

Native Human Alanine Aminotransferase

Cat. No. NATE-0067

Lot. No. (See product label)

Introduction

Description

Alanine transaminase (ALT) is a transaminase enzyme (EC 2.6.1.2). It is also called alanine aminotransferase (ALAT) and was formerly called serum glutamate-pyruvate transaminase (SGPT) or serum glutamic-pyruvic transaminase (SGPT). ALT is found in plasma and in various body tissues, but is most common in the liver. It catalyzes the two parts of the alanine cycle. Serum ALT level, serum AST (aspartate transaminase) level, and their ratio (AST/ALT ratio) are commonly measured clinically as biomarkers for liver health. The tests are part of blood panels.

Synonyms

Alanine transaminase; ALT; EC 2.6.1.2; alanine aminotransferase; ALAT; glutamic-pyruvic transaminase; glutamic-alanine transaminase; GPT; β -alanine aminotransferase; alanine- α -ketoglutarate aminotransferase; alanine-pyruvate aminotransferase; glutamic acid-pyruvic acid transaminase; glutamic-pyruvic aminotransferase; L-alanine aminotransferase; L-alanine transaminase; L-alanine- α -ketoglutarate aminotransferase; pyruvate transaminase; pyruvate-alanine aminotransferase; pyruvate-glutamate transaminase

Product Information

Species

Human

Source

Human Heart

Form

Liquid

EC Number

EC 2.6.1.2

CAS No.

9000-86-6

Purity

Purified

Activity

> 250 U/mL (Dimension Clinical Chemistry System)

Contaminants

AST/GOT: 2.0%LDH: 1.0%ALP: 1.0%gGT: 1.0%NOTE: Custom purification available.

Specificity

> 10 U/mg protein

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

1-aminocyclopropane-1-carboxylate synthase activity; L-alanine:2-oxoglutarate aminotransferase activity; L-alanine:2-oxoglutarate aminotransferase activity; pyridoxal phosphate binding; transaminase activity

Unit Definition

One unit will catalyze the transamination of one micromole of L-alanine to alpha-ketoglutarate, forming L-glutamate and pyruvate, per minute at 37°C and pH 7.4.

Storage and Shipping Information

Storage 2-8°C