ADRB2 Conjugated Antibody

Catalog No: #C38345

Package Size: #C38345-AF350 100ul #C38345-AF405 100ul #C38345-AF488 100ul #C38345-AF555 100ul #C38345-AF594 100ul #C38345-AF647 100ul #C38345-AF680 100ul #C38345-AF750 100ul #C38345-Biotin 100ul

Orders: order@signalwayantibody.com
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Description

Product Name	ADRB2 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms
Specificity	The antibody detects endogenous level of total ADRB2 antibody.
Immunogen Description	A synthetic peptide of human ADRB2.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	ADRB2R; ADRBR; B2AR; BAR; BETA2AR;
Accession No.	Swiss-Prot#:P07550NCBI Gene ID:154
Uniprot	P07550
GeneID	154;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	47
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

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 proteinoΩ½Cmediated 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