Datasheet for ABIN7042906

anti-beta 2 Adrenergic Receptor antibody (Extracellular) (PE)

2 Images

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Overview

Quantity:	50 µL
Target:	beta 2 Adrenergic Receptor (ADRB2)
Binding Specificity:	AA 15-30, Extracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This beta 2 Adrenergic Receptor antibody is conjugated to PE
Application:	Flow Cytometry (FACS), Live Cell Imaging (LCI)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to β2-Adrenergic Receptor (extracellular) conjugated to the fluorescent dye R-Phycoerythrin (R-PE)
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: Peptide (C)NGSRAPDHDVTQERDE, corresponding to amino acid residues 15-30 of mouse beta-2-Adrenoceptor
Isotype:	IgG
Specificity:	Extracellular, N-terminus
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Human - 15,16 amino acid residues identical, rat - 14
Characteristics:	A Rabbit Polyclonal Antibody to β2-Adrenergic Receptor (extracellular) conjugated to the

Product Details

	fluorescent dye R-Phycoerythrin (R-PE)
Purification:	Affinity purified on immobilized antigen.

Target Details

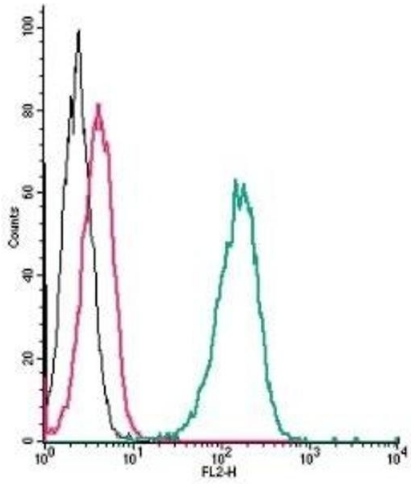
Target:	beta 2 Adrenergic Receptor (ADRB2)
Alternative Name:	ADRB2 (ADRB2 Products)
Background:	β2-Adrenergic receptor, Beta-2 Adrenergic receptor, Beta-2 Adrenoceptor, B2AR, ADRB2,Adrenergic receptors (also called adrenoceptors) are the receptors for the catecholamines adrenaline and noradrenaline (called epinephrine and norepinephrine in the United States). Adrenaline and noradrenaline play important roles in the control of blood pressure, myocardial contractile rate and force, airway reactivity, and a variety of metabolic and central nervous system functions. Adrenergic receptors are members of the G-protein coupled receptor (GPCR) superfamily of membrane proteins. They share a common structure of seven putative transmembrane domains, an extracellular amino terminus, and a cytoplasmic carboxyl terminus.Adrenoceptors are divided into three types: α1, α2 and β-adrenoceptors. Each type is further divided into at least three subtypes: α1A, α1B, α1D, α2A, α2B, α2C, β1, β2, β3.1,2 Adrenoceptors are expressed in nearly all peripheral tissues and in the central nervous system.1,2 β2-Adrenoceptors are mainly postsynaptic receptors. They are expressed on a number of tissues including blood vessels, bronchi, gastrointestinal tract (GIT), skeletal muscle, liver and mast cell.3 Functional β2-adrenoceptors were also found on lymphocytes, macrophages and neutrophils.4,5 They are also the only β-adrenoceptor subtype expressed in keratinocytes, fibroblasts and melanocytes.3 Activation of β2-adrenoceptors results in vasodilation, relaxation of the GIT, inhibition of histamine release from mast cells and bronchodilation. Selective agonists of β2-adrenoceptors are used to treat asthma and other related bronchospastic conditions such as Chronic obstructive pulmonary disease (COPD).5 Alternative names: β2-Adrenergic receptor, Beta-2 Adrenergic receptor, Beta-2 Adrenoceptor, B2AR, ADRB2
Gene ID:	11555
NCBI Accession:	NM_000024
UniProt:	P18762
Pathways:	cAMP Metabolic Process, Synaptic Membrane, Regulation of G-Protein Coupled Receptor Protein Signaling, Brown Fat Cell Differentiation

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: N/A
Comment:	Cited Application: FC Negative Control: (ABIN7582046) Blocking Peptide: (ABIN7234676)
Restrictions:	For Research Use only

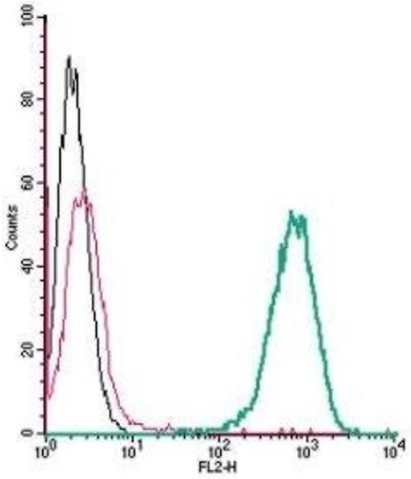
Handling

Format:	Lyophilized
Reconstitution:	Recosntitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 1 % BSA with 0.05 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C, protected from the light, for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).



Flow Cytometry

Image 1. Cell surface detection of β2-Adrenergic Receptor by direct flow cytometry in live intact human THP-1 monocytic leukemia cells: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-PE.(green line) Cells + β2-Adrenergic Receptor (extracellular)-PE Antibody ((ABIN7042906, ABIN7045470, ABIN7045471 and ABIN7045472), 2.5 µg.



Flow Cytometry

Image 2. Cell surface detection of β2-Adrenergic Receptor by direct flow cytometry in live intact mouse J774 macrophage cells: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-PE.(green line) Cells + Anti-β2-Adrenergic Receptor (extracellular)-PE Antibody (ABIN7042906, ABIN7045470, ABIN7045471 and ABIN7045472), 2.5 µg.