Model Name
Food Intake, Mouse

Item Number
531700

Introduction
Obesity, which is caused by an imbalance between energy intake and expenditure, is associated with various metabolic diseases. This study is designed for the screening of test substances which have the effect on food intake decreasing.

Procedure Summary
Groups of 20 ICR derived male or female overnight-fasted mice weighing 22 ± 2 g are randomly divided into 4 cages (5 mice/cage). Test substance is administered orally 30 minutes before the animals are placed in their cage with the food mass provided. Food consumption is then measured after 1, 3 and 6 hours and mean ± SEM values are determined. The unpaired Student's t test is applied for comparison between vehicle control and compound treated groups for each of the measured time points. Differences are considered significant at P<0.05.

Suggested Testing
• n=20/group (study design dependent)
• Doses may be administered PO, IV, IP and SC

Turnaround Time(s)
• For Acute Assays: 4 weeks from sample receipt
• For Subacute Assays: 6 weeks to 3 months

Literature

Related Assay(s) (Item # - Assay Name - Species)
531900 – Food Intake – Rat

Modified Protocols
We will readily accommodate client-specified alterations.

Laboratory
These assays are performed at our AAALAC accredited laboratory in Taipei.

Animal Welfare
All aspects of this work are performed in general accordance with the Guide for the Care and Use of laboratory animals (National Academy Press, Washington, DC, 2011). The study protocol was approved by the Pharmacology Discovery Services IACUC and is performed with the oversight of veterinarians to assure the humane treatment of laboratory animals.
Reference Compound
DL-Amphetamine

Graph

Vehicle control, 20 mL/kg PO
Amphetamine Sulfate, 3 mg/kg PO

Food intake (% control)

*P<0.05, treated vs. vehicle control; unpaired Student's t test.

Last modified October 1, 2018