



May 10,  
2019

Working

## U Mass - Bilirubin [↗](#)

Jason Kim<sup>1</sup>

<sup>1</sup>University of Massachusetts

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

Mouse Metabolic Phenotyping Centers

Tech. support email: [info@mmpc.org](mailto:info@mmpc.org)

Lili Liang

### ABSTRACT

#### Summary:

This experiment involves a spectrophotometric measurement using Roche Cobas Clinical Chemistry Analyzer. Serum levels of bilirubin reflect bile acid metabolism.

### EXTERNAL LINK

<https://mmpc.org/shared/document.aspx?id=182&docType=Protocol>

### MATERIALS

NAME	CATALOG #	VENDOR	CAS NUMBER  RRID
Total Bilirubin Special	<a href="#">04774256 160</a>	<a href="#">Roche</a>	
Calibrator f.a.s.	<a href="#">10759350 360</a>	<a href="#">Roche</a>	
Precinorm U Plus	<a href="#">12149435 160</a>	<a href="#">Roche</a>	
Precipath U Plus	<a href="#">12149443 160</a>	<a href="#">Roche</a>	
Cleaner	<a href="#">04774248 190</a>	<a href="#">Roche</a>	
Micro Sample cups	<a href="#">11406680 001</a>	<a href="#">Roche</a>	
NERL High Quality Water	<a href="#">9805</a>	<a href="#">Fisher Scientific</a>	

### 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 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).

Perform daily quality control assessment of instrumentation before analysis.

- 1
- 2 Load each sample into a specialized micro-sample cup for the clinical chemistry analyzer.
- 3 Select Bilirubin test on display and run the analysis.
- 4 Collect and analyze the data.



This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited