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Working

Yale - Blood or Urine Calcium [↗](#)

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[dx.doi.org/10.17504/protocols.io.y3nfyme](https://doi.org/10.17504/protocols.io.y3nfyme)

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ABSTRACT

Summary:

Procedure used to determine the concentration of calcium in blood, serum, and plasma. Calcium is measured as the complex with arsenazo III and monitored at 600nm.

EXTERNAL LINK

<https://mmpc.org/shared/document.aspx?id=216&docType=Protocol>

MATERIALS

NAME	CATALOG #	VENDOR
Calcium Liquid Reagent	R85188	Prolabs(cliniqa)
Multi Analyte Calibrator	R60010	Prolabs(cliniqa)
Assayed Control Serum 1	R83082	Prolabs(cliniqa)
Assayed Control Serum 2	R83083	Prolabs(cliniqa)

MATERIALS TEXT

Reagent Preparation:

Calcium Liquid 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.

BEFORE STARTING

Analysis by automated system Cobas Mira Plus

1 Calibrate Cobas for Calcium analysis by running a multi analyte standard and two assayed control serum.

2 Sample handling as performed by the Cobas Mira Plus.

- a) Pipette 5 μ L of sample into a cuvette slot.
- b) Add 180 μ L of Calcium Liquid Reagent.
- c) Mixture is incubated at 37°C and spun for 10 minutes.
- d) Absorbance is measured at 650nm.



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