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Working

# U Mass - Triglyceride

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Mouse Metabolic Phenotyping Centers

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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.

EXTERNAL LINK

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

MATERIALS

| NAME | CATALOG # | VENDOR | CAS NUMBER | RRID |
|---|---|---|---|---|
| Triglycerides | 04657594 190 | Roche | | |
| Calibrator f.a.s. | 10759350 360 | Roche | | |
| Precinorm U plus | 12149435 160 | Roche | | |
| Precipath U plus | 12149443 160 | Roche | | |
| NaCl Diluent 9 % | 04774230 190 | Roche | | |
| Chimneys | 11930630 001 | Roche | | |
| Cleaner | 04774248 190 | Roche | | |
| Micro Sample cups | 11406680 001 | Roche | | |
| NERL High Quality Water | 9805 | Fisher Scientific | | |

MATERIALS TEXT

**Note:**

**Roche, RRID:SCR_001326**
**Fisher Scientific, RRID:SCR_008452**

BEFORE STARTING

**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



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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.

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