Product Datasheet

ADRB2 antibody

Catalog No: #38345

Package Size: #38345-1 50ul #38345-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

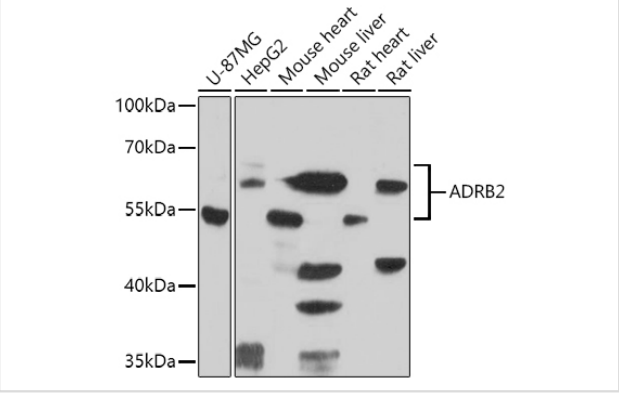
Description

Product Name	ADRB2 antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total ADRB2 protein.
Immunogen Type	Peptide
Immunogen Description	A synthetic peptide of human ADRB2.
Target Name	ADRB2
Other Names	ADRB2R; ADRBR; B2AR; BAR; BETA2AR;
Accession No.	Swiss-Prot#: P07550NCBI Gene ID: 154
Uniprot	P07550
GeneID	154;
SDS-PAGE MW	47kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

WB□1:500 - 1:2000

Images



Western blot analysis of extracts of various cell lines, using ADRB2 at 1:1000 dilution.

Background

There are four major Adrenergic Receptor (AR) subtypes (α1, α2, β1, β2). Each of the subtypes has been classified by their unique responses to agonists and antagonists. Adrenergic receptors belong to the family of guanine nucleotide-binding, regulatory protein-coupled receptors (GPCR) which transverse the plasma membrane seven times. The transmembrane regions are hydrophobic and are interconnected by hydrophilic loops (1). β2-Adrenergic Receptor (β2AR) is the most studied receptor of the catecholamine system. β2AR stimulation occurs through the catecholamines epinephrine (adrenaline) and norepinephrine (noradrenaline) acting as neuromodulators in the central nervous system and as hormones in the vascular system. β2AR activation results in coupling to heterotrimeric G proteins and activation of the second messengers cAMP and phosphatidylinositol, ultimately leading to changes in cellular physiology. GPCR kinases (GRKs) terminate β2AR signaling through phosphorylation of the GPCR and by recruiting β-arrestin. β-arrestin binding uncouples the receptor from the G protein, thereby terminating G proteinB¨Cmediated signaling (desensitization), and initiating clathrin-mediated endocytosis (internalization) of β2AR (2). β-adrenergic blocking agents (beta blockers) are drugs that block catecholamines from binding to βAR and are prescribed for cardiac arrhythmias, cardioprotection after myocardial infarction (heart attack), and hypertension (3).

Note: This product is for in vitro research use only