue Lysate at 50ugLane 3: Rat Liver Tissue Lysate at 50ugLane 4: Mouse Liver Tissue Lysate at 50ugLane 5: Mouse Lung Tissue Lysate at 50ugLane 6: 22RV1 Whole Cell Lysate at 40ugLane 7: SMMC Whole Cell Lysate at 40ugPredicted bind size: 51KDObserved bind size: 51KD

Anti-ADRA1A Picoband Antibody - Background

ADRA1A, also known as alpha-1A adrenergic receptor, is an alpha-1 adrenergic receptor, and also denotes the human gene encoding it. This gene is mapped to 8p21.2. Alpha-1-adrenergic receptors are G protein-coupled transmembrane receptors that mediate actions in the sympathetic nervous system through the binding of the catecholamines, epinephrine and norepinephrine. It has been found that ADRA1A transcripts in heart, brain, liver, and prostate. ADRA1A is the predominant ADRA1 subtype in liver and heart, and it can mediate the contraction of prostate smooth muscle.