Mast Cell Staining Solution (Alcian Blue-Safranin Method)

Cat #: A-CSH387

Size: 3×50mL

Storage: 2-8°C, avoid light (12 months)

Product Composition

Component	3×50mL	Store at
Reagent (A): Csaba acidification solution	50ml	10~30°C
Reagent (B): Alcian blue sand yellow staining solution	50ml	2~8°C, and were protected from light
Reagent (C): Csaba dehydrant	50ml	10~30°C, and were protected from light

Product Description

Mast cells are common cells found in loose connective tissue. They are often clustered along small blood vessels and lymphatic vessels and are also commonly found around the interlobular ducts of the bronchi and pancreas. Mast cells are generally larger cells, with a diameter of approximately 20-30 μm, and they are round or oval in shape. Their nuclei are small, and their cytoplasm is filled with coarse, eosinophilic granules.

Mast Cell Staining Solution (Alcian Blue Safranin Method) can differentiate different types of eosinophilic granules. After staining, immature mast cell granules appear blue, while mature mast cell granules appear red, providing a clear contrast.

Usage

1. Immediately fix fresh tissue in 10% neutral formalin fixative and proceed with routine dehydration and embedding.

2. Cut sections with a thickness of 5-6 μm and perform routine deparaffinization until water.

3. Treat with Csaba acid solution for 1-2 minutes.

4. Drop the Alcian Blue Safranin staining solution onto the sections and let it stain for 15-20 minutes, then rinse with water.

5. Perform three rounds of dehydration using Csaba dehydrating agent.

6. Clear with xylene and mount with neutral mounting medium.

Staining Results

Naive mast cell granules	blue
Mature-type mast cell granules	red

Notes

1. When staining mast cells, it is important to use fresh tissue and fix it immediately after removal.

2. If 10% neutral formalin fixative is not available, it can be replaced with 4% formaldehyde physiological saline.

3. Csaba acid solution should be stored in a tightly sealed container to prevent evaporation, as it may affect the staining results.

4. If there is an insufficient amount of Csaba dehydrating agent, ethanol can be used as a substitute, but the sections may be prone to fading.

5. After differentiation, it is important to quickly transfer the sections through 95% ethanol, absolute ethanol, and xylene, as prolonged exposure can lead to fading of the staining.

Disclaimer

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