

beta 2 Adrenergic Receptor Antibody
Rabbit mAb
Catalog # AP91120**Specification****beta 2 Adrenergic Receptor Antibody - Product Information**

Application	WB, IHC, IP
Primary Accession	P07550
Reactivity	Rat
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 Da

beta 2 Adrenergic Receptor Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 IP~~N/A
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.

beta 2 Adrenergic Receptor Antibody - 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](http://www.uniprot.org/citations/2831218)), PubMed:[2831218](http://www.uniprot.org/citations/2831218)

href="http://www.uniprot.org/citations/7915137" target="_blank">7915137

ADRB2 binds epinephrine (Epi) with an approximately 30-fold greater affinity than norepinephrine (NE) (PubMed:[2831218](http://www.uniprot.org/citations/2831218), PubMed:[33093660](http://www.uniprot.org/citations/33093660), PubMed:[7915137](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/9560162)).

Cellular Location

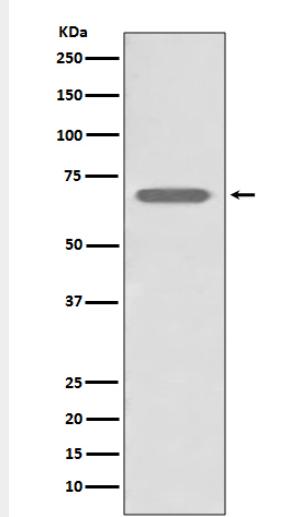
Cell membrane; Multi-pass membrane protein. Golgi apparatus. Note=Colocalizes with VHL at the cell membrane (PubMed:19584355). Activated receptors are internalized into endosomes prior to their degradation in lysosomes (PubMed:20559325). Activated receptors are also detected within the Golgi apparatus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

beta 2 Adrenergic Receptor 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 Cytometry](#)
- [Cell Culture](#)

beta 2 Adrenergic Receptor Antibody - Images



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