ANIMAL HISTOPATHOLOGY and LAB MEDICINE CORE

TISSUE PREPARATION FOR FROZEN SECTIONING PROTOCOL

Immediately after removing the tissue:

1. Dissect accordingly and wash the tissue with 1xPBS.
2. Place in a 1:20 volume ratio of fixative (tissue:fixative), 4% paraformaldehyde or formalin for 4 hours, on ice or in 4 degrees Celsius. *
3. Wash the tissue 3x for 20 minutes with 1xPBS (on ice).
4. Place in 50:50 OCT:PBS for 24 hours (overnight) in 4 degrees Celsius.
5. Place in cryomolds molds filled with OCT and orient as desire, placing the desired tissue area to be sectioned at the bottom of the cryomold.
6. Place molds in -20 to -60 degrees Celsius for 30 minutes (can stay indefinitely until you are ready to bring to us; some people like to use liquid nitrogen, isopentane and/or dry ice, but they are not necessary. Placing the tissue in -20 to -60 degrees is a slower freezing process, which helps to minimize freezing artifacts within the tissue and OCT).
7. When ready to transport to our lab, place on dry ice and bring to us, along with the Request form.
8. When frozen sections are ready to be picked up, we will send you an email. Please bring a Styrofoam container with dry ice to transport your tissue and sections back to your lab. Unfortunately, we do not keep dry ice or Styrofoam containers.

*If you are using your slides for immunohistochemistry/immunofluorescence, please be aware of the selected protein’s integrity to fixation, as fixation may affect its reactivity. If you are not completely sure, you may select to either skip Step 2 or reduce the fixation time.

If you have any questions, please contact us.
Thank you for using our services.

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