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
  - Double distilled water

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

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

Protocols provided by QuantomiX are based on work conducted at QuantomiX laboratories. They are given as a starting point which will facilitate the user’s first steps in acquiring the desired imaging results. It is the user’s responsibility to determine the suitability of any protocol published by Quantomix to their applications. Users may find it necessary to modify protocols in order to obtain the information required for their study.