

50484 Methylene Blue Solution

Description:

Methylene Blue was earlier recognized as a good nuclear stain, the staining solutions are always either aged or alkalized, if not both. More importantly it is an excellent stain for ribonucleic acid, which is the important stainable constituent of bacterial bodies, of lymphocyte and hemopoietal cytoplasm, and of nerve cell tigroid granules. It can also be employed in capsule stain. Capsules are composed of mucoid polysaccharides or polypeptides. These are detected by capsule staining. The capsule stain is a differential stain used to detect cells capable of producing an extracellular capsule. The capsule stain begins as a negative stain leaving the organisms colourless. The capsule are clearly seen as a white halo surrounding the bacterial cell. Another staining procedure is performed with nigrosin (Fluka 43925).

Simple Bacteria Stain:

Composition:

Methylene blue 0.5 g
distilled water 100 ml

Directions for Capsule Staining:

1. Put a loopful of the specimen to be examined onto a clean glass slide.
2. Add one drop of Methylene Blue Solution and mix it.
3. Make a smear by using a glass slide.
4. Let air dry.
5. Examine the slide under oil immersion objective.

Do not heat-fixing because of shrinking cells and leaving therefore an artifactual white halo around them.

Results:

Colourless hollow bodies against a blue background.

Directions for Simple Bacteria Stain:

A loopful of the specimen should be smeared onto a clean glass slide.

Allow slide to air dry and fix with gentle heat.

Flood the slide with Methylene Blue Solution.

Incubate for 2-3 minutes or heat the preparation for less than half a minute.

Wash gently with slow-running water

Blot dry and observe under oil immersion objective.

Results:

Bacteria are stained blue against a colourless background.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

