Capsule Stain Solution (Hiss Method)

C1510424

Storage Room temperature.
Shipping Regular transportation.

Introduction

The capsule of bacteria can protect the bacteria against phagocytosis and digestion, and enhance the invasiveness of bacteria. The capsule is not easy to be stained by ordinary staining methods and needs to be dyed by special staining methods to be colored for easy observation. The identification of bacterial capsules plays a crucial role in the typing and diffe- rentiation of bacteria.

Aladdin Capsule Stain Solution (Hiss Method), also known as Copper Sulfate Staining Solution, stains bacterial capsules blue-purple and bacterial cells dark blue. This reagent is for research use only and is not suitable for clinical diagnosis or other purposes.

Product Components and Storage Conditions:

C1510424	Component	2×50mL	Storage
C1510424A	Hiss Staining Solution	50mL	RT
C1510424B	Copper Sulfate Solution	50mL	RT

Self-prepared Materials:

Glass slides, coverslips, alcohol lamps, microscopes.

Operating Procedures (For Reference Only):

1. Prepare a bacterial smear, air-dry it naturally, and fix it with ethanol.
2. Add Hiss staining solution onto the slide, heat it over an alcohol lamp until steam emerges, or stain for 5–7 minutes. Do not rinse with water.
3. Rinse the slide with copper sulfate solution. Do not rinse with water.
4. Air-dry it naturally or blot it dry with absorbent paper. Locate capsulated bacteria under a low-power microscope, then switch to a high-power microscope or oil immersion lens for careful identification.

Staining Results:

1. Capsule Pale purple or blue
2. Bacterial cells Purple

Precautions:

1. Opened capsule staining solution within its shelf life should be used up within 6 months. Seal the bottle tightly after each use to prevent volatilization or deterioration.
2. Precipitation may occur after long-term storage. If coarse particles are observed under the microscope, filter the solution before use or discard it.
3. The target sample should be as fresh as possible. Both the sample and capsule staining solution must be evenly distributed.
4. The sample should have appropriate purity and concentration. It will be difficult to locate Cryptococcus neoformans under the microscope if the concentration is too low.
5. For your safety and health, wear a lab coat and disposable gloves during the operation.