

# Recombinant Rat ANGT Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP52228

Size: 10ug, 100ug

Protein Name: Angiotensinogen (Serpina8) [Cleaved into: Angiotensin-1 (Angiotensin 1-10) (Angiotensin I) (Ang I); Angiotensin-2 (Angiotensin 1-8) (Angiotensin II) (Ang II); Angiotensin-3 (Angiotensin 2-8) (Angiotensin III) (Ang III) (Des-Asp[1]-angiotensin II); Angiotensin-4 (Angiotensin 3-8) (Angiotensin IV) (Ang IV); Angiotensin 1-9; Angiotensin 1-7; Angiotensin 1-5; Angiotensin 1-4]

Synonym: Agt, Serpina8

UniProt ID: P01015

UniProt Link: [www.uniprot.org/uniprotkb/P01015/entry](http://www.uniprot.org/uniprotkb/P01015/entry)

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 477 AA

Molecular Weight: 52 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MTPTGAGLKATIFCILTWVSLTAGDRVYIHPFHLLYYSKSTCAQLENPSVETLPEPTFEPVPIQAKTSP  
VDEKTLRDKLVLA TEKLEAEDRQRAAQVAMIANFMGFRMYKMLSEARGVASGAVLSPPALFGTLVS  
FYLGS LDPTASQLQVLLGVPVKEGDCTSR LDGHKVLTA LQAVQG LLVTQGGSSSQ TPLLQSTVVGLF  
TAPGLRLKQPFVESLGPF TPAIFPRSLDLSTDPVLAAQKINRFVQAVTGWKMNLPLEGVSTDSTLFFN  
TYVHFQ GKMRGFSQLTGLHEFWVDNSTSVSVPM LSGTGNFQHWSDAQNNFSVTRVPLGESVTLLLI  
QPQCASDLDRVEVLVFQHDFLT WIKNPPPRAIRLTLPQLEIRGSYNLQDLLAQAKLSTLLGAEANLGK  
MGDTNPRVGEVLNSILLELQAGEEEQPTESAQQPGSPEVLDVTLSSPFLFAIYERDSGALHFLGRVD  
NPQNVV

## 3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

## 4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

## 5. Product Description

This product is recombinant Angiotensinogen (Serpine A8) [Cleaved into: Angiotensin-1 (Angiotensin 1-10) (Angiotensin I) (Ang I); Angiotensin-2 (Angiotensin 1-8) (Angiotensin II) (Ang II); Angiotensin-3 (Angiotensin 2-8) (Angiotensin III) (Ang III) (Des-Asp[1]-angiotensin II); Angiotensin-4 (Angiotensin 3-8) (Angiotensin IV) (Ang IV); Angiotensin 1-9; Angiotensin 1-7; Angiotensin 1-5; Angiotensin 1-4] produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

**Protein Function:** Essential component of the renin-angiotensin system (RAS), a potent regulator of blood pressure, body fluid and electrolyte homeostasis.; [Angiotensin-2]: Acts directly on vascular smooth muscle as a potent vasoconstrictor, affects cardiac contractility and heart rate through its action on the sympathetic nervous system, and alters renal sodium and water absorption through its ability to stimulate the zona glomerulosa cells of the adrenal cortex to synthesize and secrete aldosterone. Acts by binding to angiotensin receptors AGTR1 and AGTR2 (By similarity). Also binds the DEAR/FBXW7-AS1 receptor (PubMed:9508787).; [Angiotensin-3]: Stimulates aldosterone release.; [Angiotensin 1-7]: Is a ligand for the G protein-coupled receptor MAS1 (By similarity). Has vasodilator and antidiuretic effects (By similarity). Has an antithrombotic effect that involves MAS1-mediated release of nitric oxide from platelets (PubMed:18026570).

**Subcellular Localization:** Secreted .

## 6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.