

**Locomotor Activity/Open Field
Test**
IACUC Standard Procedure
Effective Date: June 2024

Description of Procedure:

The locomotor activity test (open field) is a simple means of assessing spontaneous locomotor activity and arousal in mice and rats and is necessary to establish baseline levels of motor activity.

Procedure Steps:

1. Animals are brought into the testing room under defined lighting conditions (i.e., the same lighting/environmental conditions used across all tests) and allowed up to 30-60 minutes of acclimation.
2. The chamber is cleaned with disinfectant prior to use.
3. The animals are placed into the locomotor activity chamber with infrared beams crossing the X, Y and Z axes that plot their ambulatory and fine motor movements, as well as rearing behavior. The animals are under no motivational constraints and are free to explore the environment. Alternatively, this test can be done with any open field enclosure, and the animal's movements and behavior can be video recorded using a camera placed overhead. The researchers can then use post-video processing software to assess relevant variables.
4. The chamber is cleaned with disinfectant in between the testing of each animal.