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Beam test

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

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Abstract

Beam test for mice

Troubleshooting

1 Mice are placed at the beginning of an elevated horizontal plexiglass beam bar covered on scotch tape to avoid limb slip (1m length – 2.5cm width- 0.5m elevation). At the beginning of the beam we place a little lamp and at the end of the beam we place a dark box to motivate the animal to go towards the dark side.

2 Mice are allowed to explore the beam bar and receive two assisted trials to cross it before the test. After two assisted trials, the test starts and animals can traverse the entire length of the beam unassisted for two times.

3 Measure the time the mouse takes to cross the beam. If the mouse has not crossed the beam in 120 seconds, annotate 120 seconds for that animal. If the mouse falls down, annotate as well 120 seconds. If the mouse does not cross or goes backwards, remove them from the analysis. Calculate the average time after the two trials to obtain the final results.

4 Count the possible limb errors. An error is counted when, during a forward movement, a limb (forelimb or hindlimb) slips through the beam. Classify them in right paw errors or left paw errors.

5 Clean the beam bar between animals.