May 10, 2019

U Mass - Triglyceride

DOI
dx.doi.org/10.17504/protocols.io.x5pfq5n

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Mouse Metabolic Pheno... | Metabolomics Protocols ...

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DOI: https://dx.doi.org/10.17504/protocols.io.x5pfq5n

External link: https://mmpc.org/shared/document.aspx?id=167&docType=Protocol

Protocol Citation: Jason Kim 2019. U Mass - Triglyceride. **protocols.io** https://dx.doi.org/10.17504/protocols.io.x5pfq5n

Protocol status: Working
We use this protocol and it's working

Created: February 14, 2019

Last Modified: May 10, 2019

Protocol Integer ID: 20367

Keywords: Triglyceride, obesity, insulin resistance, type 2 diabetes, alcoholic steatohepatitis, non-alcoholic fatty liver disease, non-alcoholic steatohepatitis., triglyceride level, triglyceride summary, alterations in systemic lipid metabolism, systemic lipid metabolism, lipid digestion, using roche cobas clinical chemistry analyzer, lipid clearance, roche cobas clinical chemistry analyzer, spectrophotometric measurement, tissue sample, serum, diabetes

Abstract

Summary:

This experiment involves a spectrophotometric measurement using Roche Cobas Clinical Chemistry Analyzer. Triglyceride levels may be measured in serum, plasma, and tissue samples. Serum and tissue triglyceride levels are affected by alterations in systemic lipid metabolism, lipid digestion/absorption, and lipid clearance. Serum and tissue triglyceride levels are altered in obesity, insulin resistance, type 2 diabetes, alcoholic steatohepatitis, non-alcoholic fatty liver disease, and non-alcoholic steatohepatitis.

Materials

MATERIALS

- Triglycerides **Roche Catalog #** 04657594 190
- 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
- NERL High Quality Water **Fisher Scientific Catalog #**9805

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 Triglyceride test on display and run the analysis.

4 Collect and analyze the data.