MAY 08, 2019

OPEN ACCESS

DOI:
dx.doi.org/10.17504/protocols.io.2qigdue

External link:
<https://mmpc.org/shared/document.aspx?id=193&docType=Protocol>

Protocol Citation: Patrick Tso, Dana Lee 2019. U Cinn - Body Composition & Carcass Analysis. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.2qigdue>

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

Created: May 08, 2019

Last Modified: May 08, 2019

PROTOCOL integer ID:
 23018

U Cinn - Body Composition & Carcass Analysis

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ABSTRACT

Summary:

Total body composition in live, un-anaesthetized small animals and carcasses will reveal absolute amounts of body fat, lean tissue and body water via a quantitative magnetic resonance (QMR) instrument, EchoMRI, (Echo Medical Systems, LLC, Houston, TX). This instrument uses the differences in the nuclear magnetic resonance properties of hydrogen atoms in organic and non-organic environments to fractionate signals originating from fat, lean tissue and free water.

MATERIALS

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EchoMRI-100 Whole Body Composition Analyzer for Mice **Echo Medical Systems Catalog #EchoMRI-100**

Mouse Restrainer **Echo Medical Systems Catalog #H100-30**

Note:

[EchoMRI](#), [RRID:SCR_017104](#)

Keywords: Total body composition, Carcass Analysis, quantitative magnetic resonance (QMR), EchoMRI

- 1 Insert the calibration tube into opening on right side of the EchoMRI-100 as far in as possible.
- 2 Select **"Calibrate"** at the bottom of the screen to calibrate the system.
- 3 After calibration has passed, weigh the animal and carefully place in the restrainer tube.
- 4 Insert the restrainer tube into the opening on the right side of the EchoMRI-100 and:
 - a. Select **"New Experiment"** at the bottom of the screen
 - b. Enter data for the **Group**,
 - c. Enter data for the **Subject**
 - d. **Notes** (Body weight should be included in the **"Notes"** field)
- 5 Select **"Start Experiment"** to start measuring the body composition.

Each run will take approximately 1 minute.

It is recommended that each animal is measured 2 or 3 times to determine the average of the repeated runs.

- 6 When the small box in the upper, left-hand corner reads "Experiment Complete," remove the restrainer from the machine, and return the animal to its home cage.
- 7 Repeat steps 4-7 for all additional animals.