

Recombinant Rat Gpt protein, His-tagged

Cat. No. Gpt-44R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant rat Gpt, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Rat
Source	E.coli
Description	Gpt also known as Alanine aminotransferase 1, is a pyridoxal enzyme which catalyses the reversible interconversion of L-alanine and 2-oxoglutarate to pyruvate and L-glutamate. The Gpt is widely distributed in various tissues from animals and even in some kind of plants. It is suggested that c-ALT is associated to the utilization of pyruvate in glycolysis and m-ALT is involved in the conversion of alanine to pyruvate for gluconeogenesis.
Form	Liquid. In Phosphate Buffered Saline pH 7.4 containing 10% glycerol
Molecular Mass	57.5kDa (519aa)
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSMASRVND QSQASRNLK GKVLTLDTMN PCVRRVEYAV RGPIVQRALE LEQELRQGVK KPFTEVIRANIGDAQAMGQR PITFFRQVLA LCVYPNLLSS PDFPEDAKRR AERILQACGG HSLGAYSISS GIQPIREDVA QYIERRDGGI PADPNNIFLS TGASDAIVTM LKLLVSGEGR ARTGVLIPIP QYPLYSAALA ELDAVQVDYY LDEERAWALD IAE LRRLCQ ARDRCCPRVL CVINPGNPTGQVQTRECIEA VIRFAFKEGL FLMADEVYQD NVYAEGSQFH SFKKVLMEMG PPYSTQQELA SFHSVSKGYM GECGFRGGYV

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EVVNMDAEVQ KQMGKLMSVR LCPPVPGQAL MDMVVSPPTP SEPSFKQFQA
 ERQEVLAELA AKAKLTEQVF NEAPGIRCNP VQGAMYSFPQ
 VQLPLKAVQRAQELGLAPDM FFCLCALLEET GICVVPGSGF GQQEGTYHFR
 MTILPPMEKL RLLLEKLSHF HAKFTHEYS

Purity >90% by SDS - PAGE

Storage Can be stored at +4 centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.

Concentration 1mg/ml (determined by Absorbance at 280nm)

GENE INFORMATION

Gene Name [Gpt glutamic-pyruvate transaminase \(alanine aminotransferase\) \[Rattus norvegicus \]](#)

Official Symbol [Gpt](#)

Synonyms GPT; glutamic-pyruvate transaminase (alanine aminotransferase); alanine aminotransferase 1; ALT1; GPT 1; glutamic pyruvate transaminase; glutamic--alanine transaminase 1; glutamic--pyruvic transaminase 1; glutamate pyruvate transaminase 1; glutamic pyruvic transaminase 1, soluble; glutamic pyruvic transaminase (alanine aminotrasferase); Gpt1;

Gene ID [81670](#)

mRNA Refseq [NM_031039](#)

Protein Refseq [NP_112301](#)

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MIM	
UniProt ID	
Pathway	Alanine and aspartate metabolism, organism-specific biosystem; Alanine, aspartate and glutamate metabolism, organism-specific biosystem; Alanine, aspartate and glutamate metabolism, conserved biosystem; Amino acid synthesis and interconversion (transamination), organism-specific biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of amino acids and derivatives, organism-specific biosystem;
Function	L-alanine:2-oxoglutarate aminotransferase activity; L-alanine:2-oxoglutarate aminotransferase activity; pyridoxal phosphate binding; transaminase activity;

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