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U Mass - Alanine Transferase

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Protocol status: Working

We use this protocol and it's working

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Keywords: Serum alanine transferase, liver function

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

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.