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Methylene Blue staining

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Abstract

A simple protocol for staining with Methylene Blue, a very commonly available stain.

Materials

MATERIALS

 Methylene blue

Troubleshooting

- 1 Get methylene blue (1% in aqueous solution) ; a common dye (on the WHO Model List of Essential Medicines https://en.wikipedia.org/wiki/WHO_Model_List_of_Essential_Medicines).

Possible vendors: **Home Science Tools**

Storage: Store at room temperature (2-30 deg C)

Notes: Methylene Blue is a cationic stain (positively charged blue dye); and binds to negatively charged parts of the cells, such as nucleus (DNA) and RNA in the cytoplasm (with lower affinity). It's a common stain for a large number of tasks including identification of bacteria, cellular structure in both plant and animal cells.

- 2 Mounting the sample on a glass slide (either dried or fixed using methanol).
- 3 Flood the sample with Methylene Blue. Wait for 1-3 minutes.
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- 4 Wash under tap water. Blot dry with tissue paper. Add cover slip (as desired).
- 5 Observe under a microscope.