



# Alkaline Phosphatase

Version: 1  
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*(note that the following list should be linked to the appropriate location.)*

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**Summary:** *(This area will include a brief description of what the protocol is used for and why someone would need to use it.)*

This experiment involves a spectrophotometric measurement using Roche Cobas Clinical Chemistry Analyzer. Serum levels of alkaline phosphatase reflect liver function.

**Reagents and Materials:** *(This should be a comprehensive list of stock solutions and material. The reagent list for the stock solutions is included in the reagent preparation area that is included at the end of this SOP.)*

Reagent/Material	Vendor	Stock Number
Alkaline phosphatase acc. to IFCC Gen.2	Roche	04657373 190
Calibrator f.a.s.		10759350 360
Precinorm U Plus		12149435 160
Precipath U Plus		12149443 160
NaCl Diluent 9%		04774230 190
Cleaner		04774248 190
Micro Sample cups		11406680 001
Chimneys		11930630 001
NERL High Quality Water		Fisher

## Protocol:

**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  $\mu$ l dead volume is required in addition to sample volume for multi-protein analysis (typically 1-5  $\mu$ l).
- 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 Alkaline Phosphatase test on display and run the analysis.
- 4. Collect and analyze the data.