

## 32-6775: GPT Human, His Active

**Application :** Functional Assay  
**Alternative Name :** Glutamic-pyruvate transaminase (alanine aminotransferase), GPT1, ALT1, AAT1, Glutamic-alanine transaminase 1, EC 2.6.1.2.

### Description

Source: E.coli.

Sterile Filtered colorless solution.

GPT catalyzes the reversible transamination between alanine and 2-oxoglutarate to create pyruvate and glutamate. GPT has a crucial part in the intermediary metabolism of glucose and amino acids. GPT is broadly used as an indicator of liver reliability or hepatocellular destruction in clinical tests.

GPT Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 516 amino acids (1-496) and having a molecular mass of 56.8 kDa. GPT is fused to a 20 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg  
**Purification :** Greater than 90% as determined by SDS-PAGE.  
**Content :** The GPT solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 2mM DTT and 20% glycerol.  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MASSTGDRSQ AVRHGLRAKV LTLDGMNPRV RVEYAVRGP  
IVQRALELEQ ELRQGVKKPF TEVIRANIGD AQAMGQRPIT FLRQVLALCV NPDLLSSPNF PDDAKKRAER  
ILQACGGHSL GAYSVSSGIQ LIREDVARYI ERRDGGIPAD PNNVFLSTGA SDAIVTVLKL LVAGEGHTRT  
GVLIPQYP LYSATLAE LG AVQVDYLLDE ERAWALDVAE LHRALGQARD HCRPRALCVI NPGNPTGQVQ  
TRECIEAVIR FAFEERLFL ADEVYQDNVY AAGSQFHSFK KVLMEMGPPY AGQELASFH STSKGYMGEC  
GFRGGYVEVV NMDAAVQQQM LKLM SVRLCP VPGQALLDL VVSPAPTDP SFAQFQAEKQ  
AVLAELA AKA KLTEQVFNEA PGISCNPVQG AMYSFPRVQL PPRAVERAQE LGLAPDMFFC LRLLEETGIC  
VVPGSGFGQR EGTYHFRMTI LPPLEKLRL LLEKLSRFHAK FTLEYS

### Application Note

Specific activity is > 100units/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 37C.