

Product datasheet for **RG219815**

alpha 1a Adrenergic Receptor (ADRA1A) (NM_033304) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	alpha 1a Adrenergic Receptor (ADRA1A) (NM_033304) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ADRA1A
Synonyms:	ADRA1C; ADRA1L1; ALPHA1AAR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG219815 representing NM_033304
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTGTTTCTCTCGGAAATGCTTCCGACAGCTCCAACCTGCACCAACCGCCGGCACCGGTGAACATTT
 CCAAGGCCATTCTGCTCGGGGTGATCTTGGGGGCCTCATTCTTTTCGGGGTGTGGGTAACATCCTAGT
 GATCCTCTCCGTAGCCTGTCAACGACACCTGCACTCAGTCACGCACTACTACATCGTCAACCTGGCGGTG
 GCCGACCTCCTGCTCACCTCCACGGTGTGCCCTTCTCGCCATCTTCGAGGTCCTAGGCTACTGGGCT
 TCGGCAGGGTCTTCTGCAACATCTGGCGGCAGTGGATGTGCTGTGCTGCACCGCTCCATCATGGGCT
 CTGCATCATCTCCATCGACCGCTACATCGGCGTGAGCTACCCGCTGCGCTACCAACCATCGTCAACCGAG
 AGGAGGGGTCTCATGGCTCTGCTCTGCTCTGGGCACTCTCCCTGGTCATATCCATTGGACCCCTGTTCCG
 GCTGGAGGCAGCCGGCCCCGAGGACGAGACCATCTGCCAGATCAACGAGGAGCCGGGCTACGTGCTCTT
 CTCAGCGCTGGGCTCCTTCTACCTGCCTCTGGCCATCATCTGGTCATGTACTGCCGCTCTACGTGGT
 GCCAAGAGGGAGACCCGGGCTCAAGTCTGGCTCAAGACCGACAAGTCGGACTCGGAGCAAGTGACGC
 TCCGATCCATCGAAAAACGCCCGGCAGGAGGAGCGGGATGGCCAGCGCCAAGACCAAGACGCACTT
 CTCAGTGAGGCTCCTCAAGTTCTCCCGGAGAAGAAAGCGGCCAAAACGCTGGGCATCGTGGTCCGGCTG
 TTCGCTCTGCTGGCTGCCTTTTTTCTTAGTCATGCCATTGGGCTTTTCTTCCCTGATTTCAAGCCCT
 CTGAAACAGTTTTTAAATAGTATTTGGCTCGGATATCTAAACAGCTGCATCAACCCATCATATACCC
 ATGCTCCAGCCAAGATTCAAAAAGGCTTTTCAAGATGTCTTGAGAATCCAGTGTCTCTGCAGAAAGCAG
 TCTTCCAACATGCCCTGGGCTACACCTGCACCCGCCAGCCAGGCCGTGGAAGGGCAACACAAGGACA
 TGGTGCCATCCCGTGGGATCAAGAGAGACCTTCTACAGGATCTCCAAGACGGATGGCGTTTGTGAATG
 GAAATTTTTCTTCCATGCCCGTGGATCTGCCAGGATTACAGTGTCCAAGACCAATCCTCCTGTACC
 ACAGCCGGAGGGGAATGGATTGTAGATATTTACCAAGAATTGCAGAGGCATATCAAGCATGTGAATT
 TTATGATGCCACCGTGGAGAAAGGGTCTAGAATGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG219815 representing NM_033304
 Red=Cloning site Green=Tags(s)

MVFLSGNASDSSNCTQPPAPVNISKAILLGVILGGLILFGVLGNILVILSVACHRHLHVSHTYIYNLAV
 ADLLLSTVLPFSAIFEVLGYWAFGRVFCNIWAAVDVLCTASIMGLCIISIDRYIGVSYPLRYPTIVTQ
 RRGLMALLCVWALSLSVISIGPLFGWRQPAPEDETICQINEEPGYVLFALGSFYLPALAIILVMYCRVYVV
 AKRESRGLKSGLKTDKSDSEQVTLRIHRKNAPAGGSGMASAKTKTHFSVRLKFSREKKAATLGIIVGC
 FVLCWLPFFLVMPIGSFFPDFKPSSETVFKIVFWLGYLNSCINPIIYPCSSQEFKAFQNLRIQCLCRKQ
 SSKHALGYTLHPPSQAVEGQHKDMVRIPVGSRETFYRISKTDGVCEWKFFSSMPRGARITVSKDQSSCT
 TARRGMDCRYFTKNCREHIKHVNFMPMPWRKGLEC

TRTRPLE - GFP Tag - V

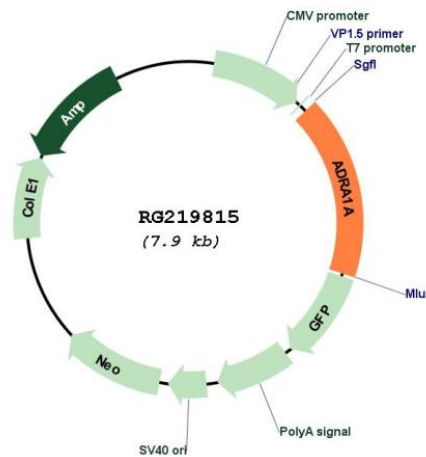
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_033304

ORF Size: 1365 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:	<ol style="list-style-type: none">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:	<u>NM_033304.1</u> , <u>NP_150647.1</u>
RefSeq Size:	1765 bp
RefSeq ORF:	1368 bp
Locus ID:	148
UniProt ID:	<u>P35348</u>
Cytogenetics:	8p21.2
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Calcium signaling pathway, Neuroactive ligand-receptor interaction, Vascular smooth muscle contraction
Gene Summary:	Alpha-1-adrenergic receptors (alpha-1-ARs) are members of the G protein-coupled receptor superfamily. They activate mitogenic responses and regulate growth and proliferation of many cells. There are 3 alpha-1-AR subtypes: alpha-1A, -1B and -1D, all of which signal through the Gq/11 family of G-proteins and different subtypes show different patterns of activation. This gene encodes alpha-1A-adrenergic receptor. Alternative splicing of this gene generates four transcript variants, which encode four different isoforms with distinct C-termini but having similar ligand binding properties. [provided by RefSeq, Jul 2008]