

MAR 14, 2024

# OPEN 6 ACCESS



DOI:

dx.doi.org/10.17504/protocols.io. 5qpvo3jmzv4o/v1

**Protocol Citation:** Xiaobo Mao, Ramhari Kumbhar, Hanseok Ko, Valina L. Dawson, Ted Dawson 2024. Cylinder Test. **protocols.io** https://dx.doi.org/10.17504/protoc ols.io.5qpvo3jmzv4o/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: Mar 14, 2024

## Cylinder Test

Xiaobo Mao<sup>1,2,3,4</sup>, Ramhari Kumbhar<sup>1,2,3,4</sup>, Hanseok Ko<sup>1,2,4</sup>, Valina L. Dawson<sup>1,2,4,3,5,6</sup>. Ted Dawson<sup>1,2,4,3,5,6,7</sup>

<sup>1</sup>Neuroregeneration and Stem Cell Programs, Institute for Cell Engineering, Johns Hopkins University School of Medicine, Baltimore, MD 21205, USA;

<sup>2</sup>Department of Neurology, Johns Hopkins University School of Medicine, Baltimore, MD 21205, USA;

<sup>3</sup>Adrienne Helis Malvin Medical Research Foundation, New Orleans, LA 70130-2685, LISA:

<sup>4</sup>Aligning Science Across Parkinson's (ASAP) Collaborative Research Network, Chevy Chase, MD 20815, USA;

<sup>5</sup>Department of Physiology, Johns Hopkins University School of Medicine, Baltimore, MD 21205 USA:

<sup>6</sup>Solomon H. Snyder Department of Neuroscience, Johns Hopkins University School of Medicine, Baltimore, MD 21205, USA;

<sup>7</sup>Institute for NanoBioTechnology, Johns Hopkins University, Baltimore, MD, USA

ASAP Collaborative Research Network

**Kaplitt Protocols** 



Eileen Ruth Torres
Weill Cornell Medicine

#### **ABSTRACT**

The Cylinder test is used to evaluate locomotor asymmetry and spontaneous movement in rodent models.

#### **MATERIALS**

- Small transparent cylinder (height, 15.5 cm; diameter, 12.7 cm)
- Video recorder

### protocols.io

Last Modified: Mar 14, 2024 PROTOCOL integer ID: 96716 Keywords: ASAPCRN, behavior, mouse model **Funders Acknowledgement:** Aligning Science for Parkinson's Grant ID: 020608 1 Set up small, transparent cylinder in front of video recorder. 2 Place mouse in cylinder and record spontaneous activity for 10 min. 3 Clean cylinder in between mice. 4 For all recordings, view in slow motion and count the number of forepaw touches to the cylinder walls, rears, and grooming bouts.