🔬 H&E Staining Protocol

Hematoxylin and Eosin Staining for Tissue Sections

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Protocol Overview

Hematoxylin and Eosin (H&E) staining is the most widely used staining method in histology. Hematoxylin stains nuclei blue-purple, while eosin stains cytoplasm and extracellular matrix pink.

⏱️ Duration

Paraffin sections: ~1-1.5 hours

Cryo sections: ~1-1.5 hours

🎯 Key Steps

1. Deparaffinization (paraffin) or Rehydration (cryo)
2. Hematoxylin staining
3. Eosin staining
4. Dehydration and mounting

💡 What it stains:

- **Hematoxylin:** Nuclei (blue-purple)
- **Eosin:** Cytoplasm, collagen, muscle fibers (pink-red)

⚠️ Safety Information

- Always work with xylene in a fume hood - fumes are toxic
- Wear appropriate PPE (lab coat, gloves, safety glasses)
- Hematoxylin can stain skin - wear gloves at all times
- Dispose of xylene and ethanol as hazardous waste
- Keep all staining solutions away from open flames
- Ensure adequate ventilation in the staining area

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About This Protocol

Standard Hematoxylin and Eosin (H&E) staining protocol for both paraffin-embedded and cryosectioned tissue samples.

Quick Links

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Protocol Overview

Troubleshooting

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