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We use this protocol and it's working

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Motor behavioral evaluation of mice

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ABSTRACT

This is a general protocol to test motor coordination of mice used models of neurological disorder

Keywords: ASAPCRN, Rotarod, Beam walk, Motor behavior

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Rotarod test

1 On first day, mice are acclimated to standing on a non-rotating rod (Rotamex 5, Columbus Instrumen, 11m
for three 00:01:00 trials with 00:10:00 interval.

2 Three hours later, mice are acclimated to walking on the rod over three 00:01:30 trials at a s 1m 30s
of 4 rpm

3 On next day, latency of mice staying in the rotarod is recorded with accelerating speed of 4-40 rpm 5m
increasing by 1 rpm every 8.3 seconds for a maximum of 00:05:00 per trial.

4 Repeat experiment for three trials daily for two days

Beam walk test 5m

5 Mice are trained to cross beams of 1~1.5m length of round beam. 24mm and 18mm diameter of beams are used.

6 Beam-crossing training is done for three times for two days

7 During the experimental day, its motor coordination will be measured by determining the number of slips, the latency required to cross the beam as the mouse traverses the beam.

8 For actual experiment, mice crosses both beams twice per trial for three trials win 00:05:00 rest 5m periods in between trials