

Product datasheet for **RC226830L4V**

GPT2 (NM_001142466) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	GPT2 (NM_001142466) Human Tagged ORF Clone Lentiviral Particle
Symbol:	GPT2
Synonyms:	ALT2; GPT 2; MRT49; NEDSPM
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001142466
ORF Size:	1564 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC226830).
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.
RefSeq:	NM_001142466.2 , NP_001135938.1
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



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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]