10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

beta 2 Adrenergic Receptor Antibody

Rabbit mAb
Catalog # AP91120

Product Information

Application	WB, IHC, IP
Primary Accession	P07550
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	ADRB2; ADRB2R; ADRBR; Adrenergic beta 2 receptor surface; Adrenoceptor beta 2 surface; B2AR; Beta-2 adrenoceptor; Catecholamine receptor;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	46459

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 IP 1:30
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human beta 2 Adrenergic Receptor
Description	Beta-adrenergic receptors mediate the catecholamine-induced activation of adenylate cyclase through the action of G proteins. The beta-2-adrenergic receptor binds epinephrine with an approximately 30-fold greater affinity than it does norepinephrine.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

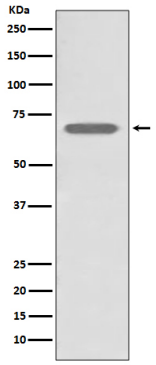
Name	ADRB2 (HGNC:286)
Synonyms	ADRB2R, B2AR
Function	G protein-coupled receptor for catecholamines that couples to both G(s) and G(i) proteins, activating bifurcated signaling pathways (PubMed:2831218, PubMed:7915137). ADRB2 binds epinephrine (Epi) with an approximately 30-fold greater affinity than norepinephrine (NE) (PubMed:2831218, PubMed:33093660, PubMed:7915137). In the heart, Epi- and NE-activated ADRB2 induces rapid and slow cardiomyocyte contraction rate, respectively (By similarity). Both NE and Epi promote coupling to G(s)/PKA pathway to regulate myocyte contraction rate (By similarity). Epi also promotes ADRB2 coupling to G(i) proteins to exert cardioprotective effects especially in the conditions of hypoxia and oxidative stress through the G(i)/PI3K/Akt signaling pathway (By similarity). ADRB2-G(s) signaling delivers proapoptotic signals in cardiomyocytes although G(i)-mediated survival effect appears to

predominate (By similarity). ADRB2 also transduces signals independently of PKA to regulate cellular pH by modulating Na(+)/H(+) exchanger SLC9A3 function (PubMed:9560162).

Cellular Location

Cell membrane; Multi-pass membrane protein. Golgi apparatus. Note=Colocalizes with VHL at the cell membrane (PubMed:19584355). Activated receptors are internalized into endosomes prior to their degradation in lysosomes (PubMed:20559325). Activated receptors are also detected within the Golgi apparatus (PubMed:27481942).

Images



Western blot analysis of beta 2 Adrenergic Receptor expression in A431 cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.