Mouse Morphometry

Version: 1
Replaced by version: N/A
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Summary: This protocol describes a number of the measurements that are made on the mouse anatomy.

Protocol:

The **left kidney weight** is obtained after dissection from the abdominal cavity and the weight is obtained on a balance with 0.1 mg discrimination. The weight is obtained wet (non-dissecated) after the kidney is blotted on paper towels. This is the left kidney of the animal.

The **right kidney weight** is obtained after dissection from the abdominal cavity and the weight is obtained on a balance with 0.1 mg discrimination. The weight is obtained wet (non dissecated) after the kidney is blotted on paper towels. This is the right kidney of the animal.

Total kidney weight is the combined weight of both kidneys in grams.

The **liver weight** is obtained after dissection from the abdominal cavity and the weight is obtained on a balance with 0.1 mg discrimination. The weight is obtained wet (non-dissecated) after the liver is blotted on paper towels.

The **spleen weight** is obtained after dissection from the abdominal cavity and the weight is obtained on a balance with 0.1 mg discrimination. The weight is obtained wet (non dissecated) after the spleen is blotted on paper towels.

Wet heart weight is obtained after dissection from the thoracic cavity and the weight is obtained on a balance with 0.1 mg discrimination. The weight is obtained wet (non dissecated) after the spleen is blotted on paper towels.

Total Mouse weight The mice are weighed in tared containers upon a Mettler scale.

The **tibia length** is determined using the left tibia of the mouse. The tibia is dissected out using surgical tools and cleaned on all soft tissue. The length is determined using a digital micrometer.

The **spleen weight:tibia length ratio** is a computed value of the spleen weight in grams divided by the tibia length in millimeters.

The **spleen weight:tibia length ratio** is a computed value of the spleen weight in grams divided by the tibia length in millimeters.

The **heart:body weight ratio** is a computed value of the heart weight in grams divided by the body weight in grams.

The **heart:tibia length ratio** is a computed value of the heart weight in grams divided by the tibia length in millimeters.

The **total kidney:body weight ratio** is a computed value of both kidneys weight in grams divided by the body weight in grams.

The **total kidney:tibia length ratio** is a computed value of both kidneys weight in grams divided by the tibia length in millimeters.

The **liver:body weight ratio** is a computed value of the liver weight in grams divided by the body weight in grams.

The **liver:tibia length ratio** is a computed value of the liver weight in grams divided by the tibia length in millimeters.