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Working

Yale - Alanine Aminotransferase

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ABSTRACT

Summary:

Procedure used to measure the Alanine Amino activity in blood, plasma, and serum. Alanine Amino (ALT) activity is measured by the enzymatically coupled reactions of ALT (to form pyruvate from alanine and α-ketoglutarate) and Lactate dehydrogenase (conversion of pyruvate to lactate with oxdiation of NADH to NAD). The rate of NAD formation is monitored by the change in absorbance at 340 nm.

EXTERNAL LINK

https://mmpc.org/shared/document.aspx?id=206&docType=Protocol

MATERIALS

NAME	CATALOG #	VENDOR
Assayed Control Serum 1	R83082	Prolabs(cliniqa)
Assayed Control Serum 2	R83083	Prolabs(cliniqa)
Alanine Transaminase Reagent	R85122	Prolabs(cliniqa)

MATERIALS TEXT

Reagent Preparation:

Alkaline Transaminase Reagent: Add the appropriate amount of water (6.5mL) to the reagent bottle. Invert to mix, allowing 15 minutes for the reagent to settle.

Assayed Control Serum 1: Add the appropriate amount of water (6.5mL) to the chemical control bottle. Invert to mix, allowing 15 minutes for the reagent to settle.

Assayed Control Serum 2: Add the appropriate amount of water (6.5mL) to the chemical control bottle. Invert to mix, allowing 15 minutes for the reagent to settle.

BEFORE STARTING

Analysis by automated system Cobas Mira Plus.

1 Calibrate Cobas for Alanine Transaminase Activity analysis by running two assayed control serum.

2 Sample handling as performed by the Cobas Mira Plus.
a) Pipette 16 µL of sample into a cuvette slot.
b) Add 145 µL of Alanine Transaminase Reagent.
c) Mixture is incubated at 37°C and spun for 10 minutes.

d) Absorbance is measured at 340 nm.