

# beta 2 Adrenergic Receptor (BAR2) Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7263A

## **Product Information**

Application WB, E
Primary Accession P07550
Other Accession NP 000015

**Reactivity** Human, Rat, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 46459
Antigen Region 1-30

# **Additional Information**

Gene ID 154

Other Names Beta-2 adrenergic receptor, Beta-2 adrenoreceptor, Beta-2 adrenoceptor,

ADRB2, ADRB2R, B2AR

**Target/Specificity** This beta 2 Adrenergic Receptor (BAR2) antibody is generated from rabbits

immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human beta 2 Adrenergic Receptor

(BAR2).

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This

antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** beta 2 Adrenergic Receptor (BAR2) Antibody (N-term) is for research use only

and not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name ADRB2

**Synonyms** ADRB2R, B2AR

**Function** 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.

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Early endosome. 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).

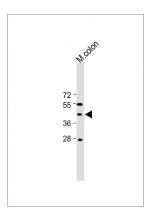
# **Background**

This gene encodes beta-2-adrenergic receptor which is a member of the G protein-coupled receptor superfamily. This receptor is directly associated with one of its ultimate effectors, the class C L-type calcium channel Ca(V)1.2. This receptor-channel complex also contains a G protein, an adenylyl cyclase, cAMP-dependent kinase, and the counterbalancing phosphatase, PP2A. The assembly of the signaling complex provides a mechanism that ensures specific and rapid signaling by this G protein-coupled receptor. This gene is intronless. Different polymorphic forms, point mutations, and/or downregulation of this gene are associated with nocturnal asthma, obesity and type 2 diabetes.

### References

Wolfarth, B., Metab. Clin. Exp. 56 (12), 1649-1651 (2007) Cherezov, V., Science 318 (5854), 1258-1265 (2007)

# **Images**



All lanes: Anti-beta 2 Adrenergic Receptor (BAR2) Antibody (N-term) at 1:1000 dilution Lane 1: mouse colon lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 47kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# **Citations**

- Enhanced Humoral Immunity in Mice Lacking CB1 and CB2 Receptors (Cnr1 -/- /Cnr2 -/- Mice) is not Due to Increased Splenic Noradrenergic Neuronal Activity.
- Matrix metalloproteinases cleave the beta2-adrenergic receptor in spontaneously hypertensive rats,

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