

MAR 15, 2024

OPEN BACCESS



DOI:

dx.doi.org/10.17504/protocols.io. 4r3l27pejg1y/v1

Protocol Citation: anita.adami 2024. Isolation of NeuN+ cells from brain tissue (for CUT and RUN). **protocols.io** https://dx.doi.org/10.17504/protocols.io.4r3l27pejg1y/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 03, 2023

(solution of NeuN+ cells from brain tissue (for CUT and RUN)

anita adami¹

¹Laboratory of Molecular Neurogenetics, Department of Experimental Medical Science, Wallenberg Neuroscience Center and Lund Stem Cell Center, BMC A11, Lund University, 221 84 Lund, Sweden.

ASAP Collaborative Research Network

Jakobsson



Raquel Garza Lund University

ABSTRACT

This protocol describes the steps to isolate NeuN+ cells from brain tissue in preparation for CUT and RUN

Oct 15 2024



Last Modified: Mar 15, 2024

PROTOCOL integer ID: 78067

Keywords: ASAPCRN

Funders Acknowledgement:

Aligning Science Across
Parkinson's through the Michael
J. Fox Foundation for Parkinson's
Research

Grant ID: ASAP-000520 Swedish Research Council Grant ID: 2018-02694 Swedish Brain Foundation Grant ID: FO2019-0098

Cancerfonden
Grant ID: 190326
Barncancerfonden
Grant ID: PR2017-0053
NIHR Cambridge Biomedical
Research Centre
Grant ID: NIHR203312
Swedish Society for Medical

Research Grant ID: S19-0100

National Institutes of Health

Grant ID: HG002385 Swedish Research Council Grant ID: 2021-03494 Swedish Research Council Grant ID: 2020-01660

Isolation of NeuN+ cells

45m

- 1 Nuclei were isolated from frozen tissue as described here.
- Before FACSing, nuclei were incubated with Recombinant Alexa Fluor® 488 Anti-NeuN antibody [EPR1276 30m Neuronal Marker (Abcam, Cat# ab190195, RRID:AB_2716282) at a concentration of 1:500 for

protocols.io

- The nuclei were run through the FACS at 4 °C with a low flow rate using a 100 mm nozzle and 300.000 nuclei Alexa Fluor 488 positive nuclei were sorted.
- The sorted nuclei were pelleted at 1,300 x g for 00:15:00 and resuspended in 1 mL of ice-cold nucle wash buffer (20 mM HEPES, 150 mM NaCl, 0.5 mM spermidine, 1x cOmplete protease inhibitors, 0.1% BSA) and 10 μL per antibody treatment of ConA-coated magnetic beads (Epicypher) added with gentle vortexing (Pipette tips for transferring nuclei were pre-coated with 1% BSA), to perform CUT&RUN.