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🌐 Protocol Collection: Perfusing, Sectioning, IHC, Mounting and Coverslipping Mouse Brain Specimens

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ABSTRACT

This protocol collection details the steps for a whole mouse brain specimen to be perfused, sliced, stained with antibodies, DAPI, or both, and made into slides. The intracardiac perfusion fixation includes anesthesia, exsanguination, fixation, brain removal, and post-fixation storage. A sliding microtome is used to slice the whole brain into sections, and the sections are stained, mounted on glass slides, and coverslipped. The result is that anatomical structures in brain regions of interest may be labeled in a way that can be viewed by laser channels on a microscope and imaged for data collection.

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protocols.io

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Protocol status: Working

We use this protocol and it's working

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Immunohistochemistry, IHC,
Histology, Immunolabeling,
Microtome, Coverslip, Mounting
Tissue, Antibody

Mouse Cardiac Perfusion Fixation and Brain Collection V.5

1 Reference the Mouse Cardiac Perfusion Fixation and Brain Collection V.5 protocol.

Protocol



NAME

Mouse Cardiac Perfusion Fixation and Brain Collection

CREATED BY

Allen Institute

PREVIEW

Sectioning Mouse Brain with Sliding Microtome

2 Reference the Sectioning Mouse Brain with Sliding Microtome protocol.

Protocol



NAME

Sectioning Mouse Brain with Sliding Microtome

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PREVIEW

Immunohistochemistry (IHC) Staining Mouse Brain Sections

- 3 If antibody staining or both antibody and DAPI staining is needed, reference the Immunohistochemistry (IHC) Staining Mouse Brain Sections protocol.

Protocol



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Immunohistochemistry (IHC) Staining Mouse Brain Sections

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PREVIEW

DAPI Staining Mouse Brain Sections

- 4 If DAPI staining only is needed, reference to DAPI Staining Mouse Brain Sections protocol.

Protocol



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DAPI Staining Mouse Brain Sections

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PREVIEW

Mounting and Coverslipping Mouse Brain Sections

- 5 Reference the Mounting and Coverslipping Mouse Brain Sections protocol.

Protocol



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Mounting and Coverslipping Mouse Brain Sections

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PREVIEW