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Tissue Sectioning Guidelines (FFPE) - CODEX/PhenoCycler V.1

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Protocol status: Working

We use this protocol and it's working

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Abstract

The purpose of this SOP is to provide general guidelines for preparing FFPE tissue sections suitable for PhenoCycler/CODEX

Materials

Standard 1" x 3" positively charged glass microscopy slides (example, SuperFrost Plus)

Tissue Sectioning Guidelines for CODEX/PhenoCycler

- 1 Prepare the microtome for sectioning. Section the tissue at a thickness of **5 μm** . 

Note

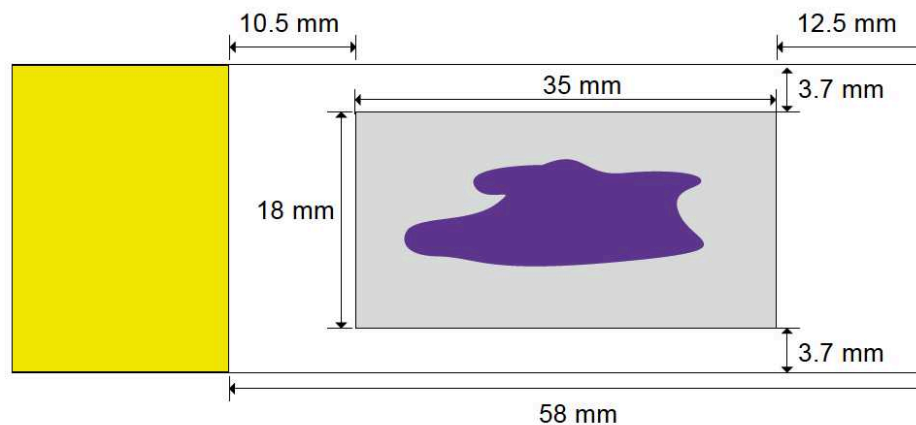
Do not exceed 10 μm as this will affect the autofocus capabilities of the microscope. **Avoid folds and tears in the tissue**, as these artifacts will affect image quality and data analysis.

- 2 For best results, the tissue should be completely adhered to the slide with minimal tears or folds.

- 3 Gently place the tissue section in the center of the slide within the imageable area as shown in 

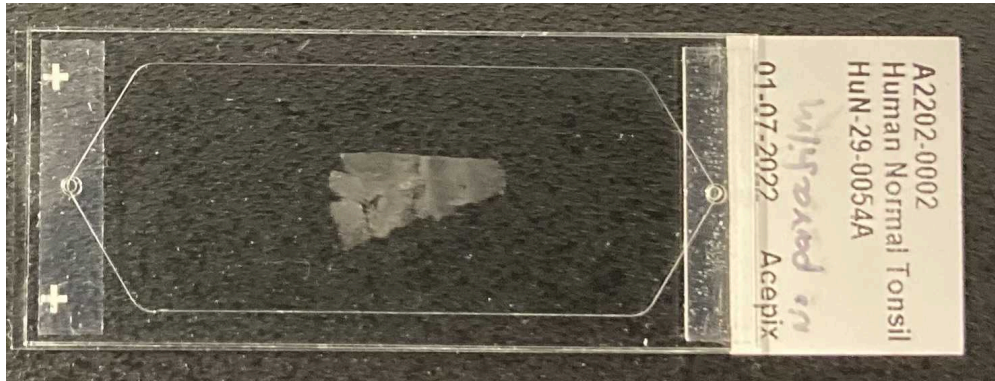
grey rectangle below.

If tissue overlaps the boundary, proper coverslip seal will not be formed. Multiple tissues can be placed within the boundary, as long as there is no overlap of paraffin over adjacent tissues



Working area dimensions on slide for optimal tissue placement

- 4 Example of good tissue placement:



Slide with CODEX coverslip showing optimal placement of tissue section

- 5 Dry tissue sections overnight at RT
- 6 After drying, store cut slides at **4°C (for up to six months)**
- 7 **NOTE:** Do not place any stickers or labels on the frosted end of the slide as it may interfere with coverslip adhesion. Use markers or directly print labels on the slide.

