

### 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.

This procedure contains guidelines for mild staining of cell culture. It can be used in cases in which only a mild contrast is required, for example, an immuno-gold labeled cell culture.

#### ➤ 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 week.***

#### ➤ Procedure

##### **For gold-labeled cells**

1. Wash three times with double distilled water.
2. Prepare 0.01% PTA solution by diluting the 2% stock solution in double distilled water.
3. Incubate the sample with 0.01% PTA for 5 minutes.
4. Wash five times with double distilled water.



#### **NOTE**

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