Active Recombinant human ALT2/GPT2 Protein, His-tagged

Cat. No. GPT2-01H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human GPT2 protein (1-523aa), fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.
Species	Human
Source	E.coli
ProteinLength	1-523aa
Description	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.
Form	Liquid
Bio-activity	Specific activity is > 100 unit/mg, and is defined as the amount of enzyme that cleaves 1umole of L-Alanine to L-Glutamate per minute at pH 7.5 at 37 centigrade.
Molecular Mass	60.3 kDa (546aa)

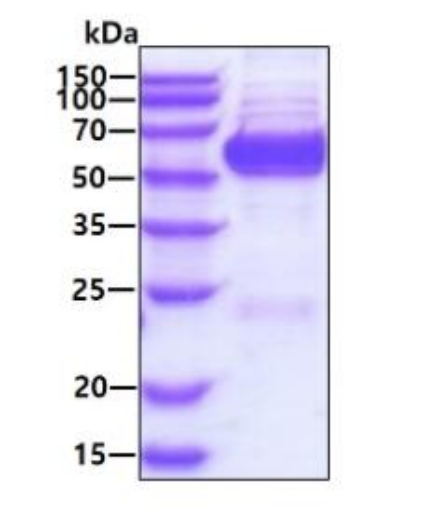
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AA Sequence	MQRAAALVRRGCGPRTPSSWGRSQSSAAAEASAVLKVRPERSRRERILTLESMNP QVKAVEYAVRGPIVLKAGEIELELQRGIKKPFTEVIRANIGDAQAMGQQPITFLRQVM ALCTYPNLLDSPSFPEDAKKRARRILQACGGNSLGSYSASQGVNCIREDVAAYITRR DGGVPADPDNIYLTTGASDGISTILKILVSGGGKSRTGVMIPIPQYPLYSAVISELDAIQ VNYYLDEENCWALNVNELRRAVQEAKDHCDPKVLCIINPGNPTGQVQSRKCIEDVIH FAWEEKLFLLADEVYQDNVYSPDCRFHSFKKVLYEMGPEYSSNVELASFHSTSKGY MGECGYRGGYMEVINLHPEIKGQLVKLLSVRLCPPVSGQAAMDIVVNPPVAGEESF EQFSREKESVLGNLAKKAKLTEDLFNQVPGIHCNPLQGAMYAFPRIFIPAKAVEAAQ AHQMAPDMFYCMKLLEETGICVVPGSGFGQREGTYHFRMTILPPVEKLKTVLQKVK DFHINFLEKYA
Purity	> 90% by SDS-PAGE
Applications	SDS-PAGE, Enzyme Activity
Storage	Can be stored at +2 to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 to -80 centigrade. Avoid repeated freezing and thawing cycles.
Concentration	0.5 mg/mL (determined by Bradford assay)
Storage Buffer	20 mM Tris-HCl buffer (pH 7.5) containing 30% glycerol, 2 mM DTT, 0.2 M NaCl

GENE INFORMATION

Gene Name	GPT2 glutamic--pyruvic transaminase 2 [Homo sapiens (human)]
Official Symbol	GPT2
Synonyms	GPT2; glutamic--pyruvic transaminase 2; ALT2; GPT 2; MRT49; NEDSPM; alanine aminotransferase 2; glutamate pyruvate transaminase 2; glutamic pyruvate transaminase (alanine aminotransferase) 2; glutamic pyruvate transaminase 2;

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	glutamic--alanine transaminase 2; EC 2.6.1.2
Gene ID	84706
mRNA Refseq	NM_133443
Protein Refseq	NP_597700
MIM	138210
UniProt ID	Q8TD30
SDS-PAGE	 3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

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