

# AR- $\beta$ 2 Polyclonal Antibody

Catalog # AP73231

## Product Information

---

|                          |                        |
|--------------------------|------------------------|
| <b>Application</b>       | WB, E                  |
| <b>Primary Accession</b> | <a href="#">P07550</a> |
| <b>Reactivity</b>        | Human, Mouse, Rat      |
| <b>Host</b>              | Rabbit                 |
| <b>Clonality</b>         | Polyclonal             |
| <b>Calculated MW</b>     | 46459                  |

## Additional Information

---

|                           |   |
|---------------------------|---|
| <b>Gene ID</b>            | 154   |
| <b>Other Names</b>        | ADRB2; ADRB2R; B2AR; Beta-2 adrenergic receptor; Beta-2 adrenoreceptor; Beta-2 adrenoceptor   |
| <b>Dilution</b>           | WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications. E~~N/A |
| <b>Format</b>             | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.                 |
| <b>Storage Conditions</b> | -20°C   |

## Protein Information

---

|                 |  |
|-----------------|--|
| <b>Name</b>     | ADRB2 ( <a href="#">HGNC:286</a> )   |
| <b>Synonyms</b> | ADRB2R, B2AR   |
| <b>Function</b> | G protein-coupled receptor for catecholamines that couples to both G(s) and G(i) proteins, activating bifurcated signaling pathways (PubMed: <a href="#">2831218</a> , PubMed: <a href="#">7915137</a> ). ADRB2 binds epinephrine (Epi) with an approximately 30-fold greater affinity than norepinephrine (NE) (PubMed: <a href="#">2831218</a> , PubMed: <a href="#">33093660</a> , PubMed: <a href="#">7915137</a> ). 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: <a href="#">9560162</a> ). |

## 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).

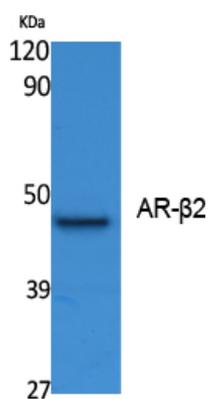
## Background

---

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.

## Images

---



Western Blot analysis of extracts from K562 cells, using AR-β2 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

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