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Protocol status: Working We use this protocol and it's working

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Buck Institute Morphology H & E staining protocol

sbreslin¹

¹Buck Institute for Research on Aging

sbreslin: Morphology Core standard protocol



sbreslin

ABSTRACT

Histological Stain for FFPE slides

RESULTS: Nuclei-blue; Cytoplasm, red blood cells and connective tissue-shades of pink

MATERIALS

- 1. Modified Mayes's Hematoxylin HXMMHPT StatLab Medical Products
- 2. 10% Acidic Acid
- 3. Scott's Tap Water (1L + 3.5g Sodium Bicarb + 20g Magnesium Sulfate pH 8.0) Bluing Agent
- 4. Eosin Y Stain STE0150 StatLab Medical Products
- 5. reagents in 250 ml Coplin Jar

SAFETY WARNINGS

Xylene (C₈H₁₀)CAS No. 1330-20-7 is a colorless, flammable liquid with a sweet odor. Exposure to xylene can irritate the eyes, nose, skin, and throat. Xylene can also cause headaches, dizziness, confusion, loss of muscle coordination, and in high doses, death. Workers may be harmed from exposure to xylene.

from https://www.cdc.gov/niosh/topics/xylene/

Permount Mounting Media is toluene-based synthetic resin mounting medium. Use caution around uncured media.

https://www.cdc.gov/niosh/topics/toluene/

Hematoxylin and Eosin Staining

1 Deparaffinization and rehydration: 2 x xylene 7 min, 100% ethanol 4 min, 95% 4 min, 80% 4 min, 70% 4 min, bring to water. 2 Hematoxylin staining for 30 seconds - 4 min. using filtered dye (usually 2 mins) - Modified Mayes's Hematoxylin HXMMHPT StatLab Medical Products 3 Rinse in ddH20 x2 4 10% acetic acid rinse (acid into water) - 1 min 5 rinse in ddH20 x2 6 TBS (1x) rinse or Scott's Tap Water (1L + 3.5g Sodium Bicarb + 20g Magnesium Sulfate pH 8.0) -2 mins 7 Rinse in ddH20 8 Rinse in 70% ETOH 9 Stain Eosin for 0.5 to 2 minutes (keep an eye on intensity of pink) - Eosin Y Stain STE0150

StatLab Medical Products

- 10 Rinse in 90% EtOH
- 11 Rinse in 95% EtOH, 100% EtOH, xylene
- 12 Coverslip with Permount Mounting Medium EMS #17986-01