

## Product datasheet for RC203756L4

#### OriGene Technologies, Inc.

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### Alanine Transaminase (GPT) (NM\_005309) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** Alanine Transaminase (GPT) (NM\_005309) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Alanine Transaminase

Synonyms: AAT1; ALT1; GPT1

Mammalian Cell

Selection:

Puromycin

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

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

**ORF Nucleotide** 

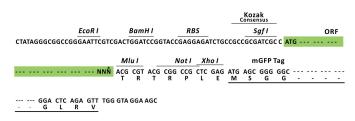
The ORF insert of this clone is exactly the same as(RC203756).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_005309

ORF Size: 1488 bp



#### Alanine Transaminase (GPT) (NM\_005309) Human Tagged Lenti ORF Clone - RC203756L4

**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 005309.1</u>

 RefSeq Size:
 1896 bp

 RefSeq ORF:
 1491 bp

 Locus ID:
 2875

 UniProt ID:
 P24298

Cytogenetics: 8q24.3

**Protein Families:** Druggable Genome

**Protein Pathways:** Alanine, aspartate and glutamate metabolism, Metabolic pathways

**MW:** 54.6 kDa

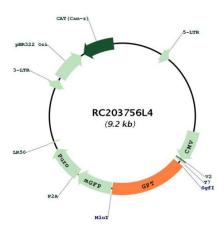
Gene Summary: This gene encodes cytosolic alanine aminotransaminase 1 (ALT1); also known as glutamate-

pyruvate transaminase 1. This enzyme catalyzes the reversible transamination between alanine and 2-oxoglutarate to generate pyruvate and glutamate and, therefore, plays a key role in the intermediary metabolism of glucose and amino acids. Serum activity levels of this enzyme are routinely used as a biomarker of liver injury caused by drug toxicity, infection, alcohol, and steatosis. A related gene on chromosome 16 encodes a putative mitochondrial

alanine aminotransaminase.[provided by RefSeq, Nov 2009]



# **Product images:**



Circular map for RC203756L4