

Product datasheet for SC308760

OriGene Technologies, Inc.

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Angiotensin II Type 1 Receptor (AGTR1) (NM 032049) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Angiotensin II Type 1 Receptor (AGTR1) (NM 032049) Human Untagged Clone

Tag: Tag Free Symbol: AGTR1

Synonyms: AG2S; AGTR1B; AT1; AT1AR; AT1B; AT1BR; AT1R; AT2R1; HAT1R

Mammalian Cell

Neomycin

Selection:

Vector: pCMV6-Entry (PS100001) E. coli Selection: Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC308760 representing NM_032049.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGCTGACCTTCACCTCAGAGTGTGGCTGTACCACATTCGGTGTATTTGATATAGTGTTTTGCAACAAAT TCGACCCAGGTGATCAAAATGATTCTCAACTCTTCTACTGAAGATGGTATTAAAAGAATCCAAGATGAT TGTCCCAAAGCTGGAAGGCATAATTACATATTTGTCATGATTCCTACTTTATACAGTATCATCTTTGTG GTGGGAATATTTGGAAACAGCTTGGTGGTGATAGTCATTTACTTTTATATGAAGCTGAAGACTGTGGCC AGTGTTTTTCTTTTGAATTTAGCACTGGCTGACTTATGCTTTTTACTGACTTTGCCACTATGGGCTGTC TTCAACCTGTACGCTAGTGTTTTCTACTCACGTGTCTCAGCATTGATCGATACCTGGCTATTGTTCAC CCAATGAAGTCCCGCCTTCGACGCACAATGCTTGTAGCCAAAGTCACCTGCATCATCATTTGGCTGCTG GCAGGCTTGGCCAGTTTGCCAGCTATAATCCATCGAAATGTATTTTTCATTGAGAACACCAATATTACA GTTTGTGCTTTCCATTATGAGTCCCAAAATTCAACCCTCCCGATAGGGCTGGGCCTGACCAAAAATATA CTGGGTTTCCTGTTTCCTGATCATTCTTACAAGTTATACTCTTATTTGGAAGGCCCTAAAGAAG GCTTATGAAATTCAGAAGAACAAACCAAGAAATGATGATATTTTTAAGATAATTATGGCAATTGTGCTT TTCTTTTCTTTCCTGGATTCCCCACCAAATATTCACTTTTCTGGATGTATTGATTCAACTAGGCATC ATACGTGACTGTAGAATTGCAGATATTGTGGACACGGCCATGCCTATCACCATTTGTATAGCTTATTTT AACAATTGCCTGAATCCTCTTTTTTATGGCTTTCTGGGGAAAAAATTTAAAAGATATTTTCTCCAGCTT CTAAAATATATTCCCCCAAAAGCCAAATCCCACTCAAACCTTTCAACAAAAATGAGCACGCTTTCCTAC CGCCCCTCAGATAATGTAAGCTCATCCACCAAGAAGCCTGCACCATGTTTTGAGGTTGAGTGA **ACGCGTACGCGGCCGCTC**GAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul



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Plasmid Map:

ACCN: NM_032049 **Insert Size:** 1167 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 032049.3</u>

RefSeq Size: 2096 bp
RefSeq ORF: 1167 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: 44.2 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]

Transcript Variant: This variant (5), also known as pC4, has two additional exons in the 5' region, but its 5' UTR end has not been determined, compared to variant 1. The resulting isoform (3) has a longer N-terminus, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.