

## Product datasheet for **RG224155**

### alpha 1a Adrenergic Receptor (ADRA1A) (NM\_000680) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	alpha 1a Adrenergic Receptor (ADRA1A) (NM_000680) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	alpha 1a Adrenergic Receptor
Synonyms:	ADRA1C; ADRA1L1; ALPHA1AAR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG224155 representing NM_000680. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGTGTCTCTCGGAAATGCTCCGACAGCTCCAACTGCACCAACCGCCGGCACCGGTGAACATT
TCCAAGGCCATTCTGCTCGGGTGATCTTGGGGGCTCATTCTTTTCGGGTGCTGGTAAACATCTA
GTGATCCTCTCCGTAGCCTGTCACCGACACCTGCACTCAGTCACGCACTACTACATCGTCAACCTGGCG
GTGGCCGACCTCCTGCTCACCTCCACGGTGTGCCCTTCTCCGCCATCTCGAGGTCTAGGCTACTGG
GCCTTCGGCAGGGTCTTCTGCAACATCTGGCGGCAGTGGATGTGCTGTGCTGCACCGCTCCATCATG
GGCTCTGCATCATCTCCATCGACCGCTACATCGGCGTGAGCTACCCGCTGCGCTACCAACCATCGTC
ACCCAGAGGAGGGTCTCATGGCTCTGCTCTGCGTCTGGCACTCTCCCTGGTCATATCCATTGGACCC
CTGTTTCGGCTGGAGGCAGCCGGCCCCGAGGACGAGACCATCTGCCAGATCAACGAGGAGCCGGGTAC
GTGCTCTTCTCAGCGCTGGGCTCCTTCTACCTGCCTCTGGCCATCATCTGGTATGTA
CTGCCGCTC
TACGTGGTGGCAAGAGGGAGAGCCGGGCTCAAGTCTGGCCTCAAGACCGACAAGTCGGACTCGGAG
CAAGTGACGCTCCGCATCCATCGAAAAACGCCCGGCAGGAGGCAGCGGGATGGCCAGCGCAAGACC
AAGACGCACTTCTCAGTGAGGCTCCTCAAGTCTCCCGGAGAAGAAAGCGCCAAAACGCTGGGCATC
GTGGTCCGGCTGCTCGTCTCTGCTGGCTGCCTTTTTCTTAGTCATGCCATTGGGTCTTCTTCCCT
GATTTCAAGCCCTGAAACAGTTTTTAAAATAGTATTTTGGCTCGGATATCTAAACAGTCATCAAC
CCCATCATATACCCATGCTCCAGCCAAGAGTTCAAAAAGCCTTTCAGAATGTCTTGAGAATCCAGTGT
CTCCGCAGAAAGCAGTCTTCAAACATGCCCTGGGCTACACCCTGCACCCGCCAGCCAGCCGTGGAA
GGGCAACACAAGGACATGGTGCGCATCCCCGTGGGATCAAGAGAGACCTTCTACAGGATCTCCAAGACG
GATGGCGTTTGTGAATGGAAATTTTCTTCCATGCCCGTGGATCTGCCAGGATTACAGTGTCCAAA
GACCAATCCTCCTGTACCACAGCCCGGGTGAAGTAAAAGCTTTTTGGAGGTCTGCTGTGTAGGG
CCCTCAACCCCGCCTTGACAAGAACCATCAAGTCCAACCATAAGGTCCACACCATCTCCCTCAGT
GAGAACGGGGAGGAAGTC
ACGCGTACGCGCCGCTCGAG - GFP Tag - GTTTAAAC
```



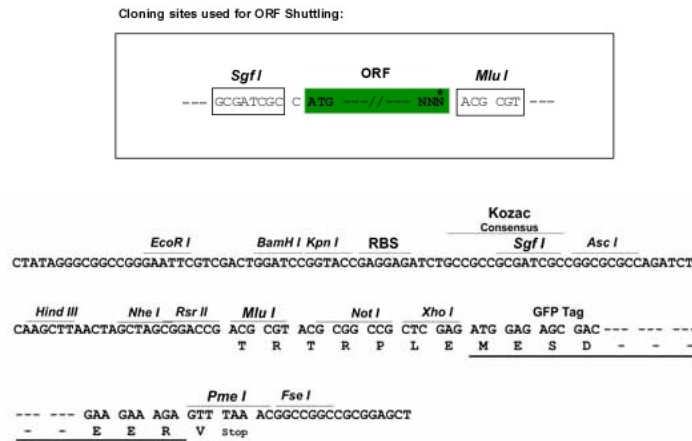
[View online >](#)

**Protein Sequence:** >Peptide sequence encoded by RG224155  
 Blue=ORF Red=Cloning site Green=Tag(s)

MVFLSGNASDSSNCTQPPAPVNI SKA ILLGVLGGLILFGVLGNILVILSVACHRHLHSVTHYYIVNLA  
 VADLLL TSTVLPFSAIFEVLGYWAFGRVFCNIWAAVDVLCCTASIMGLCIISIDRYIGVSYPLRYPTIV  
 TQRRGLMALLCVWALSLVISIGPLFGWRQPAPEDETIQCINEEPGYVLF SALGSFYLP LAIILVMYCRV  
 YVYAKRESRGLKSGLKTDKSDSEQVTLRIHRKNAPAGGSGMASAKTKTHFSVRL LKF SREKKA AKTLGI  
 VVGCFVLCWLPFFLVMPIGSFFPDFK PSETVFKIVFWLGYLNSCINPIIYPCSSQEFKAFQNVLR IQC  
 LRRKQSSKHALGYTLHPPSQAVEGQHKDMVRIPVGSRETFYRISKTDGVC EWKFFSSMPRGSARITVSK  
 DQSSCTTARVRSKSFLEVCCCVGPSTPSLDKNHQVPTIKVHTISLSEN GEEV  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYP SGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_000680

**ORF Size:** 1398 bp

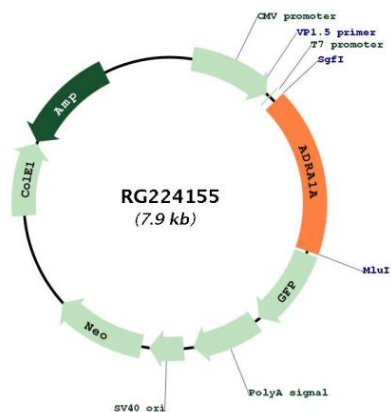
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<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_000680.1</a> , <a href="#">NP_000671.1</a>
<b>RefSeq Size:</b>	2290 bp
<b>RefSeq ORF:</b>	1401 bp
<b>Locus ID:</b>	148
<b>UniProt ID:</b>	<a href="#">P35348</a>
<b>Cytogenetics:</b>	8p21.2
<b>Protein Families:</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways:</b>	Calcium signaling pathway, Neuroactive ligand-receptor interaction, Vascular smooth muscle contraction
<b>MW:</b>	51.5 kDa
<b>Gene Summary:</b>	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 RG224155