

Introduction

Phosphotungstic acid (PTA) is an anionic stain. PTA positively stains charged structures such as basic proteins associated with nuclear DNA and nucleoli and intensely stains mitochondrial matrix

➤ The reagents required:

- Phosphotungstic acid (for example Sigma Cat.No. P4006), 2% stock solution in double distilled water, pH 1.5.



WARNING

PTA solution is acidic. Appropriate personal protective clothing should be used.

- Double distilled water
- 2% Glutaraldehyde in PBS



NOTE

The stock can be stored at room temperature for approximately one month.

➤ Procedure:

1. Wash the cells four times with PBS.
2. Fix cells with 2% Glutaraldehyde in PBS for 30 minutes.



NOTE

Fixation can also be done with a combination of 2% Paraformaldehyde and 1% Glutaraldehyde in PBS for 30 minutes.

3. Wash three times with PBS.
4. Wash three times with double distilled water.
5. Incubate the sample with 2% PTA for 30 minutes.
6. Wash five times with double distilled water.



NOTE

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