ARRB1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	ARRB1, Polyclonal Antibody
Full Product Name	ARRB1 Rabbit pAb
Product Gene Name	anti-ARRB1 antibody
Product Synonym Names	ARRB1; ARB1; ARR1; Arrestin beta 1; Beta arrestin 1
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	In phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% Sodium Azide and 50% Glycerol.
Purity/Purification	Affinity Chromatography
Preparation and Storage	Store at 4 degree C short term. Store at -20 degree C long term. Avoid freeze/thaw cycle.
Molecular Weight	50kDa
OMIM	107940
3D Structure	ModBase 3D Structure for P49407
Immunogen	A synthesized peptide derived from human ARRB1
Cellular Localization	Cell Membrane, Cell Projection, Coated Pit, Cytoplasm, Cytoplasmic Vesicle, Membrane, Nucleus
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-ARRB1 antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF), Flow Cytometry (FC/FACS)
Application Notes for anti-ARRB1 antibody	WB: 1:500-1:1000 IHC: 1:50-1:200 ICC/IF: 1:50-1:200 FC/FACS: 1:20
Related Product Information for anti-ARRB1 antibody	Arrestin proteins function as negative regulators of G protein-coupled receptor (GPCR) signaling. Cognate ligand binding stimulates GPCR phosphorylation, which is followed by binding of arrestin to the phosphorylated GPCR and the eventual internalization of the receptor and desensitization of GPCR signaling. Four distinct mammalian arrestin proteins are known. Arrestin 1 (also known as S-arrestin) and arrestin 4 (X-arrestin) are localized to retinal rods and cones, respectively.
Other Notes	Small volumes of anti-ARRB1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for ARRB1 purchase	MBS8542391 is an antibody targeting ARRB1. Also known as ARRB1 Rabbit pAb. Reactive in Human, Mouse, Rat. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ARRB1. It may not necessarily be applicable to this product.

NCBI GI #	10880136

NCBI GeneID	408
NCBI Accession #	NP_004032.2
UniProt Primary Accession #	P49407
UniProt Related Accession #	P49407
GenBank Nucleotide #	NP_004032.2
NCBI Official Full Name	beta-arrestin-1 isoform A
NCBI Official Synonym Full Names	arrestin beta 1
NCBI Official Symbol	ARRB1
NCBI Official Synonym Symbols	ARB1; ARR1
UniProt Protein Name	Beta-arrestin-1
UniProt Synonym Protein Names	Arrestin beta-1
Protein Family	Beta-arrestin
UniProt Gene Name	ARRB1
UniProt Synonym Gene Names	ARR1
UniProt Entry Name	ARRB1_HUMAN
NCBI Protein Information	beta-arrestin-1
NCBI Summary for ARRB1	Members of arrestin/beta-arrestin protein family are thought to participate in agonist-mediated desensitization of G-protein-coupled receptors and cause specific dampening of cellular responses to stimuli such as hormones, neurotransmitters, or sensory signals. Arrestin beta 1 is a cytosolic protein and acts as a cofactor in the beta-adrenergic receptor kinase (BARK) mediated desensitization of beta-adrenergic receptors. Besides the central nervous system, it is expressed at high levels in peripheral blood leukocytes, and thus the BARK/beta-arrestin system is believed to play a major role in regulating receptor-mediated immune functions. Alternatively spliced transcripts encoding different isoforms of arrestin beta 1 have been described. [provided by RefSeq, Jan 2011]

UniProt Comments for ARRB1	ARRB1: regulates G-protein coupled receptors (GPCR) signaling by mediating both receptor desensitization and resensitization processes. Binds to GRK-phosphorylated receptor and sterically preclude its coupling to the cognate G- protein; the binding appears to require receptor determinants exposed only in the active receptor conformation. Targets many receptors for internalization by acting as endocytic adapters (CLASPs, clathrin-associated sorting proteins). Internalized arrestin-receptor complexes traffic to intracellular endosomes, where they remain uncoupled from G-proteins. Two different modes of arrestin-mediated internalization occur. Beta-arrestins function as multivalent adapter proteins that can switch the GPCR from a G-protein signaling mode that transmits short-lived signals from the plasma membrane via small molecule second messengers and ion channels to a beta-arrestin signaling mode that transmits a distinct set of signals that are initiated as the receptor internalizes and transits the intracellular compartment. Also involved in regulation of receptors other than GPCRs. Involved in Toll-like receptor and IL-1 receptor signaling through the interaction with TRAF6 which prevents TRAF6 autoubiquitination and oligomerization required for activation of NF-kappa-B and JUN. Binds phosphoinositides. Binds inositolhexakisphosphate (InsP6). Involved in IL8-mediated granule release in neutrophils. Interacts with phosphorylated ADRB2 and CHRM2. Interacts with SRC (via the SH3 domain and the protein kinase domain); the interaction is independent of the phosphorylation state of SRC C-terminus. Interacts with RAF1, CHUK, IKBKB and Nik. Interacts with DVL1 and DVL2; the interaction is enhanced by DVL phosphorylation. Interacts with IGF1R. Belongs to the arrestin family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Adaptor/scaffold Chromosomal Location of Human Ortholog: 11q13 Cellular Component: nucleoplasm; Golgi membrane; cytoplasmic vesicle membrane; lysosomal membrane; cytoplasm; plasma membrane; heterotrimeric G-protein complex; coated pit; cytoplasmic vesicle; pseudopodium; cytosol; nucleus; chromatin Molecular Function: angiotensin receptor binding; enzyme inhibitor activity; insulin-like growth factor receptor binding; protein binding; histone acetyltransferase activity; mitogen-activated protein kinase kinase binding; ubiquitin protein ligase binding; caspase inhibitor activity; transcription factor binding; GTPase activator activity Biological Process: transcription from RNA polymerase II promoter; proteasomal ubiquitin-dependent protein catabolic process; platelet activation; Notch signaling pathway; positive regulation of protein binding; positive regulation of receptor internalization; positive regulation of Rho protein signal transduction; protein ubiquitination; negative regulation of caspase activity; positive regulation of peptidyl-serine phosphorylation; protein transport; G-protein coupled receptor internalization; inhibition of NF-kappaB transcription factor; negative regulation of interleukin-8 production; negative regulation of interleukin-6 production; phototransduction; stress fiber formation; positive regulation of transcription from RNA polymerase II promoter; negative regulation of protein ubiquitination; positive regulation of histone acetylation; post-Golgi vesicle-mediated transport; positive regulation of protein amino acid phosphorylation; blood coagulation; positive regulation of GTPase activity
Research Articles on ARRB1	**1.** Beta-arrestin-1 expression was significantly higher lung in adenocarcinoma (ADC) versus squamous cell carcinoma (SCC) of the lung samples, and identified as a diagnostic marker to differentiate ADC from SCC and a potential plasma biomarker for non-invasive diagnosis of lung cancer.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-rat-antibody/arrb1/8542391