Elabscience®

Hematoxylin Staining Buffer

| Cat | Products | 5 mL | 15 mL | 50 mL | Storage |
|-----------|-----------------------------|------|-------|-------|---------|
| E-IR-R120 | Hematoxylin Staining Buffer | 5 mL | 15 mL | 50 mL | RT |

Size: 5 mL / 15 mL / 50 mL

Introduction

Cat. No: E-IR-R120

Hematoxylin Staining Buffer synthesizes many classical methods of hematoxylin staining, such as Harris method, Mayer method, etc., which simplifies the operation steps, shortens the operation time, and does not use toxic reagents such as mercury and methanol in the staining buffer. It can be used for staining of tissue slice or cultured cells.

Hematoxylin staining, also known as hematoxylin staining, is one of the most commonly staining methods for tissues and cells. There are many different ways to prepare hematoxylin staining buffer. Different methods can stain the nucleus into different shades of blue or blue purple.

The nucleus is blue when it is stained by this product.

Experimental Procedure

1. Reagents Preparation

Fixative solution: 4% Paraformaldehyde (It is recommended to use Elabscience® E-IR-R113).

Differentiation solution: 5% acetic acid solution or 0.5% hydrochloric alcohol.

If dehydration, transparency and sealing treatment are needed. Xylene, Neutral Balsam (It is recommended to use Elabscience® E-IR-R118), 80% ethanol, 90% ethanol and anhydrous ethanol should be prepared. 70% ethanol.

Preparation of paraffin section. Xylene and gradient ethanol

- 2. Sample Treatment
 - a) For Paraffin Slices
 - 1) Dehydrate the slices in xylene for $5 \sim 10$ min.
 - 2) Replace with fresh xylene and Dehydrate the slices for 5~10 min.
 - 3) Immerse the slices in anhydrous ethanol for 5 min.
 - 4) Immerse the slices in 90% ethanol for 2 min.
 - 5) Immerse the slices in 80% ethanol for 2 min
 - 6) Immerse the slices in 70% ethanol for 2 min.
 - 7) Immerse the slices in distilled water for 2 min.
 - b) For Frozen Slices
 - 1) Fix the slices in Fixative solution for more than 10 min.
 - 2) Immerse the slices in distilled water for 2 min.
 - c) For Cultured Cells
 - 1) Fix the cells in Fixative solution for more than 10 min.
 - 2) Immerse the slices in distilled water for 2 min.
 - 3) Change to fresh distilled water and wash for 2 min.

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3. Hematoxylin Staining.

For the above treated samples

- 1) Add Hematoxylin Staining Solution and incubate for 15~60 s (the time can be adjusted according to the staining results and requirements).
- 2) Wash the slices with water for 10 min.
- 3) Wash the slices with distilled water for several seconds.

4) (Choose) Immerse the slices in differentiation solutions about $2 \sim 30$ s, wash with water for 10 min.

5) Dehydrate and transparently seal the slices with Balsam.

Tip: For the immunohistochemical staining, please refer to the immunohistochemical staining operation steps after antibody incubation.

- 4. Dehydration, Transparency, Sealing or Other Staining
 - a) Dehydration, Transparency, Sealing
 - 1) Immerse the slices in 70% ethanol for 10 s, 80% ethanol for 10 s, 90% ethanol for 10 s, and anhydrous ethanol for 10 s. Then immerse the slices in xylene for 5 min.
 - 2) Immerse the slices in fresh xylene for 5 min.
 - 3) Seal with Balsam or other sealer.
 - 4) Observe the result by microscope, the nucleus is blue.
 - b) Other Staining
 - 1) If immunofluorescence or Hoechst is needed.
 - 2) Hematoxylin staining the slices follow the steps above.
 - 3) Wash the slices with 70% ethanol for 2 min/time, 2 times.
 - 4) Immerse the slices in PBS or normal saline or TBS or TBST buffer for 5 min.
 - 5) Stain with immunofluorescence or other fluorescent staining buffer.

Storage

Store at room temperature for 12 months.

Cautions

- 1. It is recommended to differentiate, which will make the nuclear staining more clearly.
- 2. The dye solution can be reused many times. When the effect is not good, the new dye solution can be replaced.
- 3. It is recommended to take 1~2 slices for pre-experiment.
- 4. This product couldn't be used for clinical diagnosis or treatment, food or medicine, and can't be stored in residence.
- 5. For your safety and health, please wear the lab coat and disposable gloves before the experiments.