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H&E Staining for Pancreas or Eye Cryosections V.2

Diane Saunders[1], Angela Kruse[1], Jamie Allen[1], Carrie Romer[1], Danielle Gutierrez[1], Alvin Powers[1], Jeff Spraggins[1]

[1]Vanderbilt University

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VU Biomolecular Multimodal Imaging Center
Human BioMolecular Atlas Program (HuBMAP) Method Development Community

Carrie Romer

This protocol for H&E staining can be applied to either fixed or unfixed frozen cryosections.

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Carrie Romer

HuBMAP, BIOMIC, Vanderbilt, Pancreas, H&E staining, Eye, Retina

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1. Coplin jars
2. 95% Ethanol
3. Hematoxylin
4. Bluing Solution
5. Eosin
6. 100% Ethanol
7. Xylene
8. Coverslips
9. Cytoseal

1.Safety glasses or goggles, proper gloves, and a lab coat required. The area should be adequately vented and a lab mat placed underneath all solutions.

2. Xylenes should be used in the fume hood.

1 Air dry sections for **00:05:00** . 5m

2 Incubate in **95% alcohol** for **00:01:00** , then wash, dipping until clear. 1m

3 Incubate in **hematoxylin** for **00:00:30** , then wash until clear. 30s

4 Dip 3-4x in **bluing solution**, then wash for **00:00:30** 30s

5 Dip 3-4x in **95% alcohol.**

6 Dip 1-2x in **eosin.**

7 Dip 5-10x in **95% alcohol**, then repeat using 2nd aliquot.

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8 Dip 5-10x in **100% alcohol**, then repeat using 2nd aliquot.

9 Dip 5-10x in **xylene**, then repeat using 2nd aliquot.

10 Apply coverslip and seal.

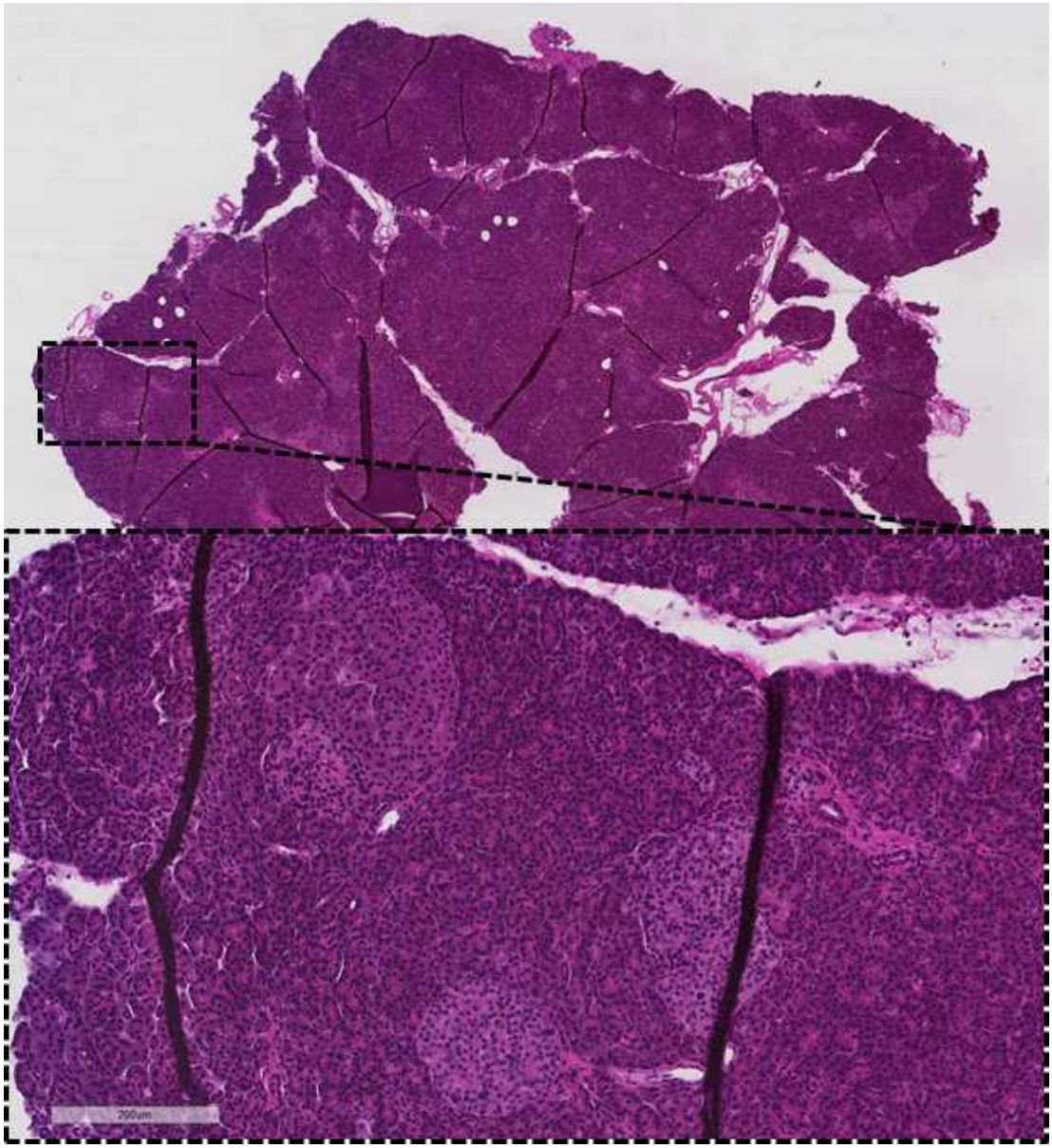

Figure 1. H&E stained pancreas with magnified section showing nuclei in blue and cytoplasm in pink.

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Figure 2. H&E stain of human retina tissue from a 72 year old donor. Dark purple nuclear staining and pink cytoplasmic staining allow the user to readily distinguish retinal layers such as (from bottom to top) the: sclera, choroid, retinal pigmented epithelium, photoreceptor layer, outer nuclear layer, outer plexiform layer, inner nuclear layer, inner plexiform layer, ganglion cell layer, and nerve fiber layer.

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