



Anatomic Pathology Services

Standard Tissue Trimming for Rodents

IDEXX **BioAnalytics**

IDEXX

Anatomic Pathology Services

Standard Tissue Trimming for Rodents

The IDEXX BioAnalytics team of experienced pathologists and histology technicians use standardized trimming protocols for rodent tissues. Please contact us with questions about our standard practices or to discuss a customized trimming protocol for your upcoming study.

Contact Us

Client Support Services (CSS): 1-800-669-0825 | IDEXXBioAnalytics@IDEXX.com

Tissue	# Sections	Description
Brain	3	Cross section ¹ of forebrain, midbrain and hindbrain
Heart	1	Longitudinal piece to represent right ventricle, left ventricle and atria
Lungs	1	Cross section ¹ through the hylus to represent all lobes
Liver	1	Mouse: cross section ¹ of medial lobe (to include gall bladder) Rat: cross section of left lateral lobe
Spleen	1	Cross section ¹ to represent the most triangulated section
Kidneys	2	Right kidney: cross section ¹ . Left kidney: longitudinal section
Stomach	1	Cross section ¹ to represent both glandular and non-glandular areas
Intestines (small + large)	6	Cross sections ¹ of the following: duodenum (mouse: longitudinal section, rat: cross section), jejunum, ileum, cecum, colon, rectum
Bladder	1	Cross section ¹
Trachea/Esophagus Thyroid/Parathyroid	1	Submitted attached as a single section
Pituitary	1	Submitted whole
Adrenals	2	Submitted whole
Eyes/Optic Nerve	2	Submitted whole

¹ Cross-section is a perpendicular incision to the long axis of tissue

Hardarian Gland	2	Cross section ¹
Salivary Gland	3	Cross section ¹ to represent both submandibular and sublingual. Dissect parotid glad separately.
Sciatic Nerve	2	Cross and longitudinal sections
Skin/Mammary	1	Longitudinal cross section ¹ , in direction of hair growth to include nipple if present
Cross section and longitudinal section	1	Longitudinal cross section ¹ of Biceps Femoris
Lymph Nodes	2	Mandibular and Mesenteric
Tongue	1	Cross section ¹
Thymus	1	Rats: Cross section ¹ Mouse: Whole
Aorta	1	Cross section ¹
Bone Marrow: Sternum	1	Longitudinal Section, to include 2-3 sternebrae if possible
Longitudinal section to include femorotibial joint	1	Cross section ¹ to include femoral-tibial joint
Injection section	1	Cross section ¹ (usually tail or skin)
Reproductive Organs Female		
Ovaries	2	Submitted whole right and left
Uterine Horns	2	Cross section ¹ of left and right
Cervix	1	Cross section ¹
Vagina	1	Cross section ¹
Reproductive Organs Male		
Testes	2	Cross section ¹ of right and left
Seminal Vesicles	2	Cross section ¹ of right and left
Epididymis	1	Whole, to include head, tail and body
Prostate	1	Longitudinal section

¹ Cross-section is a perpendicular incision to the long axis of tissue

More information and standards for sectioning additional organs can be found at reni.item.fraunhofer.de/reni/trimming/

Anatomic Pathology Services

Histology Tissue Collection and Shipping

Here at IDEXX BioAnalytics we recognize that sample quality is directly correlated to the quality of slides and/or pathological report you will receive. In order to receive the best results we recommend following the guidelines for tissue collection, preservation and shipping. Please contact us with questions about our standard practices or to discuss customized protocols for your upcoming study.

Contact Your Account Manager

Client Support Services (CSS): 1-800-669-0825 | IDEXXBioAnalytics@IDEXX.com

Sample Collection Steps

- Place tissues in formalin for at least 24 hours before shipment. Tissue to formalin ratio should be 1:20 for proper fixation. Please refer to the Whole Rodent Collection Guide and Tissue Trim Guide for more specialized collection protocols.
- Make sure tissues are not tightly packed in jars or cassettes. Smaller tissues can be placed in a cassette or submitted attached to surrounding organs. Be careful to not overpack cassettes; overpacking can lead to cassette imprints on tissues and interfere with evaluation.
- Label cassettes with pencil. Even indelible ink will fade during processing.
- Tissues can be shipped in 70% alcohol or formalin. For IHC staining, tissues should not be fixed in formalin for longer than 48 hours.
- Store and ship fixed samples at room temperature.
- Flash frozen samples for frozen sectioning should be stored and shipped on dry ice.



Tissues Shipment Steps

To preserve sample integrity and prevent leakage samples should be triple-bagged with each layer tied, knotted or secured individually.

- Screw-topped containers are preferred. Make sure the lid is tightly secured to the jar and place a layer of Para film or tape to secure the lid to the jar.
- Invert the jar to check for leaks and reseal if needed.
- Place jar(s) into one gallon Ziploc bag with absorbent material such as paper towels and seal.
- Place samples in sealed Ziploc bag in a second Ziploc bag and seal or double-line (one bag inside of another) the shipping box with large garbage bags and tie off each bag separately.
- Prior to knotting the first garbage bag, place absorbent packing materials around the bagged samples to not only absorb any leaked fluid but to prevent jostling and stabilize samples during shipment.
- If sample jars are too large to seal in a one gallon Ziploc bag you can also use garbage bags to triple line the shipping container. Absorbent material should be placed around the samples in the first garbage bag prior to tying a knot in the bag.
- Place the Histology Submission Form(s) and other supporting documents (if needed) on the outside of the second garbage bag. Do not tape the inventory form to the outside of the box or place with samples in the same Ziploc bag.
- Contact us for instructions on collecting and shipping frozen tissues or tissues embedded in OCT.

We welcome you to submit diagrams or other special instructions if you would like to customize your study. We also have experience with a wide variety of research animal models. Consult with us to help determine the best collection and shipping protocol for your research application.

Need help getting started?

[Ask Our Experts](#)

