

## Product datasheet for RC234077

### Beta Arrestin 2 (ARRB2) (NM\_001257328) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Beta Arrestin 2 (ARRB2) (NM_001257328) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ARRB2
Synonyms:	ARB2; ARR2; BARR2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC234077 representing NM_001257328 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGGGGAGAAACCCGGGACCAGGGTCTTCAAGAAGTCGAGCCCTAACTGCAAGCTCACCGTGTACTTGG  
GCAAGCGGGACTTCGTAGATCACCTGGACAAAGTGGACCTGTAGATGGCGTGGTCTTGTGGACCTGA  
CTACCTGAAGGACCGCAAAGTGTGGTGTGACCTCACCTGCGCCTCCGCTATGGCCGTGAAGACCTGGAT  
GTGCTGGGCTTGTCTTCCGCAAAGACCTGTTTCATCGCCACCTACCAGGCCTTCCCCCGGTGCCAAC  
CACCCCGCCCCCACCAGCCTGCAGGACCGGCTGCTGAGGAAGCTGGCCAGCATGCCACCCCTTCTT  
CTTACCGTGAGGATGCCCTGCCTCTGAGGGCCAGGGGGCTGGGGCTGGGACTGTGTCTGGGGTGGGG  
ATACCCAGAATCTTCCATGCTCCGTACACTGCAGCCAGGCCAGAGGATACAGGAAAGGCCTGCGGCG  
TAGACTTTGAGATTCGAGCCTTCTGTGCTAAATCACTAGAAGAGAAAAGCCACAAAGGAACTCTGTGCG  
GCTGGTGATCCGAAAGGTGCAGTTCGCCCCGGAGAAACCCGGCCCCCAGCCTTACGCCGAAACCACACGC  
CACTTCTCATGTCTGACCGTCCCTGCACCTCGAGGCTTCCCTGGACAAGGAGCTGTACTACCATGGGG  
AGCCCCCAATGTAATGTCCACGTCAACAACACTCCACCAAGACCGTCAAGAAGATCAAAGTCTCTGT  
GAGACAGTACGCCGACATCTGCCTTTCAGCACCGCCAGTACAAGTGTCTGTGGCTCAACTCGAACAA  
GATGACCAGGTATCTCCAGCTCCACATTCTGTAAAGGTGTACACCATAACCCCACTGCTCAGCGACAACC  
GGGAGAAGCGGGTCTCGCCCTGGATGGGAACTCAAGCACGAGGACACCAACCTGGCTTCCAGCACCAT  
CGTGAAGGAGGGTCCAACAAGGAGGTGCTGGGAATCCTGGTGTCTACAGGGTCAAGGTGAAGCTGGTG  
GTGTCTCGAGGCGGGATGTCTCTGTGGAGCTGCCTTTTGTCTTATGCACCCCAAGCCCCACGACCACA  
TCCCCCTCCCAGACCCAGTCAGCCGCTCCGGAGACAGATGTCCCTGTGGACACCAACCTCATTGAATT  
TGATACCAACTATGCCACAGATGATGACATTGTGTTTGGAGACTTTCGCCGGCTTCGGCTGAAGGGGATG  
AAGGATGACGACTATGATGATCAACTCTGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC234077 representing NM\_001257328  
 Red=Cloning site Green=Tags(s)

MGEKPGTRVFKKSSPNCKLTVYLGKRDFVDHLKVDKVPDGVVLDVDPDYLKDRKVFVTLTCAFRYGRELDL  
 VLGLSFRKDLFIATYQAFPPVPPRPPTRLQDRLLRKLGHAFHFFFTVRMPLPSEGQAGAGTVSGVG  
 IPQNLPCSVTLQPGPDTGKACGVDFEIRAFCAKSLSEKSHKRNVRVLRKVKQFAPEKPGPQPSAETTR  
 HFLMSDRSLHLEASLDKELYHGEPLNVNVHVTNNSTKTVKKIKVSVRQYADICLFSTAQYKCPVAQLEQ  
 DDQVSPSSTFCVKYVITITPLLSDNREKRLALDGKLGKEDTNLASSTIVKEGANKEVLGILVSVRVKVKLV  
 VSRGGDVSVELPFVLMHPKPHDHIPLPRPQSAAPETDVPVDTNLI EFDNTNYATDDDIVFEDFARLRLKGM  
 KDDYDDQLC

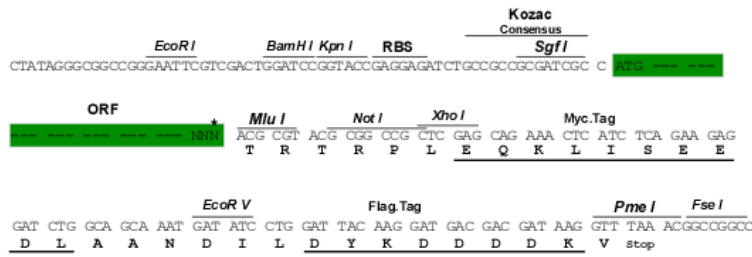
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

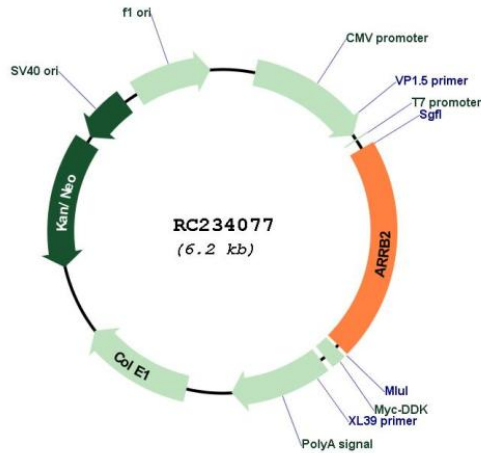
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:

NM\_001257328

<b>ORF Size:</b>	1290 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001257328.2</a>
<b>RefSeq Size:</b>	1999 bp
<b>RefSeq ORF:</b>	1293 bp
<b>Locus ID:</b>	409
<b>UniProt ID:</b>	<a href="#">P32121</a>
<b>Cytogenetics:</b>	17p13.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Chemokine signaling pathway, Endocytosis, MAPK signaling pathway, Olfactory transduction
<b>MW:</b>	48.5 kDa
<b>Gene Summary:</b>	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 2, like arrestin beta 1, was shown to inhibit beta-adrenergic receptor function in vitro. It is expressed at high levels in the central nervous system and may play a role in the regulation of synaptic receptors. Besides the brain, a cDNA for arrestin beta 2 was isolated from thyroid gland, and thus it may also be involved in hormone-specific desensitization of TSH receptors. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2012]