



Jun 09, 2023

Pole Test to assess motor coordination in parkinsonian mice

DOI

dx.doi.org/10.17504/protocols.io.dm6gp3ed8vzp/v1

Natalia Lopez-GonzalezdelRey¹, Zachary Gaertner¹

¹Northwestern University, Feinberg School of Medicine, Neurology Department



Natalia Lopez-GonzalezdelRey

Northwestern University

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.dm6gp3ed8vzp/v1>

Protocol Citation: Natalia Lopez-GonzalezdelRey, Zachary Gaertner 2023. Pole Test to assess motor coordination in parkinsonian mice. **protocols.io** <https://dx.doi.org/10.17504/protocols.io.dm6gp3ed8vzp/v1>

License: This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: June 09, 2023



Last Modified: May 31, 2024

Protocol Integer ID: 83161

Keywords: ASAPCRN, behavior protocol, parkinsonian behavior, pole test, parkinsonian mice the pole test, pole test, parkinsonian mice, motor coordination ability, motor coordination, mouse, pole, mice

Funders Acknowledgements:

Aligning Science Across Parkinson's [ASAP-020600] through the Michael J. Fox Foundation for Parkinson's Research (MJFF)
Grant ID: ASAP-020600

Abstract

The pole test evaluates the motor coordination ability of a mouse by having them grasp a pole and then descend to its home cage.

Materials

16in tall, ½in diameter wooden pole coated in tape to allow gripping

Troubleshooting



Pole Test


1d

- 1 Total duration: 1 day
Three consecutive trials per animals are run.

1d

Protocol

1h

- 2 Place the animal cage in the testing room to allow the animals to acclimate.
 01:00:00
- 3 Mice are placed with their head oriented upward at the top of a 16in tall, ½in diameter wooden pole coated in tape to allow gripping. The animals normally orient themselves downward and then descend the length of the pole in order to return to their home cage.
- 4 Return the mouse to its cage.

1h

5m

1m

Analysis

- 5 The time required for the animals to orient themselves facing in a downward direction (time to T turn) and to descend to the base of the pole (total time) is recorded.

Mean times per mouse are compared across groups.