

Product datasheet for RC225659L3

OriGene Technologies, Inc.

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alpha 1 Antitrypsin (SERPINA1) (NM_001127704) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: alpha 1 Antitrypsin (SERPINA1) (NM_001127704) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: alpha 1 Antitrypsin

Synonyms: A1A; A1AT; AAT; alpha1AT; nNIF; PI; PI1; PRO2275

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Sgfl-Mlul

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC225659).

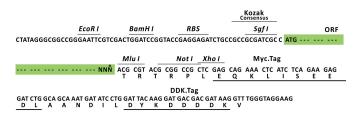
Sequence:

Restriction Sites: Cloning Scheme:

Cloning sites used for ORF Shuttling:

Sgf I ORF Mlu I

GCG ATC GC ATG ---//--- NNN ACG CGT ---



^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001127704

ORF Size: 1254 bp



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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 001127704.1</u>, <u>NP 001121176.1</u>

 RefSeq Size:
 3492 bp

 RefSeq ORF:
 1257 bp

 Locus ID:
 5265

 UniProt ID:
 P01009

Cytogenetics:

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein

Protein Pathways: Complement and coagulation cascades

14q32.13

MW: 46.7 kDa

Gene Summary: The protein encoded by this gene is a serine protease inhibitor belonging to the serpin

superfamily whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and plasminogen activator. This protein is produced in the liver, the bone marrow, by lymphocytic and monocytic cells in lymphoid tissue, and by the Paneth cells of the gut. Defects in this gene are associated with chronic obstructive pulmonary disease, emphysema, and chronic liver disease. Several transcript variants encoding the same protein have been found for this gene.

[provided by RefSeq, Aug 2020]