

Urine Hemosiderin Qualitative Assay Kit (Rous Method)

U1507812

Storage: Room Temperature.

Introduction:

Hemosiderin is a hemoglobin-derived pigment that appears as golden-yellow or brownish-yellow granules. It is called hemosiderin because it contains iron and exhibits a golden-yellow color. It is an unstable polymer of ferritin and presents as an iron-containing brown pigment. When hemosiderin is present in urine, under acidic conditions, potassium ferrocyanide solution releases ferric ions from proteins with the aid of dilute hydrochloric acid. The ferric ions then react with potassium ferrocyanide to form an insoluble blue compound known as ferric ferrocyanide, a reaction termed the Prussian blue reaction.

The Urine Hemosiderin Qualitative Detection Kit (Rous Method) is specifically designed for the detection of hemosiderin in urine. It offers good specificity, minimal precipitation, and broad applicability, but is not suitable for staining tissues or cells. This kit is intended for research use only and is not suitable for clinical diagnosis or other purposes.

Kit Contents and Storage Conditions:

U1507812	Component	50T	Storage
U1507812A	Perls Solution A	100 mL	RT.
U1507812B	Perls Solution B	100 mL	RT.

Procedure:

1. Take 5-10 mL of fresh urine and centrifuge at 2000 g for 5 minutes. Discard the supernatant.
2. Add 1-2 mL each of Perls Solution A and Perls Solution B to the sediment (pellet). Mix thoroughly and let stand at room temperature for 10 minutes.
3. Centrifuge at 2000 g for 5 minutes. Discard the supernatant, smear the sediment onto a slide, cover with a coverslip, and observe under high-power magnification. Use oil immersion if necessary.
4. Interpretation of Results:

The presence of scattered or clustered blue-glittering granules indicates a positive result. Granules located inside cells are considered more reliable.

Notes:

1. Urine samples should be fresh.
2. All reagents, slides, and utensils must be free from iron contamination to avoid false-positive results.
3. A negative control should generally be performed. If the mixture of Perls Solution A and B



appears blue, it indicates reagent contamination and should be discarded.

4. Use the reagents as soon as possible after opening to avoid affecting subsequent experimental results.

