

May 17, 2019



Yale - Blood or Urine Calcium

DOI

dx.doi.org/10.17504/protocols.io.y3nfyme



John Stack¹, Gary Cline¹

¹Yale University

Mouse Metabolic Phenotyping Centers Tech. support email: info@mmpc.org



Lili Liang

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account





DOI: https://dx.doi.org/10.17504/protocols.io.y3nfyme

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

Protocol Citation: John Stack, Gary Cline 2019. Yale - Blood or Urine Calcium. protocols.io

https://dx.doi.org/10.17504/protocols.io.y3nfyme

protocols.io Part of SPRINGER NATURE



License: This is an open access protocol distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: March 12, 2019

Last Modified: May 17, 2019

Protocol Integer ID: 21326

Keywords: Blood or Urine Calcium, urine calcium summary, concentration of calcium, calcium, urine, yale, concentration

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.

Materials

MATERIALS

Calcium Liquid Reagent **Prolabs(cliniqa) Catalog** #R85188

Multi Analyte Calibrator **Prolabs(cliniqa) Catalog #**R60010

Assayed Control Serum 1 Prolabs(cliniqa) Catalog #R83082

Assayed Control Serum 2 Prolabs(cliniqa) Catalog #R83083

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.

Troubleshooting



Before start

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