

Total Protein

Version: 1 Edited by: John Stack, Gary Cline: Yale MMPC Analytical Core

Summary: Procedure to determine the total protein concentration in blood, serum, and plasma. Total Protein is determined by the biuret reaction.

Reagents and Materials:

Reagent/Material	Vendor	Stock Number
Total Protein Reagent	Prolabs	R84086
Multi Analyte Calibrator	Prolabs	R60010
Assayed Control Serum 1	Prolabs	R83082
Assayed Control Serum 2	Prolabs	R83083

Protocol: Analysis by automated system Cobas Mira Plus

1) Calibrate Cobas for Total Protein analysis by running a multi-analyte calibrator and two control serum.

- 2) Sample handling as performed by Cobas Mira Plus
 - a) Pipette 5µL of sample into cuvette.
 - b) Add 150 μL of Total Protein Reagent.
 - c) Incubate at 37°C for 10 minutes
 - d) Absorbance is measured at 550nm

Reagent Preparation:

Total Protein Reagent: As supplied by vendor

Multi Analyte Calibrator: 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 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.