
1. Transport embedded samples on dry ice to the cryomicrotome
2. Place sample in the cryomicrotome box and equilibrate the box temperature to −24°C
   - Higher box temperatures (e.g., −20°C) are acceptable but can cause distortion of the acini at the periphery of the Matrigel during sectioning
   - Keep the slides at room temperature
3. Replace microtome blade (if disposable)
4. Spray microtome blade and anti-roll bar with a Kimwipe moistened with ethanol
   - Be careful not to cut yourself when cleaning the blade
5. Pop the embedded sample out of the cryomold, mount on the sectioning platform with Neg-50, and freeze until the sample has solidified on the sectioning platform
6. Mount the sectioning platform on the cryomicrotome and cut trim sections until ~3 mm of Matrigel is visible on the cutting surface
   - Matrigel will appear as off-white against the white Neg-50; test slides can be prepared and checked under an inverted microscope to confirm that acini are on the slides
7. Cut 5 µm sections, adjusting the anti-roll bar to prevent the section from accordioning
   - Do not graze sections (subsequent section will be 10 µm instead of 5 µm)
   - Alternatively, one can omit the anti-roll bar and use the brush technique
   - 5 µm sections are thin enough to image by widefield microscopy
8. Wick sections onto Superfrost plus slides (VWR #48311-703) and move the slide immediately to a slide rack at room temperature
   - Keep the slide rack at room temperature so that the section can adhere strongly to the slide
   - Two sections per slide can be wicked
   - *Superfrost Plus slides have low autofluorescence in the FITC channel and allow the sections to adhere better*
9. Continue cutting and wicking sections until good cuts are no longer possible
   - One embedded sample typically yields 50-100 slides with two sections per slide
   - Do not return a half-sectioned sample to −80°C (the exposed sample will dehydrate and become damaged)
10. Dry the slides in the slide box at room temperature for at least 30 min
    - *Slide mailers can be labeled during this time*
11. Transfer the slides to five-slide mailers and store at −80°C for several months or more