

## Product datasheet for **RG201168**

### Beta Arrestin 2 (ARRB2) (NM\_004313) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Beta Arrestin 2 (ARRB2) (NM_004313) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Beta Arrestin 2
Synonyms:	ARB2; ARR2; BARR2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG201168 representing NM_004313 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGGAGAAACCCGGGACCAGGGTCTTCAAGAAGTCGAGCCCTAACTGCAAGCTCACCGTGTACTTGG  
GCAAGCGGGACTTCGTAGATCACCTGGACAAAGTGACCCTGTAGATGGCGTGGTGTCTTGTGGACCCTGA  
CTACCTGAAGGACCGCAAAGTGTGTGACCCTCACCTGCGCCTCCGCTATGGCCGTGAAGACCTGGAT  
GTGCTGGGCTTGTCTTCCGCAAAGACCTGTTCATCGCCACCTACCAGGCCTTCCCCCGGTGCCAACCC  
CACCCCGCCCCCACCAGCCTGCAGGACCGGCTGCTGAGGAAGCTGGGCCAGCATGCCACCCCTTCTT  
CTTCACCATACCCAGAATCTTCCATGCTCCGTCACACTGCAGCCAGGCCAGAGGATACAGGAAAGGCC  
TGCGGCGTAGACTTTGAGATTTCGAGCCTTCTGTGCTAAATCACTAGAAGAGAAAAGCCACAAAAGGAACT  
CTGTGCGGCTGGTATCCGAAAGGTGCAGTTCGCCCGGAGAAACCCGGCCCCAGCCTTTCAGCCGAAAC  
CACACGCCACTTCTCATGTCTGACCGGTCCCTGCACCTCGAGGCTTCCCTGGACAAGGAGCTGTACTAC  
CATGGGGAGCCCCCAATGTAATGTCCACGTCACCAACAACCTCCACCAAGACCGTCAAGAAGATCAAAG  
TCTCTGTGAGACAGTACGCCGACATCTGCCTCTCAGCACCGCCAGTACAAGTGTCTGTGGCTCAACT  
CGAACAAGATGACCAGGTATCTCCAGCTCCACATTCTGTAAGGTGTACACCATAACCCCACTGCTCAGT  
GACAACCGGGGAGAAGCGGGTCTCGCCCTGGATGGGAACTCAAGCACGAGGACCAACCTGGCTTCCA  
GCACCATCGTGAAGGAGGTGCCAACAAGGAGGTGCTGGGAATCCTGGTGTCTACAGGGTCAAGGTGAA  
GCTGGTGGTGTCTCGAGGCGGGATGTCTCTGTGGAGCTGCCTTTTGTCTTATGACCCCAAGCCCCAC  
GACCACATCCCCCTCCCCAGACCCAGTCCAGCCGCTCCGGAGACAGATGTCCCTGTGGACACCAACCTCA  
TTGAATTTGATACCAACTATGCCACAGATGATGACATTGTGTTTGAGGACTTTGCCCGGCTTCGGCTGAA  
GGGGATGAAGGATGACGACTATGATGATCAACTCTGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG201168 representing NM\_004313  
 Red=Cloning site Green=Tags(s)

MGEKPGTRVFKKSSPNCKLTVYLGKRDFVDHLDKVDPVDGVVLDVDPYLDKDRKVFVTLTCAFRYGRELDL  
 VLGLSFRKDLFIATYQAFPPVPPRPPTRLQDRLLRKLGHHPFFFTIPQNLPCSVTLQPGPDTGKA  
 CGVDFEIRAFCAKSLSEKSHKRNVSRLVIRKVFQFAPEKPGPQSPAETTRHFLMSDRSLHLEASLDKELY  
 HGEPLNVNVHVTNNSTKTVKKIKVSVRQYADICLFSTAQYKCPVAQLEQDDQVSPSSTFCKVYITPLLS  
 DNREKRLALDGKLGKHDNLASSTIVKEGANKEVILGILVSYRVKVKLVVSRGGDVSVELPFVLMHPKPH  
 DHIPLPRPQSAAPETDVPVDTNLIIEFDNTYATDDDIVFEDFARLRLKGMKDDDDYDDQLC

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004313

**ORF Size:** 1227 bp

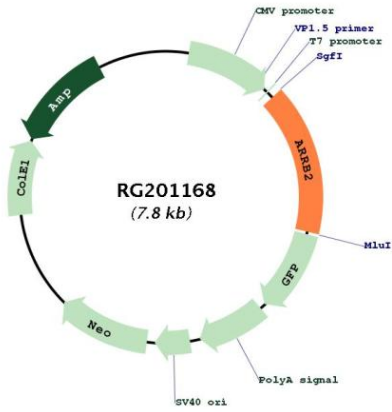
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

<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_004313.2</a>
<b>RefSeq Size:</b>	1936 bp
<b>RefSeq ORF:</b>	1230 bp
<b>Locus ID:</b>	409
<b>UniProt ID:</b>	<a href="#">P32121</a>
<b>Cytogenetics:</b>	17p13.2
<b>Domains:</b>	arrestin
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Chemokine signaling pathway, Endocytosis, MAPK signaling pathway, Olfactory transduction
<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]

Product images:



Circular map for RG201168