

Jul 12, 2024

Tissue Processing

DOI

<https://dx.doi.org/10.17504/protocols.io.bp2l622zzgqe/v1>

daniel.dautan daniel^{1,2}, Per Svenningsson^{1,2}

¹Department of Clinical Neuroscience, Karolinska Institutet, 171 76 Stockholm, Sweden;

²Aligning Science Across Parkinson's (ASAP) Collaborative Research Network, Chevy Chase, MD 20815, USA



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.bp2l622zzgqe/v1>

Protocol Citation: daniel.dautan daniel, Per Svenningsson 2024. Tissue Processing. **protocols.io**

<https://dx.doi.org/10.17504/protocols.io.bp2l622zzgqe/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 04, 2024

Last Modified: September 23, 2024

Protocol Integer ID: 101200

Keywords: ASAPCRN, mouse, brain, tissue, tissue processing protocol for processing mouse tissue, processing mouse tissue, tissue processing protocol, immunohistochemistry, tissue, mouse

Funders Acknowledgements:

Aligning Science Across Parkinson's

Grant ID: 020608

Abstract

Protocol for processing mouse tissue for immunohistochemistry.

- 1 After completion of live experiments, anesthetize the mouse with institution-approved substance at correct dosage.
- 2 Ensure the mouse is deeply anesthetized via the toe-pinch test and that there is no reaction. Place the mouse with its chest facing up above a basin to capture blood, and secure the paws so that the body doesn't move.
- 3 While there is still a heart beat, open chest cavity using small scissors and forceps, making sure not to puncture organs.
- 4 With a small needle/syringe attached to a pump, pierce the left (on your right side) ventricle. Pierce the left atrium to allow blood to flow through.
- 5 Perfuse the mouse with 1x PBS to clear the blood.
- 6 Once blood has been cleared, perfuse the mouse with 4% PFA.
- 7 Once the whole body is perfused, dissect all needed tissues and organs.
- 8 Post-fix the dissected tissues in 4% PFA for 4-6 hours.
- 9 After post-fixation, gently dry the tissue.
- 10 Embed each tissue to OCT block.
- 11 Section tissue at 40um thickness using cryostat.