

May 10, 2019

U Mass - Body composition (organs)

DOI

dx.doi.org/10.17504/protocols.io.xsnfnde



Jason Kim¹

¹University of Massachusetts

Mouse Metabolic Phenotyping Centers
Tech. support email: info@mmpc.org



Lili Liang

OPEN  ACCESS



DOI: dx.doi.org/10.17504/protocols.io.xsnfnde

External link: <https://mmpc.org/shared/document.aspx?id=148&docType=Protocol>

Protocol Citation: Jason Kim 2019. U Mass - Body composition (organs). **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.xsnfnde>

License: This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: February 05, 2019

Last Modified: May 10, 2019

Protocol Integer ID: 20014

Keywords: obesity, Body composition

Abstract

Summary:

The EchoMRI 3-in-1 uses ^1H - magnetic resonance spectroscopy to noninvasively measure fat mass, lean mass, and water mass in individual organs. Fat, lean, and water mass composition in specific organs is altered in obesity.

Materials

MATERIALS

 EchoMRI 3-in-1 **Echo Medical Systems**

 Pentobarbital **Oak Pharmaceuticals, Inc. Catalog #NDC76478-501-50**

Note:

EchoMRI, RRID:SCR_017104



- 1 Euthanize mice using intraperitoneal injection of pentobarbital.
- 2 Quickly dissect and extract specific organs to measure their composition.
- 3 Place specific organ into an instrument column.
- 4 Measure composition of organ using instrument standard operating procedure.