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Opto-Open Field

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Protocol status: Working
We use this protocol and it's working

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Abstract

Opto-Open Field from Serra et al 2023

1 Mice were individually placed in neutral cages for 3 min in order to recover after connecting the optic cables.

2 Mice were subsequently placed in the central zone of the open field arena and allowed to freely explore it for 5 min before starting the test.

3 The open-field chamber consisted in a 50 cm, squared, transparent, plastic arena with a white floor.

4 The Opto-Open Field test consisted of a 20-min session divided into 5-min alternating time intervals (OFF-ON-OFF-ON).

5 Each 5-min interval was then divided into two 2.5-min intervals for analysis.

6 The patch cable was connected to a rotary joint, which was attached on the other end to a laser that was controlled by an Arduino Uno card (Arduino).

7 During the light-ON trials, blue light was delivered according to the behavioral stimulation protocol (20Hz, 5ms, 5mW).

8 Self-grooming and escape behaviors were manually recorded by an experimenter blind to the experimental groups using the EthoVision XT 14.0 tracking software (Noldus Information Technology, The Netherlands).