

## Product datasheet for RC216447

### Angiotensin II Type 1 Receptor (AGTR1) (NM\_032049) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Angiotensin II Type 1 Receptor (AGTR1) (NM_032049) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Angiotensin II Type 1 Receptor
Synonyms:	AG2S; AGTR1B; AT1; AT1AR; AT1B; AT1BR; AT1R; AT2R1; HAT1R
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216447 representing NM_032049 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATTCTCAACTCTTCTACTGAAGATGGTATTAAGAATCCAAGATGATTGTCCCAAAGCTGGAAGGC  
ATAATTACATATTTGTCATGATTCTACTTTATACAGTATCATCTTTGTGGTGGGAATATTTGGAAACAG  
CTTGGTGGTGATAGTCATTTACTTTTATGAAGCTGAAGACTGTGGCCAGTGTCTTTCTTTGAATTTA  
GCACTGGCTGACTTATGCTTTTACTGACTTTGCCACTATGGGCTGTCTACACAGCTATGGAATACCGCT  
GGCCCTTTGGCAATTACCTATGTAAGATTGCTTCAGCCAGCGTCAGTTTCAACCTGTACGCTAGTGTGT  
TCTACTCAGTGTCTCAGCATTGATCGATACCTGGCTATTGTTCCACCAATGAAGTCCCGCTTCGACGC  
ACAATGCTGTAGCCAAAGTCACCTGCATCATCTTTGGCTGCTGGCAGGCTTGGCCAGTTTGGCAGCTA  
TAATCCATCGAAATGATTTTTTATTGAGAACCAATATTACAGTTTGTCTTTCCATTATGAGTCCCA  
AAATTCACCCCTCCGATAGGGCTGGGCTGACCAAAAATACTGGGTTTCTGTTTCTTTTCTGATC  
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GAAATGATGATATTTTTAAGATAATTATGGCAATTGTGCTTTTCTTTTCTTTTCTTTTCTGGATTCCCA  
AATATTCATTTTCTGGATGATTGATCAACTAGGCATCATACGTGACTGTAGAATTGCAGATATTGTG  
GACACGGCCATGCCTATCACCATTTGTATAGCTTATTTAACAATTGCCTGAATCCTTTTTTATGGCT  
TTCTGGGGAAAAATTTAAAGATATTTCTCCAGCTTCTAAAATATATTTCCCAAAAGCCAAATCCCA  
CTCAAACCTTTCAACAAAATGAGCAGCTTTCTACCGCCCTCAGATAATGTAAGCTCATCCACCAAG  
AAGCTGCACCATGTTTTGAGTTGAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC216447 representing NM\_032049  
 Red=Cloning site Green=Tags(s)

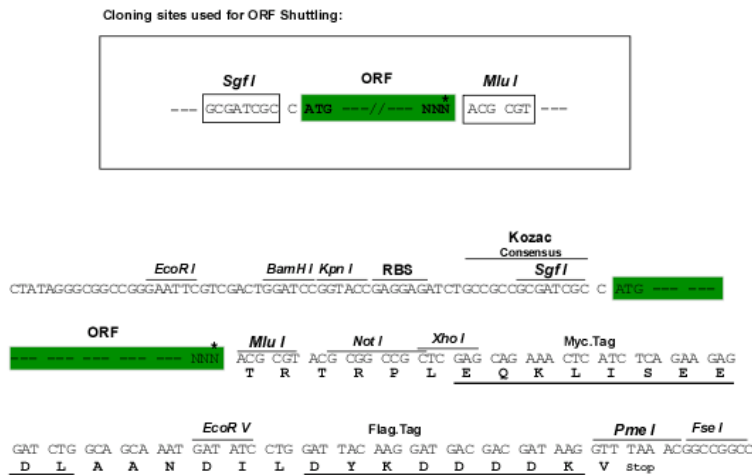
MILNSSTEDGIKRIQDDCPKAGRHNIFVMIPTLYSIIIFVVGIFGNSLVVIVIIYFYMKLKTVASVFLNL  
 ALADLCFLLTLPLWAVYTAMEYRWPFGNYLCKIASASVSFNLYASVLLTCLSIDRYLAIVHPMKSRLRR  
 TMLVAKVTCIIIWLLAGLASLPAIIHRNVFFIENTNITVCAFHYEQNSTLPIGLTKNILGFLFPFLI  
 ILTSYTLIWKALKKAYEIQKNKPRNDDIFKIIIMAVLFFFFSWIPHQIFTFLDVLIQLGIIRDRIADIV  
 DTAMPITICIAFYNNCLNPLFYGFLGKKFKRYFLQLLKYIPPKAKSHSNLSTKMSTLSYRPSDNVSSSTK  
 KPAPCFEVE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6312\\_d03.zip](https://cdn.origene.com/chromatograms/mk6312_d03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**ACCN:** NM\_032049

**ORF Size:** 1077 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\\_032049.1](#), [NP\\_114438.1](#)

**RefSeq Size:** 2181 bp

**RefSeq ORF:** 1080 bp

**Locus ID:** 185

**UniProt ID:** [P30556](#)

**Cytogenetics:** 3q24

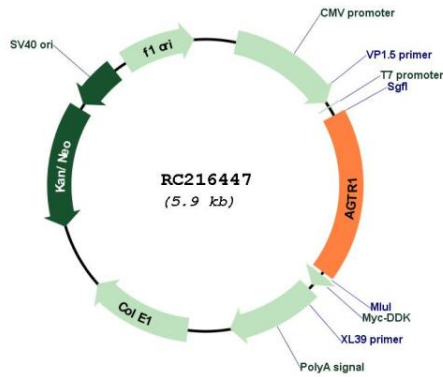
**Protein Families:** Druggable Genome, GPCR, Transmembrane

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

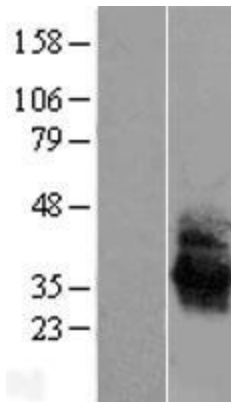
**MW:** 40.9 kDa

**Gene Summary:** Angiotensin II is a potent vasopressor hormone and a primary regulator of aldosterone secretion. It is an important effector controlling blood pressure and volume in the cardiovascular system. It acts through at least two types of receptors. This gene encodes the type 1 receptor which is thought to mediate the major cardiovascular effects of angiotensin II. This gene may play a role in the generation of reperfusion arrhythmias following restoration of blood flow to ischemic or infarcted myocardium. It was previously thought that a related gene, denoted as AGTR1B, existed; however, it is now believed that there is only one type 1 receptor gene in humans. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Aug 2020]

Product images:



Circular map for RC216447



Western blot validation of overexpression lysate (Cat# [LY410363]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216447 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).