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Pole Test

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ABSTRACT

This behavior test is used to assess motor coordination in mice.

PROTOCOL REFERENCES

Based on protocol used in:

Kim S, Kwon SH, Kam TI, Panicker N, Karuppagounder SS, Lee S, Lee JH, Kim WR, Kook M, Foss CA, Shen C, Lee H, Kulkarni S, Pasricha PJ, Lee G, Pomper MG, Dawson VL, Dawson TM, Ko HS. Transneuronal Propagation of Pathologic α -Synuclein from the Gut to the Brain Models Parkinson's Disease. *Neuron*. 2019 Aug 21;103(4):627-641.e7. doi: 10.1016/j.neuron.2019.05.035. Epub 2019 Jun 26. PMID: 31255487; PMCID: PMC6706297.

GUIDELINES

Main outcome measures: average time to turn, average time to reach the bottom

MATERIALS

Metal rod pole wrapped in bandage gauze (9mm in diameter, 75cm in height)

OPEN  ACCESS



DOI:
dx.doi.org/10.17504/protocols.io.5jyl8938rv2w/v1

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We use this protocol and it's working

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- 1** Place the mouse on the vertical pole with their head oriented upwards 7.5cm from the top of the pole.

- 2** During day 1, gently guide the mouse to turn around and go to the bottom of the pole. They are trained 3 times.

- 3** On day 2, they are trained 3 times again without guidance.

- 4** On day 3, the test day, mice are again placed on the pole 3 times.
Record the time to reorient to face down and the time to reach the bottom of the pole during each of the 3 trials.