

## Product datasheet for **RC220495**

### alpha 1a Adrenergic Receptor (ADRA1A) (NM\_033303) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	alpha 1a Adrenergic Receptor (ADRA1A) (NM_033303) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	alpha 1a Adrenergic Receptor
Synonyms:	ADRA1C; ADRA1L1; ALPHA1AAR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC220495 representing NM\_033303  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGTGTTCCTCTCGGAAATGCTTCCGACAGCTCCAACCTGCACCAACCGCCGGCACCGGTGAACATTT  
 CCAAGGCCATTCTGCTCGGGGTGATCTTGGGGGCCTCATTCTTTTCGGGGTGTGGGTAACATCCTAGT  
 GATCCTCTCCGTAGCCTGTCAACGACACCTGCACTCAGTCACGCACTACTACATCGTCAACCTGGCGGTG  
 GCCGACCTCCTGCTCACCTCCACGGTGTGCCCTTCTCGCCATCTTCGAGGTCCTAGGCTACTGGGCTT  
 TCGGCAGGGTCTTCTGCAACATCTGGCGGCAGTGGATGTGCTGTGCTGCACCGCTCCATCATGGGCTT  
 CTGCATCATCTCCATCGACCGCTACATCGGCGTGAGCTACCCGCTGCGCTACCAACCATCGTCAACCGAG  
 AGGAGGGGTCTCATGGCTCTGCTCTGCTCTGGGCACTCTCCCTGGTCATATCCATTGGACCCCTGTTCCG  
 GCTGGAGGCAGCCGGCCCCGAGGACGAGACCATCTGCCAGATCAACGAGGAGCCGGGCTACGTGCTCTT  
 CTCAGCGCTGGGCTCCTTCTACCTGCCTCTGGCCATCATCTGGTCATGTACTGCCGCTCTACGTGGT  
 GCCAAGAGGGAGACCCGGGCTCAAGTCTGGCCTCAAGACCGACAAGTCGGACTCGGAGCAAGTGACGC  
 TCCGCATCCATCGAAAAACGCCCGGCAGGAGGAGCGGGATGGCCAGCGCCAAGACCAAGACGCACTT  
 CTCAGTGAGGCTCCTCAAGTCTCCCGGAGAAGAAAGCGGCCAAAACGCTGGGCATCGTGGTCCGGCTGC  
 TTCGTCCTCTGCTGGCTGCCTTTTTTCTTAGTCATGCCATTGGGCTTTTCTTCCCTGATTTCAAGCCCT  
 CTGAAACAGTTTTTAAATAGTATTTGGCTCGGATATCTAAACAGCTGCATCAACCCATCATATACCC  
 ATGCTCCAGCCAAGATTCAAAAGGCCTTTTCAGAAATGTCTTGAGAATCCAGTGTCTCTGCAGAAAGCAG  
 TCTTCAAACATGCCCTGGGCTACACCTGCACCCGCCAGCCAGGCCGTTGGAAGGGCAACACAAGGACA  
 TGGTGCATCCTCCGTTGGGATCAAGAGAGACCTTCTACAGGATCTCCAAGACGGATGGCGTTTGTGAATG  
 GAAATTTTTCTCTTCCATGCCCGTGGATCTGCCAGGATTACAGTGTCCAAGACCAATCCTCCTGTACC  
 ACAGCCCGGACGAAGTCTCGCTCTGTCAACAGGCTGGAGTGCAGTGGCATGATCTTGGCTCACTGCAACC  
 TCCGCTCCCGGTTCAAGAGATTCTCCTGCCTCAGCCTCCAAGCAGCTGGGACTACAGGGATGTGCCA  
 CCAGGCCGACGCCACCAGGCCAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC220495 representing NM\_033303  
 Red=Cloning site Green=Tags(s)

MVFLSGNASDSSNCTQPPAPVNIKAILLGVILGGLILFGVLGNILVILSVACHRHLHVSHTHYIYNLAV  
 ADLLLSTVLPFSAIFEVLGYWAFGRVFCNIWAAVDVLCTASIMGLCIISIDRYIGVSYPLRYPTIVTQ  
 RRGLMALLCVWALSLSVISIGPLFGWRQPAPEDETICQINEEPGYVLF SALGSFYPLAIILVMYCRVYVV  
 AKRESRGLKSGLKTDKSDSEQVTLRIHRKNAPAGSGMASAKTKTHFSVRLKFSREKKAAKTLGIYVGC  
 FVLCWLPFFLVMPIGSFFPDFKPSSETVFKIVFWLGYLNSCINPIIYPCSSQEFKAFQNVLRIQCLCRKQ  
 SSKHALGYTLHPPSQAVEGQHKDMVRIPVGSRETFYRISKTDGVCEWKFSSMPRGSARITVSKDQSSCT  
 TARTKRSVTRLECSGMILAHCNLRPGSRDSPASASQAAGTTGMCHQADATRPS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8062\\_d06.zip](https://cdn.origene.com/chromatograms/mk8062_d06.zip)

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_033303

ORF Size: 1425 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\\_033303.4](#)

RefSeq Size: 2304 bp

RefSeq ORF: 1428 bp

Locus ID: 148

UniProt ID: [P35348](#)

Cytogenetics: 8p21.2

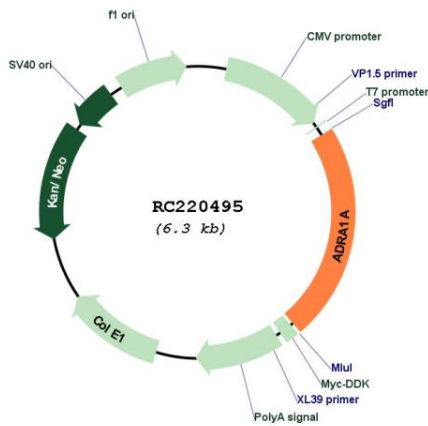
**Protein Families:** Druggable Genome, GPCR, Transmembrane

**Protein Pathways:** Calcium signaling pathway, Neuroactive ligand-receptor interaction, Vascular smooth muscle contraction

**MW:** 52 kDa

**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]

**Product images:**



Circular map for RC220495