
Lab Dept: Chemistry

Test Name: ALT

General Information

Lab Order Codes: ALT

Synonyms: Alanine Aminotransferase, SGPT, Serum Glutamic Pyruvate Transaminase

CPT Codes: 84460–Transferase; alanine amino (ALT) (SGPT)

Test Includes: Alanine Aminotransferase concentration reported in U/L.

Logistics

Test Indications: ALT is often measured in conjunction with AST to determine whether the AST source is liver or heart. Elevated levels of AST are found in hepatic disease, myocardial damage, and muscular dystrophy. ALT is the more liver-specific enzyme.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 4 hours

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: Green top (Li Heparin) tube **preferred**
Alternate tube: Red, marble or gold top tube

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL serum/plasma

Collection: Routine blood collection. Mix tubes containing anticoagulant by gentle inversion.

Special Processing: Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into a plastic sample cup. Analyze sample immediately or store at refrigerated temperatures.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen

Interpretive

Reference Range:	Reference ranges by Method:	
	Method Abbott	
	0 – 364 days:	5 – 33 U/L
	1 – 12 years:	9 – 25 U/L
	13 – 18 years female:	8 – 22 U/L
	13 – 18 years male:	9 – 24 U/L
	Adult:	<5 – 55 U/L

Critical Values: N/A

Limitations: N/A

Methodology: ABBOTT: Enzymatic (NAOH without p5-p7)

References:

Biorad Liquichek Unassayed Chemistry Control Product Insert (10/2005) Bio-Rad Laboratories, Irvine, CA 92618

Clinical Significance, Dade Behring Inc., Glasgow Business Community, Mailbox 531, P.O. Box 6101, Newark, Delaware 19714

Architect ALT Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, February 2017

Alinity ALT Pkg Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL 60064, February 2018

Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc, Hudson, OH, 5th Edition

Updates:

2/17/2005: Critical value previously listed as >500 U/L.

2/8/2016: Update alt tube types

10/18/2019: New backup instrumentation and related reference ranges

11/9/2020: Method VISTA removed, instrument retired