

## Product datasheet for **RC203768**

### Angiotensinogen (AGT) (NM\_000029) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Angiotensinogen (AGT) (NM_000029) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Angiotensinogen
Synonyms:	ANHU; hFLT1; SERPINA8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC203768 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATCGGGAAGCGAGCACCCAGTCTGAGATGGCTCTGCCGGTGTGAGCCTGAGGGCCACCATCCTCTGCC  
 TCCTGGCCTGGGCTGGCCTGGCTGCAGGTGACCGGTGTACATACACCCCTCCACCTCGTCATCCACAA  
 TGAGAGTACCTGTGAGCAGCTGGCAAAGGCCAATGCCGGGAAGCCAAAGACCCACCTTCATACCTGCT  
 CCAATTCAGGCCAAGACATCCCCTGTGGATGAAAAGGCCCTACAGGACCAGCTGGTGTAGTCTGCTGCAA  
 AACTTGACACCGAAGACAAGTTGAGGGCCGAATGGTCGGGATGCTGGCCAACTTCTGGGCTTCCGAT  
 ATATGGCATGCACAGTGAAGTATGGGGCGTGGTCCATGGGGCCACCGTCTCTCCCAACGGCTGTCTTT  
 GGCACCCTGGCCTCTCTATCTGGGAGCCTGGACCACAGCTGACAGGCTACAGGCAATCCTGGGTG  
 TTCCTTGAAGGACAAGAAGTGCACCTCCCGGTGGATGCGCACAAGTCTGTCTGCCCTGCAGGCTGT  
 ACAGGGCTGCTAGTGGCCAGGGCAGGGCTGATAGCCAGGCCAGCTGTGCTGTCCACGGTGGTGGGC  
 GTGTTACAGCCCAGGCTGCACCTGAAGCAGCCGTTTGTGCAGGGCCTGGCTCTATACCCCTGTGG  
 TCCTCCCACGCTCTCTGGACTTACAGAAGTGGATGTTGCTGCTGAGAAGATTGACAGGTTTCATGCAGGC  
 TGTGACAGGATGGAAGACTGGCTGCTCCCTGACGGGAGCCAGTGTGGACAGCACCCCTGGCTTTCAACACC  
 TACGTCCACTTCCAAGGGAAGTGAAGGGCTTCTCCCTGCTGGCCGAGCCCCAGGAGTTCTGGGTGGACA  
 ACAGCACCTCAGTGTCTGTTCCCATGCTCTGGCATGGGCACCTCCAGCACTGGAGTGACATCCAGGA  
 CAATTCTCGGTGACTCAAGTGTCTTCACTGAGAGCCCTGCCTGCTGATCCAGCCTCACTATGCC  
 TCTGACCTGGACAAGGTGGAGGGTCTCACTTCCAGCAAACTCCCTCACTGGATGAAGAACTGTCTC  
 CCCGGACATCCACCTGACCATGCCCAACTGGTGTGCAAGGATCTTATGACCTGCAGGACCTGTCTCG  
 CCAGGCTGAGCTGCCCGCATTCTGCACACCGAGCTGAACCTGCAAAAATTGAGCAATGACCGCATCAGG  
 GTGGGGGAGGTGCTGAACAGCATTTTTTTTGGAGCTTGAAGCGGATGAGAGAGAGCCACAGAGTCTACCC  
 AACAGTTAAACAAGCCTGAGGTCTTGGAGGTGACCCTGAACCGCCATTCTGTTTGTGTGTATGATCA  
 AAGCGCCACTGCCTGCCTTCTGGGCCGCGTGGCCAACCCGCTGAGCACAGCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC203768 protein sequence  
 Red=Cloning site Green=Tags(s)

MRKRAPQSEMAPAGVSLRATILCLLAWAGLAAGDRVYIHPFHLVIHNESTCEQLAKANAGKPKDPTFIPA  
 PIQAKTSPVDEKALQDQLVLA AKLDTEDKLRAMVGM LANFLGFRIYGMHSELWGVVHGATVLSPTAVF  
 GTLASLYLGALDHTADRLQAILGVPWKDKNCTSR LDAHKVLSALQAVQGLLVAQGRADSQAQLLLSTVVG  
 VFTAPGLHLKQPFVQGLALYTPVLPRLDFTELDVAAEKIDRFMQAVTGWKTGCSLTGASVDSTLAFNT  
 YVHFQGMKGFSLLAEPQEFWVDNSTSVSVPMLSGMGTFQHWSDIQDNFSVTQVSFTESACLLL IQPHYA  
 SDLDKVEGLTFQQNSLNMKKLSPRTIHLTMPQLVLQGSYDLQDL LAQELPAILHTELNLQKLSNDRIR  
 VGEVLNSIFFEADEREPTTESTQQLNKPEVLEVLNRPFLFAVYDQSATALHFLGRVANPLSTA

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6147\\_f12.zip](https://cdn.origene.com/chromatograms/mk6147_f12.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_000029

**ORF Size:** 1455 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\\_000029.4](#)

**RefSeq Size:** 2587 bp

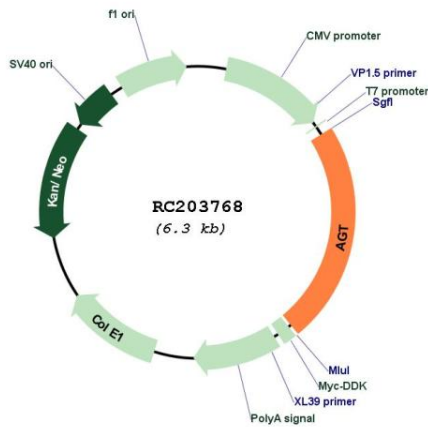
**RefSeq ORF:** 1458 bp

**Locus ID:** 183

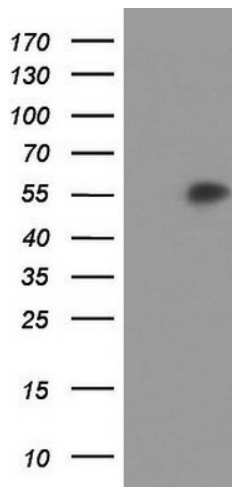
**UniProt ID:** [P01019](#)  
**Cytogenetics:** 1q42.2  
**Domains:** SERPIN  
**Protein Families:** Druggable Genome, Secreted Protein  
**Protein Pathways:** Renin-angiotensin system  
**MW:** 53.1 kDa

**Gene Summary:** The protein encoded by this gene, pre-angiotensinogen or angiotensinogen precursor, is expressed in the liver and is cleaved by the enzyme renin in response to lowered blood pressure. The resulting product, angiotensin I, is then cleaved by angiotensin converting enzyme (ACE) to generate the physiologically active enzyme angiotensin II. The protein is involved in maintaining blood pressure, body fluid and electrolyte homeostasis, and in the pathogenesis of essential hypertension and preeclampsia. Mutations in this gene are associated with susceptibility to essential hypertension, and can cause renal tubular dysgenesis, a severe disorder of renal tubular development. Defects in this gene have also been associated with non-familial structural atrial fibrillation, and inflammatory bowel disease. [provided by RefSeq, Nov 2019]

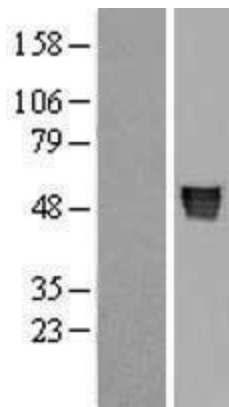
**Product images:**



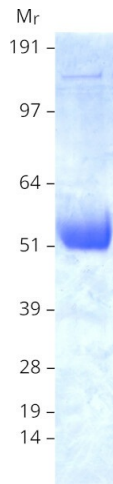
Circular map for RC203768



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY AGT (Cat# RC203768, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-AGT (Cat# [TA804670]). Positive lysates [LY400005] (100ug) and [LC400005] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400005]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203768 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AGT protein (Cat# [TP303768]). The protein was produced from HEK293T cells transfected with AGT cDNA clone (Cat# RC203768) using MegaTran 2.0 (Cat# [TT210002]).