

## **Product datasheet for RC226830L3**

# OriGene Technologies, Inc.

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### GPT2 (NM\_001142466) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** GPT2 (NM\_001142466) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: GPT2

Synonyms: ALT2; GPT 2; MRT49; NEDSPM

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(RC226830).

Sequence:

e:

Restriction Sites: Cloning Scheme:





st The last codon before the Stop codon of the ORF.

**ACCN:** NM\_001142466

ORF Size: 1564 bp





#### GPT2 (NM\_001142466) Human Tagged Lenti ORF Clone - RC226830L3

**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 001142466.2</u>, <u>NP 001135938.1</u>

 RefSeq Size:
 3879 bp

 RefSeq ORF:
 1272 bp

 Locus ID:
 84706

 UniProt ID:
 Q8TD30

 Cytogenetics:
 16q11.2

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

**MW:** 57.7 kDa

**Gene Summary:** This gene encodes a mitochondrial alanine transaminase, a pyridoxal enzyme that catalyzes

the reversible transamination between alanine and 2-oxoglutarate to generate pyruvate and glutamate. Alanine transaminases play roles in gluconeogenesis and amino acid metabolism in many tissues including skeletal muscle, kidney, and liver. Activating transcription factor 4 upregulates this gene under metabolic stress conditions in hepatocyte cell lines. A loss of function mutation in this gene has been associated with developmental encephalopathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2015]