



Oct 30, 2023

Version 1

Nielsen and Ford (2023) M4-mediated cholinergic transmission is reduced in parkinsonian mice and its restoration alleviates motor deficits and levodopa-induced dyskinesia V.1

DOI

dx.doi.org/10.17504/protocols.io.dm6gp336jvzp/v1

Beatriz E Nielsen¹, Christopher P Ford¹

¹University of Colorado Anschutz Medical Campus



Beatriz E Nielsen

University of Colorado Anschutz Medical Campus

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.dm6gp336jvzp/v1>

Collection Citation: Beatriz E Nielsen, Christopher P Ford 2023. Nielsen and Ford (2023) M4-mediated cholinergic transmission is reduced in parkinsonian mice and its restoration alleviates motor deficits and levodopa-induced dyskinesia. **protocols.io** <https://dx.doi.org/10.17504/protocols.io.dm6gp336jvzp/v1>

License: This is an open access collection 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 collection and it's working

Created: August 23, 2023

Last Modified: May 31, 2024

Collection Integer ID: 86837

Keywords: ASAPCRN, mediated cholinergic transmission, parkinsonian mice, cholinergic transmission, induced dyskinesia, levodopa, motor deficit, dyskinesia this collection

Funders Acknowledgements:

NIH

Grant ID: R01-NS95809

NIH

Grant ID: R01-DA35821

Aligning Science Across Parkinson's

Grant ID: ASAP-020529

Parkinson's Foundation

Grant ID: PF-PRF-839073

Abstract

This collection contains protocols detailing methods used in Nielsen and Ford (2023) M4-mediated cholinergic transmission is reduced in parkinsonian mice and its restoration alleviates motor deficits and levodopa-induced dyskinesia

Troubleshooting

Files

 SEARCH

Protocol

NAME

Stereotaxic Surgery

VERSION 1

CREATED BY



Beatriz E Nielsen
University of Colorado Anschutz Medical Campus

OPEN →

Protocol

NAME

Levodopa-induced dyskinesia mouse model

VERSION 1

CREATED BY



Beatriz E Nielsen
University of Colorado Anschutz Medical Campus

OPEN →

Protocol

NAME

Acute Brain Slices

VERSION 1

CREATED BY



Kelsey Barcomb
CU Anschutz

OPEN →

Protocol

NAME

Motor behavioral assessment

VERSION 1



CREATED BY



Beatriz E Nielsen
University of Colorado Anschutz Medical Campus

OPEN →

Protocol

NAME

6-OHDA mouse model of Parkinson's disease

VERSION 1

CREATED BY



Beatriz E Nielsen
University of Colorado Anschutz Medical Campus

OPEN →

Protocol

NAME

Optical sensors 2-photon imaging

VERSION 1

CREATED BY



Beatriz E Nielsen
University of Colorado Anschutz Medical Campus

OPEN →

Protocol

NAME

Western Blot

VERSION 1

CREATED BY



Beatriz E Nielsen
University of Colorado Anschutz Medical Campus

OPEN →

Protocol

NAME

Ex vivo electrophysiology

VERSION 1

CREATED BY



Beatriz E Nielsen
University of Colorado Anschutz Medical Campus

OPEN →



Protocol

NAME

Immunohistochemistry

VERSION 1

CREATED BY



Kelsey Barcomb
CU Anschutz

OPEN →