

Standard Protocol for Diet Induced Obesity (DIO) Study with C57 Mice

A Standard Protocol for Diet Induced Obesity (DIO) study has been developed to facilitate your study design. This protocol can be customized as needed to meet your specific objectives. Typically, C57BL/6J (B6) males are fed a high fat diet for 8 to 12 weeks and, as a result they become obese, mildly to moderately hyperglycemic, and develop impaired glucose tolerance. These mice are then used to study the efficacy of drug and or drug formulation and mechanisms of obesity and Type-II diabetes.

Study Design

Following 8 weeks on high fat diet (60%kcal), mice are randomly assigned to groups according to body weight and glucose levels. Mice are dosed once a day via one of the routes of the administration [PO, IP, SC] for 4-12 weeks.

Observation:

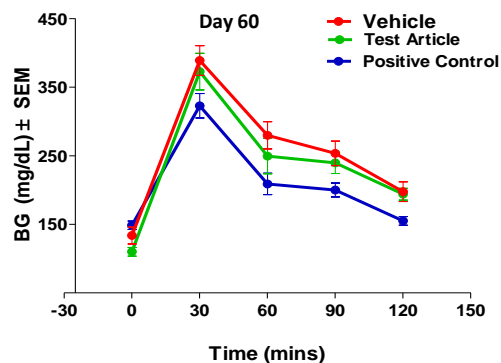
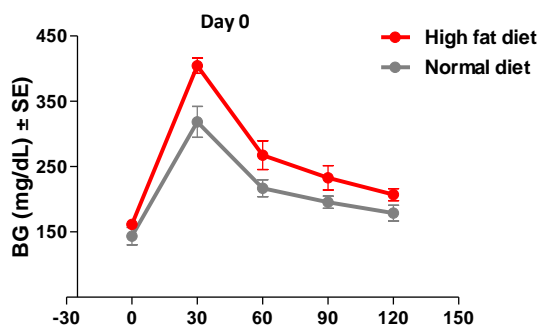
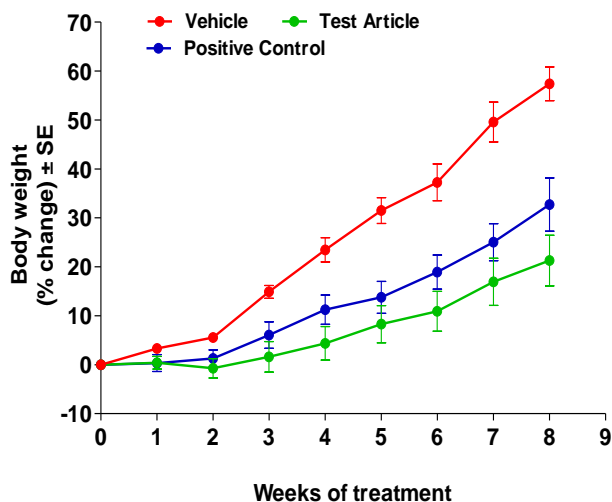
- Body weight
- Food and water intake
- Blood glucose
- Glucose Tolerance Test (GTT)
- Insulin
- Serum Triglycerides, Total Cholesterol, and Free Fatty Acid
- Major tissue are collected and preserved

Report:

Written report provide the following data:

- Percent change in body weight
- Food and Water intake
- Blood Glucose
- Glucose Tolerance Test (GTT)
- AUC for GTT and associated curve
- Serum TG, TC, and FFA data

Glucose Tolerance Test (GTT): Mice are fasted overnight and glucose solution is administrated orally. Blood glucose levels are measured using glucose meter at 0, 30, 60, 90 and 120 min after the glucose administration.



IMPORTANT: Our services are responsive to client needs, customizing protocols, fast results, expert consultation and flexibility. Invitek intends to expand with new therapeutic areas, models, and assays, contact us to discuss your specific needs.