Product datasheet for RC212008L2

Angiotensin II Type 1 Receptor (AGTR1) (NM_000685) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Angiotensin II Type 1 Receptor (AGTR1) (NM_000685) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Angiotensin II Type 1 Receptor
Synonyms:	AG2S; AGTR1B; AT1; AT1AR; AT1B; AT1BR; AT1R; AT2R1; HAT1R
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC212008).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:

Sgf I — ORF — Mlu I
--- GCG ATC GC C ATG --- // --- NNÑ ACG CGT ---

EcoR I — BamH I — RBS — Kozak Consensus — Sgf I — ORF
CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGC C ATG --- --- ---

Mlu I — Not I — Xho I — mGFP Tag
--- --- --- --- --- --- NNÑ ACG CGT ACG CGG CCG CTC GAG ATG AGC GGG GGC --- --- --- ---
                         T   R   T   R   P   L   E   M   S   G   G   -   -   -   -

Pme I
--- --- GGA CTC AGA TAA GTT TAA ACGGCCGGCCGCGG
     -   -   G   L   R   Stop

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

ACCN:	NM_000685
ORF Size:	1077 bp

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OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.
	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_000685.3, NP_000676.1
RefSeq Size:	2347 bp
RefSeq ORF:	1080 bp
Locus ID:	185
UniProt ID:	P30556
Cytogenetics:	3q24
Domains:	7tm_1
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:
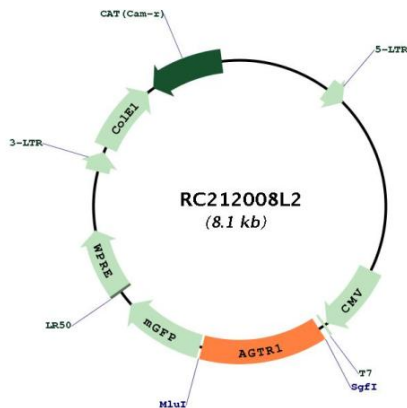
Circular map for RC212008L2
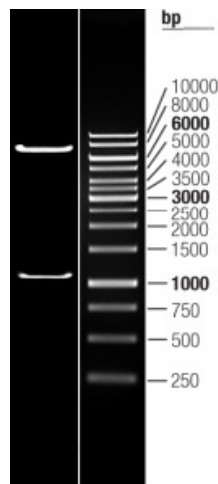
Double digestion of RC212008L2 using SgfI and MluI