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Product datasheet for RC223317

Angiotensin II Type 2 Receptor (AGTR2) (NM_000686) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Angiotensin II Type 2 Receptor (AGTR2) (NM_000686) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Angiotensin II Type 2 Receptor
Synonyms:	AT2; ATGR2; MRX88
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223317 representing NM_000686 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGAAGGGCAACTCCACCCTTGCCACTACTAGCAAAAACATTACCAGCGGTCTTCACTTCGGGCTTGTGA ACATCTCTGGCAACAATGAGTCTACCTTGAACTGTTCACAGAAACCATCAGATAAGCATTTAGATGCAAT TCCTATTCTTTACTACATTATATTTGTAATTGGATTTCTGGTCAATATTGTCGTGGTTACACTGTTTTGT TGTCAAAAGGGTCCTAAAAAGGTTTCTAGCATATACATCTTCAACCTCGCTGTGGCTGATTTACTCCTTT TGGCTACTCTTCCTCTATGGGCAACCTATTATTCTTATAGATATGACTGGCTCTTTGGACCTGTGATGTG CAAAGTTTTTGGTTCTTTTCTTACCCTGAACATGTTTGCAAGCATTTTTTTTATCACCTGCATGAGTGTT GATAGGTACCAATCTGTCATCTACCCCTTTCTGTCTCAAAGAAGAAATCCCTGGCAAGCATCTTATATAG TTCCCCTTGTTTGGCGTATGGCCTGTTTGTCCTCATTGCCAACATTTTATTTTCGAGACGTCAGAACCAT TGAATACTTAGGAGTGAATGCTTGCATTATGGCTTTCCCACCTGAGAAATATGCCCAATGGTCAGCTGGG ATTGCCTTAATGAAAAATATCCTTGGTTTTATTATCCCTTTAATATTCATAGCAACATGCTATTTTGGAA TTAGAAAACACTTACTGAAGACGAATAGCTATGGGAAGAACAGGATAACCCGTGACCAAGTCCTGAAGAT GGCAGCTGCTGTTGTTCTGGCCTTCATCATTTGCTGGCTTCCCTTCCATGTTCTGACCTTCCTGGATGCT CTGGCCTGGATGGGTGTCATTAATAGCTGCGAAGTTATAGCAGTCATTGACCTGGCACTTCCTTTTGCCA TCCTCTTGGGATTCACCAACAGCTGCGTTAATCCGTTTCTGTATTGTTTTGTTGGAAACCGGTTCCAACA GAAGCTCCGCAGTGTGTTTAGGGTTCCAATTACTTGGCTCCAAGGGAAAAGAGAGAGTATGTCTTGCCGG AAAAGCAGTTCTCTTAGAGAAATGGAGACCTTTGTGTCT ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC223317 representing NM_000686
Red=Cloning site Green=Tags(s)

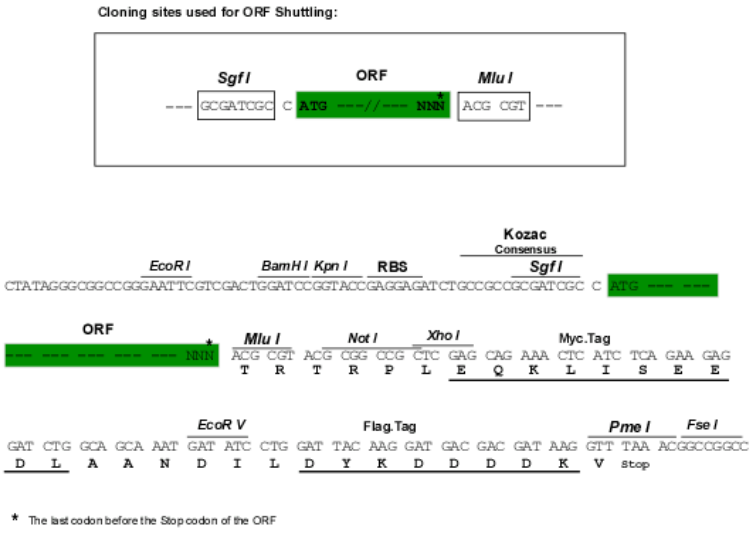
MKGNSTLATTSKNITSGLHFGLVNISGNNESTLNCSQKPSDKHLDAIPILYYIIFVIGFLVNIVVVTLFC
CQKGPKKVSSIYIFNLAVADLLLLATLPLWATYYSYRYDWLFGPVMCKVFGSFLTLNMFASIFFITCMSV
DRYQSVIYPFLSQRRNPWQASYIVPLVWRMACLSSLPTFYFRDVRTIEYLGVNACIMAFPPEKYAQWSAG
IALMKNILGFIIPLIFIATCYFGIRKHLLKTNSYGKNRITRDQVLKMAAAVVLAFIICWLPFHVLTFLDA
LAWMGVINSCEVIAVIDLALPFAILLGFTNSCVNPFLYCFVGNRFQQKLRSVFRVPITWLQGKRESMSCR
KSSSLREMETFVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6113_e12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000686

ORF Size: 1089 bp

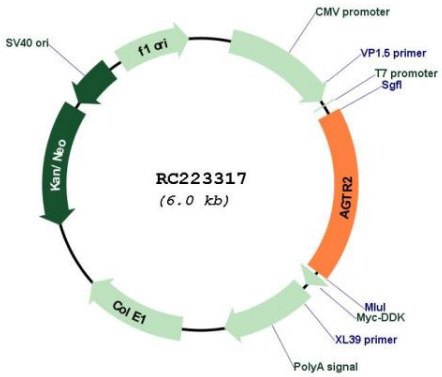
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

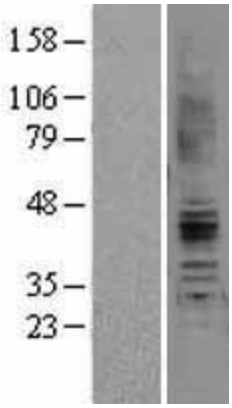
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_000686.5
RefSeq Size:	2448 bp
RefSeq ORF:	1092 bp
Locus ID:	186
UniProt ID:	P50052
Cytogenetics:	Xq23
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Neuroactive ligand-receptor interaction, Renin-angiotensin system
MW:	41 kDa
Gene Summary:	The protein encoded by this gene belongs to the G-protein coupled receptor 1 family, and functions as a receptor for angiotensin II. It is an intergral membrane protein that is highly expressed in fetus and in neonates, but scantily in adult tissues, except brain, adrenal medulla, and atretic ovary. This receptor has been shown to mediate programmed cell death and this apoptotic function may play an important role in developmental biology and pathophysiology. Mutations in this gene are been associated with X-linked cognitive disability. Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) and SARS-CoV-2 infection results in down-regulation of angiotensin converting enzyme-2 (ACE2) receptors, the effects of which, triggers serious inflammatory lesions in the tissues involved, primarily in the lungs. The inflammatory reaction appears to be mediated by angiotensin II derivatives, including the angiotensin AT2 receptor which has been found to be upregulated in bronchoalveolar lavage samples from Coronavirus disease 2019 (COVID19) patients. [provided by RefSeq, Jul 2020]

Product images:



Circular map for RC223317



Western blot validation of overexpression lysate (Cat# [LY400227]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223317 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).