

## Product datasheet for PH309119

### GPT2 (NM\_133443) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	GPT2 MS Standard C13 and N15-labeled recombinant protein (NP_597700)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC209119
Predicted MW:	57.9 kDa
Protein Sequence:	>RC209119 protein sequence Red=Cloning site Green=Tags(s)

MQRAAALVRRGCGPRTPSSWGRSQSSAAAEASAVLKVRPERSRRERILTLESMPQVKAVEYAVRGPVIL  
KAGEIELELQRGIKPFTEVIRANIGDAQMGQPITFLRQVMALCTYPNLLDPSFPEDAKKRARRILQ  
ACGGNSLGSYSASQGVNCIREDVAAYITRRDGGVPADPDNIYLTGASDGISTILKILVSGGKSRTGVM  
IPIQYPLYSAVISSELDIQQVNYLDEENCWALNVNELRRAVQEAQKDHCDPKVLCIINPGNPTGQVQSRK  
CIEDVIHFAWEEKLFLLADEVYQDNVYSPDCRFHSFKKVLVEMGPEYSSNVELASFHSTSKGYMGECGYR  
GGYMEVINLHPEIKGQLVKLLSVRLCPPVSGQAAMDIVNPPVAGEESFEQFSREKESVLGNLAKKAKLT  
EDLFNQVPGIHCNPLQGAMYAFPRIFIPAKAVEAAQAHQMAPDMFYCMKLEETGICVVPVSGSGFGQREGT  
YHFRMTILPPVEKLTQVQKDFHINFLEKYA

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u><a href="#">NP_597700</a></u>
RefSeq Size:	3963
RefSeq ORF:	1569



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**Synonyms:** ALT2; GPT 2; MRT49; NEDSPM

**Locus ID:** 84706

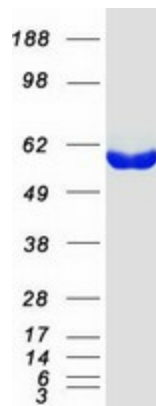
**UniProt ID:** [Q8TD30](#), [A0A024R6R2](#)

**Cytogenetics:** 16q11.2

**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]

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

### Product images:



Coomassie blue staining of purified GPT2 protein (Cat# [TP309119]). The protein was produced from HEK293T cells transfected with GPT2 cDNA clone (Cat# [RC209119]) using MegaTran 2.0 (Cat# [TT210002]).