



May 09, 2019

U Mass - Alanine Transferase

DOI

dx.doi.org/10.17504/protocols.io.xpmfmk6



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Protocol Citation: Jason Kim 2019. U Mass - Alanine Transferase. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.xpmfmk6>

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Protocol status: Working

We use this protocol and it's working

Created: February 01, 2019

Last Modified: May 09, 2019

Protocol Integer ID: 19917

Keywords: Serum alanine transferase, liver function, serum alanine transferase level, alanine transferase summary, using roche cobas clinical chemistry analyzer, roche cobas clinical chemistry analyzer, liver, serum, spectrophotometric measurement

Abstract

Summary:

This experiment involves a spectrophotometric measurement using Roche Cobas Clinical Chemistry Analyzer. Serum alanine transferase levels reflect liver function.

Materials

MATERIALS

- ✕ Pyridoxal Phosphate Roche Catalog # 04774221190
- ✕ Calibrator f.a.s. Roche Catalog # 10759350 360
- ✕ Precinorm U Plus Roche Catalog # 12149435 160
- ✕ Precipath U Plus Roche Catalog # 12149443 160
- ✕ NaCl Diluent 9% Roche Catalog #04774230 190
- ✕ Cleaner Roche Catalog #04774248 190
- ✕ Micro Sample cups Roche Catalog #11406680 001
- ✕ Chimneys Roche Catalog #11930630 001
- ✕ NERL High Quality Water Fisher Scientific Catalog #9805
- ✕ Alanine aminotransferase acc. IFCC Roche Catalog #04718569190

Note:

Roche, [RRID:SCR_001326](#)

Fisher Scientific, [RRID:SCR_008452](#)

Troubleshooting



Before start

Notes:

- ✓ Try to use freshly prepared serum and plasma samples for this assay.
- ✓ No dilution or treatment of the sample is required, but plasma samples should be centrifuged to remove any fibrin/fibrinogen clumps.
- ✓ Samples should be stored at 2-8°C for 24 hours prior to analysis. For longer periods, store samples at -70°C, and avoid repeated freeze/thaw cycles.
- ✓ A 50 µl dead volume is required in addition to sample volume for multi-protein analysis (typically 1-5 µl).



- 1 Perform daily quality control assessment of instrumentation before analysis.
- 2 Load each sample into a specialized micro-sample cup for the clinical chemistry analyzer.
- 3 Select ALT test on display and run the analysis.
- 4 Collect and analyze the data.