

RFS Block Melting Procedure

(13.8 RFS_Block_Melting_Procedure); Created November 19th, 2019 by Jeremy Deisch, MD

After the performance of a rapid frozen section (RFS) consultation, verify with the performing pathologist to ensure that no more sections will be needed. Once it is confirmed that the consultation is complete, the next step is to transfer the tissue from the frozen block to a cassette for formalin fixation and routine histology. Please follow the steps below carefully to ensure that the tissue is not lost during the melting procedure.

1. Prepare the labeled cap that corresponds to the RFS block designation: Carefully write the case number (“19MS-_____”) and block designation (“A1”) on the front of the cap with an approved marking device (**NOT A PERMANENT MARKER**). Remember to select the proper cap color - green for routine histology, yellow for cases for which IP stains will be pre-ordered
2. After ensuring that the proper RFS frozen chuck has been matched with the proper labeled cap, hold the block and cap together as indicated in the image (figure 1).
3. In the left-sided sink, **over the strainers**, carefully run warm water over the chuck “stem” while covering the frozen tissue/OCT with the cap. The warm water will rapidly warm the chuck and the tissue, although still largely frozen, will begin to slide off the chuck. At this point, the frozen tissue should be transferred to the cap (in the same orientation, cut side down) and the chuck should be placed in the right-sided sink for cleaning.
4. Place still-frozen tissue and OCT on a paper towel. Using an open pair of forceps, trim off the extra OCT from the edges of the tissue (see figure 3). Do not try to remove all OCT, and always ensure that tissue is not being discarded! If OCT melts completely, it is much more difficult to transfer the tissue back to the cap
5. If tissue is small and/or friable, wrap tissue as detailed in video instructions to prevent tissue loss; place carbol fuschin dye on small tissue fragments that are at risk of loss during embedding.
6. Place cap containing specimen with remainder of tissue from specimen. If remaining tissue is large and/or formalin is opaque, the RFS block may not be seen by the person grossing the specimen. In these cases, place RFS block in a small formalin container labeled with patient name, accession number, and specimen designation. Keep all specimen components together.

Cautionary Notes:

- Do not attempt to melt block completely, particularly not under running water. This is very risky, and several specimens have been lost down the drain when they slid away at the last moment. This is why there are so many strainers in the left-sided sink...
- Remember to wrap small tissue fragments. They always seem more “secure” when embedded in OCT, but are at risk of floating through the holes in the caps after the OCT returns to a liquid state.
- Don’t melt the chucks until given clearance by the pathologist. You never know when they may ask for additional sections, and you don’t want to have to explain that you have already melted the blocks.
- Always label the chucks with the accession number and block designation. This is key to keep things straight when there are multiple concurrent frozens.

