

Product datasheet for RC201279

beta Arrestin 1 (ARRB1) (NM_004041) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	beta Arrestin 1 (ARRB1) (NM_004041) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	beta Arrestin 1
Synonyms:	ARB1; ARR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201279 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCGACAAAGGGACCCGAGTGTTCAAGAAGGCCAGTCCAAATGGAAAGCTCACCGTCTACCTGGGAA
AGCGGGACTTTGTGGACCACATCGACCTCGTGGACCTGTGGATGGTGTGGTCTGGTGGATCCTGAGTA
TCTCAAAGAGCGGAGAGTCTATGTGACGCTGACCTGCGCCTTCCGCTATGGCCGGGAGGACCTGGATGTC
CTGGCCCTGACCTTTGCAAGGACCTGTTGTGGCCAACGTACAGTCGTTCCACCGGCCCCGAGGACA
AGAAGCCCTGACGCGGCTGCAGGAACGCCTCATCAAGAAGCTGGGCGAGCACGTTACCTTTACCTT
TGAGATCCCTCCAAACCTTCCATGTTCTGTGACACTGCAGCCGGGCCCCAAGACACGGGAAGGCTTGC
GGTGTGGACTATGAAGTCAAAGCCTTCTGCGCGGAGAATTTGGAGGAGAAGATCCACAAGCGGAATCTG
TGCGTCTGGTCATCCGGAAGTTTCAGTATGCCCCAGAGAGGCTGGCCCCAGCCACAGCCGAGACCAC
CAGGCAGTTTCTCATGTCGGACAAGCCCTTGCACCTAGAAGCCTCTCTGGATAAAGGAGATCTATTACCAT
GGAGAACCCATCAGCGTCAACGTCCACGTACCAACAACCAACAAGACGGTGAAGAAGATCAAGATCT
CAGTGCGCCAGTATGCAGACATCGCTTTTCAACACAGCTCAGTACAAGTGCCTGTTGCCATGGAAGA
GGCTGATGACACTGTGGCACCCAGCTCGACGTTCTGCAAGGTCTACACACTGACCCCTTCTAGCCAAT
AACCGAGAGAAGCGGGCCTCGCCTTGGACGGGAAGCTCAAGCACGAAGACGAACTTGGCCTCTAGCA
CCCTGTTGAGGGAAGGTGCCAACCGTGAGATCCTGGGGATCATTGTTTCTACAAAGTGAAGTGAAGCT
GGTGGTGTCTCGGGCGGCTGTTGGGAGATCTTGCATCCAGCGACGTGGCCGTGGAAGTCCCTTACC
CTAATGCACCCCAAGCCCAAAGAGGAACCCCGCATCGGGAAGTCCAGAGAACGAGACGCCAGTAGATA
CCAATCTCATAGAACTTGACACAAATGATGACGACATTGATTTGAGGACTTTGCTCGCCAGAGACTGAA
AGGCATGAAGGATGACAAGGAGGAAGAGGAGGATGGTACCGGCTCTCCACAGCTCAACAACAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC201279 protein sequence
Red=Cloning site Green=Tags(s)

MGDKGTRVFKKASPNGKLTVYLGKRDFVDHIDLVPVDGVVLDPEYLKERRVYVTLTCAFYRGREDLDV
 LGLTFRKDLFVANVQSFPPAPEDKKPLTRLQERLIKKGHAYPFTEIPPNLPCSVTLQPGPEDTGKAC
 GVDYEVKAFCAENLEEKIHKRNSVRLVIRKQYAPERPGPQTAETTRQFLMSDKPLHLEASLDKEIYYH
 GEPISVNVHVTNNTNKTVKKIKISVRQYADICLFNTAQYKCPVAMEEADDTVAPSSFTCKVYVTLTPFLAN
 NREKRGLALDGKLGKHDNLASSTLLREGANREILGIIIVSYKVKVCLVSRGGLLDLASSDVAVELPFT
 LMHPKPKEEPHREVPENETPVDTNLIELDTNDDDIVFEDFARQLKGMKDDKEEEDGTGSPQLNNR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6572_f06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004041

ORF Size: 1254 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_004041.5](#)

RefSeq Size: 7539 bp

RefSeq ORF: 1257 bp

Locus ID: 408

UniProt ID: [P49407](#)

Cytogenetics: 11q13.4

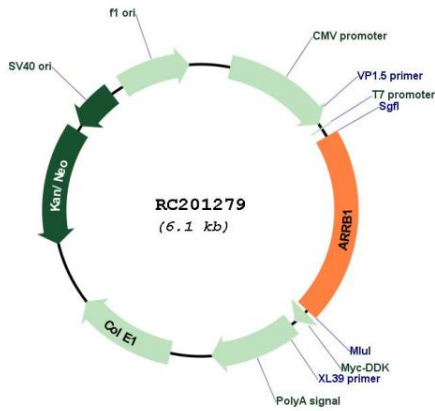
Protein Families: Druggable Genome

Protein Pathways: Chemokine signaling pathway, Endocytosis, MAPK signaling pathway

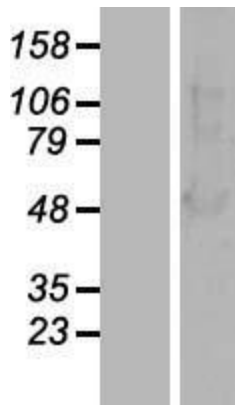
MW: 47.1 kDa

Gene Summary: 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]

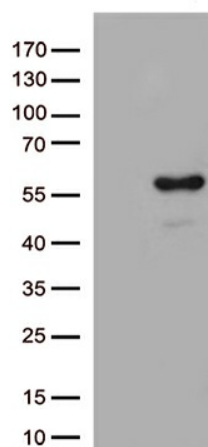
Product images:



Circular map for RC201279



Western blot validation of overexpression lysate (Cat# [LY418298]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201279 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ARRB1 (Cat# RC201279, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ARRB1 antibody (Cat# [TA812548])(1:500)