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Open Field Behavior in Mice

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Protocol status: Working

We use this protocol and it's working

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Abstract

The open field test is widely used to assess spontaneous locomotor activity, exploratory behavior, and anxiety-like responses in rodents.

Attachments



Ding_Lab_Open field ...

15KB

Materials

Open field arena: 50 × 50 × 50 cm chambers

Video recording: A camera mounted on the ceiling above the chambers, adjusted to ensure full coverage of the arena.

Safety warnings

! Wear appropriate PPE as required by your institution.

Ethics statement

Prior ethics approval (e.g. IACUC) should be obtained before performing these experiments. Approval was obtained by the Stanford University IACUC before any procedures were performed.



Procedure

- 1 Place the mouse gently in the center of the open field arena.
- 2 Start recording.
- 3 The test can last between 15 and 60 minutes, depending on the experimental design.
- 4 After allotted time, stop the recording and return the mouse to its home cage.
- 5 **Optional observation:** Record the number of fecal boli and urine spots as additional indicators of anxiety.
- 6 Thoroughly clean the chambers with 70% ethanol between trials and after testing to eliminate odor cues from previous animals.