

Rat glutamic-pyruvate transaminase (alanine aminotransferase) ELISA Kit | GPT elisa kit

Rat Alanine aminotransferase, ALT ELISA Kit

CATALOG # AAA79715	REACTIVITY Rat
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PRODUCT SYNONYMS

glutamic-pyruvate transaminase (alanine aminotransferase); Rat Alanine aminotransferase; ALT ELISA Kit; Rat Alanine aminotransferase (ALT) ELISA Kit; AAT1; ALT1; GPT1; glutamic pyruvate transaminase; glutamic-alanine transaminase 1; GPT elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay has high sensitivity and excellent specificity for detection of Rat GPT. No significant cross-reactivity or interference between Rat GPT and analogues was observed.
Sequence Length	496
Samples	Serum, plasma, cell culture supernates, tissue homogenates
Detection Range	3.12 mIU/ml-200 mIU/ml
Sensitivity	0.78 mIU/ml
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV% is less than 8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV% is less than 10% Three samples of known concentration were tested in twenty assays to assess.
Detection Wavelength	450 nm
Sample Volume	50-100ul
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for GPT elisa kit

Introduction: Alanine transaminase or ALT is a transaminase enzyme (EC 2.6.1.2). It is also called serum glutamic pyruvic transaminase (SGPT) or alanine aminotransferase (ALAT). ALT is found in serum and in various bodily tissues, but is most commonly associated with the liver. It catalyzes the two parts of the alanine cycle. It catalyzes the transfer of an amino group from alanine to α -ketoglutarate, the products of this reversible transamination reaction being pyruvate and glutamate. Significantly elevated levels of ALT often suggest the existence of other medical problems such as viral hepatitis, congestive heart failure, liver damage, biliary duct problems, infectious mononucleosis, or myopathy. For this reason, ALT is commonly used as a way of screening for liver problems. However, elevated levels of ALT do not automatically mean that medical problems exist. Fluctuation of ALT levels is normal over the course of the day, and ALT levels can also increase in response to strenuous physical exercise. When elevated ALT levels are found in the blood, the possible underlying causes can be further narrowed down by measuring other enzymes.

Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to ALT. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated polyclonal antibody preparation specific for ALT and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain ALT, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm $\pm$ 2 nm. The concentration of ALT in the samples is then determined by comparing the O.D. of the samples to the standard curve.

NCBI AND UNIPROT INFORMATION

NCBI GI #	13591961
NCBI GeneID	81670
NCBI Accession #	NP_112301.1
NCBI GenBank Nucleotide #	NM_031039.1
UniProt Accession #	P25409 ; Q4V7F7
Molecular Weight	55,110 Da
NCBI Official Full Name	alanine aminotransferase 1
NCBI Official Synonym Full Names	glutamic-pyruvate transaminase (alanine aminotransferase)
NCBI Official Symbol	Gpt
NCBI Official Synonym Symbols	Gpt1
NCBI Protein Information	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)
UniProt Protein Name	Alanine aminotransferase 1
UniProt Gene Name	Gpt
UniProt Synonym Gene Names	Aat1; Gpt1; ALT1; GPT 1
UniProt Entry Name	ALAT1_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/gpt-rat-elisa-kits/glutamic-pyruvate-transaminase-alanine-aminotransferase/79715>