

Rabbit anti-Human ARRB1 Polyclonal Antibody | anti-ARRB1 antibody

ARRB1 Antibody

CATALOG # AAA229112	HOST Rabbit	REACTIVITY Human	APPLICATIONS ELISA
-------------------------------	-----------------------	----------------------------	------------------------------

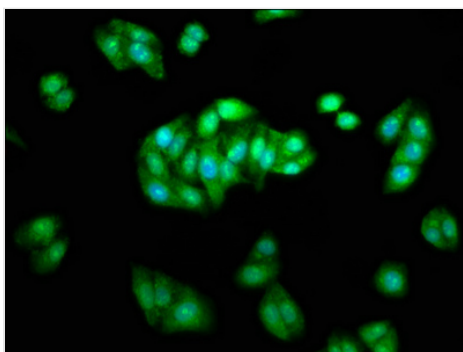
PRODUCT SYNONYMS

ARRB1; Polyclonal Antibody; ARRB1 Antibody; Beta-arrestin-1; Arrestin beta-1; ARR1; anti-ARRB1 antibody

PRODUCT SPECIFICATIONS

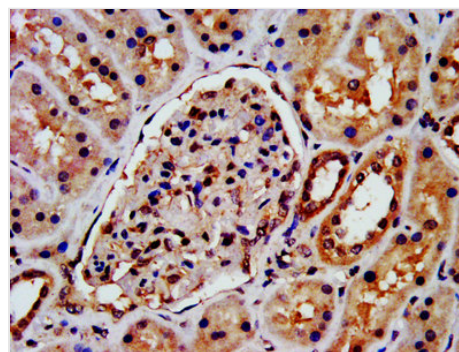
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	>95%,Protein G purified
Form/Format	Liquid
Sequence Length	418
Applicable Applications for anti-ARRB1 antibody	ELISA
Immunogen	Recombinant human Beta-arrestin-1 protein
Conjugation	Non-conjugated
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-9182 / sc-6388 / sc-6389 / sc-28869
Preparation and Storage	Shipped at 4 degree C. Upon delivery, aliquot and store at -20 degree C or -80 degree C.

IMAGES



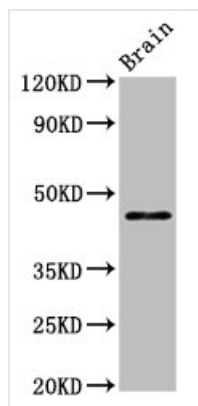
IHC (Immunohistochemisry)

Immunofluorescence staining of HepG2 cells with AAA229112 at 1:233,counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4 degree C.The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



IHC (Immunohiostchemistry)

IHC image of AAA229112 diluted at 1:300 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



WB (Western Blot)

Western BlotPositive WB detected in: Rat brain tissueAll lanes: ARRB1 antibody at 4.6ug/mlSecondaryGoat polyclonal to rabbit IgG at 1/50000 dilutionPredicted band size: 48,47 KDaObserved band size: 48 KDa

ADDITIONAL INFORMATION

Related Product Information for anti-ARRB1 antibody	Functions in regulating agonist-mediated G-protein coupled receptor (GPCR) signaling by mediating both receptor desensitization and resensitization processes. During homologous desensitization, beta-arrestins bind to the GPCR-phosphorylated receptor and sterically preclude its coupling to the cognate G-protein; the binding appears to require additional receptor determinants exposed only in the active receptor conformation. The beta-arrestins target many receptors for internalization by acting as endocytic adapters (CLASPs, clathrin-associated sorting proteins) and recruiting the GPCRs to the adapter protein 2 complex 2 (AP-2) in clathrin-coated pits (CCPs). However, the extent of beta-arrestin involvement appears to vary significantly depending on the receptor, agonist and cell type. Internalized arrestin-receptor complexes traffic to intracellular endosomes, where they remain uncoupled from G-proteins. Two different modes of arrestin-mediated internalization occur. Class A receptors, like ADRB2, OPRM1, ENDRA, D1AR and ADRA1B dissociate from beta-arrestin at or near the plasma membrane and undergo rapid recycling. Class B receptors, like AVPR2, AGTR1, NTSR1, TRHR and TACR1 internalize as a complex with arrestin and traffic with it to endosomal vesicles, presumably as desensitized receptors, for extended periods of time. Receptor resensitization then requires that receptor-bound arrestin is removed so that the receptor can be dephosphorylated and returned to the plasma membrane. Involved in internalization of P2RY4 and UTP-stimulated internalization of P2RY2. Involved in phosphorylation-dependent internalization of OPRD1 and subsequent recycling. Involved in the degradation of cAMP by recruiting cAMP phosphodiesterases to ligand-activated receptors. 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. Acts as signaling scaffold for MAPK pathways such as MAPK1/3 (ERK1/2). ERK1/2 activated by the beta-arrestin scaffold is largely excluded from the nucleus and confined to cytoplasmic locations such as endocytic vesicles, also called beta-arrestin signalosomes. Recruits c-Src/SRC to ADRB2 resulting in ERK activation. GPCRs for which the beta-arrestin-mediated signaling relies on both ARRB1 and ARRB2 (codependent regulation) include ADRB2, F2RL1 and PTH1R. For some GPCRs the beta-arrestin-mediated signaling relies on either ARRB1 or ARRB2 and is inhibited by the other respective beta-arrestin form (reciprocal regulation). Inhibits ERK1/2 signaling in AGTR1- and AVPR2-mediated activation (reciprocal regulation). Is required for SP-stimulated endocytosis of NK1R and recruits c-Src/SRC to internalized NK1R resulting in ERK1/2 activation, which is required for the antiapoptotic effects of SP. Is involved in proteinase-activated F2RL1-mediated ERK activity. Acts as signaling scaffold for the AKT1 pathway. Is involved in alpha-thrombin-stimulated AKT1 signaling. Is involved in IGF1-stimulated AKT1 signaling leading to increased protection from apoptosis. Involved in activation of the p38 MAPK signaling pathway and in actin bundle formation. Involved in F2RL1-mediated cytoskeletal rearrangement and chemotaxis. Involved in AGTR1-mediated stress fiber formation by acting together with GNAQ to activate RHOA. Appears to function as signaling scaffold involved in regulation of MIP-1-beta-stimulated CCR5-dependent chemotaxis. Involved in attenuation of NF-kappa-B-dependent transcription in response to GPCR or cytokine stimulation by interacting with and stabilizing CHUK. May serve as nuclear messenger for GPCRs. Involved in OPRD1-stimulated transcriptional regulation by translocating to CDKN1B and FOS promoter regions and recruiting EP300 resulting in acetylation of histone H4. Involved in regulation of LEF1 transcriptional activity via interaction with DVL1 and/or DVL2 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. Required for atypical chemokine receptor ACKR2-induced RAC1-LIMK1-PAK1-dependent phosphorylation of cofilin (CFL1) and for the up-regulation of ACKR2 from endosomal compartment to cell membrane, increasing its efficiency in chemokine uptake and degradation. Involved in the internalization of the atypical chemokine receptor ACKR3.
---	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	10880136
NCBI GeneID	408
NCBI Accession #	NP_004032.2
NCBI GenBank Nucleotide #	NM_004041.4
UniProt Accession #	P49407; O75625; O75630; Q2PP20; Q9BTK8; B6V9G8
Molecular Weight	46,309 Da
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
NCBI Protein Information	beta-arrestin-1
UniProt Protein Name	Beta-arrestin-1
UniProt Gene Name	ARRB1
UniProt Synonym Gene Names	ARR1
UniProt Entry Name	ARRB1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/polyclonal/arrb1-antibody-elisa/229112>