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U Mass - Uric Acid

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Protocol status: Working

We use this protocol and it's working

Created: February 14, 2019

Last Modified: May 10, 2019

Protocol Integer ID: 20370

Keywords: Serum uric acid, kidney failure, renal complications of diabetes, uric acid summary, serum uric acid level, uric acid level, renal complications of diabetes, using roche cobas clinical chemistry analyzer, renal complication, roche cobas clinical chemistry analyzer, spectrophotometric measurement, alterations in systemic protein, nitrogen metabolism, diabetes, systemic protein

Abstract

Summary:

This experiment involves a spectrophotometric measurement using Roche Cobas Clinical Chemistry Analyzer. Serum uric acid levels are affected by alterations in systemic protein and nitrogen metabolism. Serum uric acid levels are altered in kidney failure and renal complications of diabetes.

Materials

MATERIALS

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

Chimneys Roche Catalog #11930630 001

Cleaner Roche Catalog #04774248 190

Micro Sample cups Roche Catalog #11406680 001

X NERL High Quality Water Fisher Scientific Catalog #9805

W Uric Acid Roche Catalog #04657608190

Note:

Roche, RRID:SCR_001326

Fisher Scientific, RRID:SCR_008452



Troubleshooting

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 Uric acid test on display and run the analysis.
- 4 Collect and analyze the data.