

### Product datasheet for RC222845L4

#### OriGene Technologies, Inc.

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## Antithrombin III (SERPINC1) (NM\_000488) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Antithrombin III (SERPINC1) (NM 000488) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Antithrombin III

Synonyms: AT3; AT3D; ATIII; ATIII-R2; ATIII-T1; ATIII-T2; THPH7

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC222845).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_000488

ORF Size: 1392 bp



#### Antithrombin III (SERPINC1) (NM\_000488) Human Tagged Lenti ORF Clone - RC222845L4

**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.

**RefSeq:** <u>NM 000488.2</u>

RefSeq Size: 1559 bp RefSeq ORF: 1395 bp Locus ID: 462

UniProt ID: P01008
Cytogenetics: 1q25.1
Domains: SERPIN

Protein Families: Druggable Genome, Secreted Protein

**Protein Pathways:** Complement and coagulation cascades

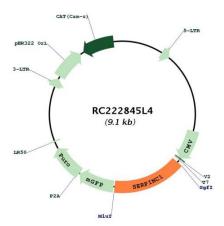
**MW:** 52.6 kDa

**Gene Summary:** The protein encoded by this gene, antithrombin III, is a plasma protease inhibitor and a

member of the serpin superfamily. This protein inhibits thrombin as well as other activated serine proteases of the coagulation system, and it regulates the blood coagulation cascade. The protein includes two functional domains: the heparin binding-domain at the N-terminus of the mature protein, and the reactive site domain at the C-terminus. The inhibitory activity is enhanced by the presence of heparin. Numerous mutations have been identified for this gene, many of which are known to cause antithrombin-III deficiency which constitutes a strong risk factor for thrombosis. A reduction in the serum level of this protein is associated with severe cases of Coronavirus Disease 19 (COVID-19). [provided by RefSeq, Sep 2020]



# **Product images:**



Circular map for RC222845L4