

Massachusetts Institute of Technology
Koch Institute for Integrative Cancer Research
Tang Histology Lab
500 Main St 76-182
Cambridge, Ma 02139

KI Core Histology Lab Sample Drop Off Check List

Have you submitted your **requisition** via iLab with in 24 hours of dropping off the samples?

Have you dropped off your **samples** in the Histology lab with in 24 hours of submitting your requisition via iLab? (Please **hold onto frozen tissues** until we ask for them, as our freezer space is very limited)

Are your tissues thicker than a nickel? If they are, they might be too thick for full infiltration with reagents on our tissue processor, thus your samples will look less than optimal. * Options do exist for larger tissue samples that contain implantable devices etc, don't take this as the freedom to submit large pieces of tissue "just because". Smaller pieces of tissue such as mouse lymph nodes go on a shorter processing cycle.

Things to consider: 10% neutral buffered formalin is the typical fixative for tissue to be processed to paraffin. It cannot be used more than once. Formalin typically has a 5 year outdate. The ratio of fixative to tissue is 1 cc of tissue to 20 cc of fixative. If you choose to use PFA, the above applies. PFA also is only good for one week after you make it up. Yes, you can make aliquots and freeze. If you make it up and it boils over, you get to start over. Invert your containers of cassetted tissue every so often to ensure even fixing/mixing. Depending on the size of the tissue fixation time ranges from 1 hour (think tiny tiny tissue) to 24 hours or more. A good target time is 24 hours.

Are your cassettes labeled with pencil and your initials? (and a short numeric or alphabetic identifier?) Trust us, all marker will wash off during processing, and if we have to hand type in long/complicated identifiers, you **will** get your stuff back slower.

Are your samples in a "spill resistant" (i.e. snap on or screw on lid) container, labeled with your HCF number and 70% ethanol? **No** beakers with foil/parafilm wraps are accepted and we ask that you drop off your samples in 70% ethanol, not a fixative.

Please drop off all cassetted wet tissue and paraffin blocks in the "drop off container" under our hood. Bone to be decalcified are placed in a separate container,

so that we don't have to fish those out of the container with the standard tissue. All slides to be scanned, should be dropped off in the multihead microscope-Bronson room cart, on the shelf labeled "slides to be scanned". **Don't forget** to pick up your rinsed containers, as well as any completed cases on the "pick up" shelf on your way out.

We ask that you return all slide folders and boxes promptly (and anything else that you "borrow", i.e. green staining containers etc). If you need a way to store your slides, we can chat about alternatives to taking our folders/boxes for weeks/months/years. 😊

You must have your unstained slides in hand before you enter in a request for IHC staining.

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