

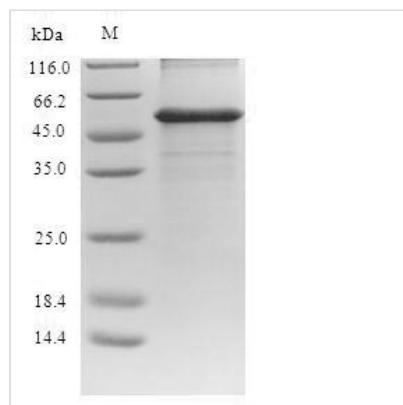


Recombinant Human Alanine aminotransferase 1 (GPT)

Product Code	CSB-EP009864HU
Relevance	Catalyzes the reversible transamination between alanine and 2-oxoglutarate to form pyruvate and glutamate. Participates in cellular nitrogen metabolism and also in liver gluconeogenesis starting with precursors transported from skeletal muscles .
Abbreviation	Recombinant Human GPT protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P24298
Alias	Glutamate pyruvate transaminase 1 ;GPT 1;Glutamic--alanine transaminase 1;Glutamic--pyruvic transaminase 1
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ASSTGDRSQAVRHGLRAKVLTLDGMNPRVRRVEYAVRGPIVQRALELEQELR QGVKKPFTEVIRANIGDAQAMGQRPITFLRQVLALCVNPDLLSSPNFPDDAKK RAERILQACGGHSLGAYSVSSGIQLIREDVARYIERRDGGIPADPNNVFLSTGA SDAIVTVLKLLVAGEGHTRTGVLIPQYPLYSATLAELGAVQVDYYLDEERAW ALDVAELHRALGQARDHCRPRALCVINPGNPTGQVQTRECIEAVIRFAFEERLF LLADEVYQDNVYAAGSQFHSFKKVLMMGPPYAGQQELASFHSTSKGYMGE CGFRGGYVEVNMDDAAVQQQMLKLMSVRLCPPVPGQALLDLVVSPAPTDP SFAQFQAEKQAVLAELA KAKLTEQVFNEAPGISCNPVQGAMYSFPRVQLPPR AVERAQELGLAPDMFFCLRLLEETGICVVP GSGFGQREGTYHFRMTILPPLEK LRLLEKLSRFHAKFTLEYS
Research Area	Signal Transduction
Source	E.coli
Target Names	GPT
Expression Region	2-496aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	58.5kDa
Protein Length	Full Length of Mature Protein



Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The DNA coding sequence translated into the human GPT protein sequence (2-496aa) was fused with the N-terminal 6xHis tag sequence to form the recombinant DNA, which was inserted into an expression vector. The reconstructed expression vector was transformed into the E.coli for follow-up expression. The product underwent purification to obtain the recombinant human GPT protein with N-terminal 6xHis tag. The SDS-PAGE analysis determined its purity higher than 90%. After electrophoresis, a 55 kDa protein band was observed on the gel.

GPT is a gene providing instructions for making a protein named alanine aminotransferase 1 (abbreviated GPT) in human and belongs to class-I pyridoxal-phosphate-dependent aminotransferase family or alanine aminotransferase subfamily. This protein is mainly expressed in liver, kidney, heart, and skeletal muscles, and expressed at moderate levels in the adipose tissue. This protein is an enzyme catalyzing the reversible transamination between alanine and 2-oxoglutarate to form pyruvate and glutamate. It is involved in cellular nitrogen metabolism and also in in step 1 of the subpathway that synthesizes pyruvate from L-alanine.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.