



Feb 21, 2024

Version 1

Rotarod (40 RPM and 20 RPM with docking) V.1

DOI

dx.doi.org/10.17504/protocols.io.3byl4qo5zvo5/v1

daniel.dautan daniel¹, Per Svenningsson¹

¹Karolinska Institute Stockholm



Jacquelyn Haytayan

Weill Cornell Medicine

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.3byl4qo5zvo5/v1>

Protocol Citation: daniel.dautan daniel, Per Svenningsson 2024. Rotarod (40 RPM and 20 RPM with docking) . **protocols.io** <https://dx.doi.org/10.17504/protocols.io.3byl4qo5zvo5/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: February 15, 2024



Last Modified: September 23, 2024

Protocol Integer ID: 95289

Keywords: ASAPCRN, rpm with docking, rpm, motor function testing in mice, rotarod by the svenningsson lab, rotarod, motor function testing, docking, rpm constant speed after habituation, constant speed, mice

Funders Acknowledgements:

Aligning Science Across Parkinson's

Grant ID: 020608

Abstract

This protocol describes motor function testing in mice using the rotarod by the Svenningsson lab.

Two options for the protocol are included: 1) 40 RPM constant speed after habituation and 2) 20 RPM with docking.

Materials

Mouse Rotarod (Ugo Basile 47650)

50% ethanol

Troubleshooting



- 1 Naive mice were placed in groups of 5 on the rotatord (Ugo Basile 47650) for 2-3 minutes for habituation.
- 2 Following habituation, the rotarod program was initiated and lasted for a maximum of 2 minutes.

STEP CASE

40 RPM 4 steps

- 3 Following habituation, the rotarod program was initiated for 40 RPM and lasted for a maximum of 2 minutes.
- 4 The time to fall as defined with the moment the mice fall in the receptacle or the moment the mice turn around the rotor more than 5 consecutive times was selected.
- 5 The apparatus was thus cleaned thoroughly between each group with 50% ethanol followed by water.
- 6 The test was repeated 3 times with at least 6h between each trial.