

## Celestine Blue B Staining Solution

Cat #: A-CSH262

Size: 50mL, 100mL

Storage: 2-8 °C, Avoid exposure to light (1 year)

### Product Description

Hematoxylin and Eosin (HE) staining is a commonly used staining method in pathology and histology. Hematoxylin, an alkaline natural dye, stains the cell nuclei. The main component of chromatin in the cell nucleus is DNA. In the double helix structure of DNA, the phosphate groups on the two nucleotide chains are oriented outward, giving the outer side of the DNA double helix a negative charge, making it acidic. It easily binds to the positively charged hematoxylin basic dye through ionic or hydrogen bonding, resulting in staining. In Van Gieson staining, the acid used can remove most of the hematoxylin color, making the cell nuclei almost invisible. In such cases, the use of iron hematoxylin or Azure B can counteract the acidic effect and achieve satisfactory results.

Azure B staining solution mainly consists of 0.5% Azure B and is often used in combination with alum hematoxylin. Its advantage lies in the acid resistance of Azure B. The high iron salt enhances the binding between alum hematoxylin and the cell nuclei, resulting in a deeper staining of the cell nuclei. Therefore, it achieves the purpose of acid resistance and prevents the fading of hematoxylin color.

### Usage

1. Deparaffinize the paraffin-embedded tissue sections by gradually hydrating in ethanol to water.
2. Immerse the sections in Azure B staining solution for 5 minutes. Rinse with distilled water and proceed with downstream experiments as required.

### Notes

1. With prolonged incubation time, the staining intensity may decrease, and the staining time should be extended accordingly.

2. The staining intensity decreases faster with increased usage of the staining solution, requiring longer staining time.
3. The staining time for frozen sections should be shortened, while tissues with longer immersion time in formalin solution without buffering and decalcified tissues may require an extended staining time.

## Disclaimer

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.