

### 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



#### **NOTE**

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

#### ➤ Procedure:

1. Wash the sample three times, five minutes each wash, with double distilled water.
2. Prepare 1% PTA solution by diluting the 2% stock solution in double distilled water.
3. Incubate the sample with 1% PTA for 5 minutes.
4. Wash five times, five minutes each wash, with double distilled water.



#### **NOTE**

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