

# Instructions For Use CIS-IFU

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## **Colloidal Iron Stock Solution**

#### **Description and Principle**

Colloidal Iron Stock Solution is a component in the Colloidal Iron Stain Kit and is used to demonstrate acid mucopolysaccharides.

<u>Storage</u> 18-25°C

#### **Expected Results**

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Acidic Mucopolysaccharides: Blue Collagen: Red

KI	it Contents (Cat# CIK-1)
Ad	dditional Kit Reagents Sold Separately
1.	Acetic Acid Solution (12%)

2. Hydrochloric Acid Solution (1N)	18-25°C
3. Potassium Ferrocyanide Solution (3%)	18-25°C
4. Colloidal Iron Stock Solution	18-25°C
5. Van Gieson's Solution	18-25°C

### Suggested Controls (not provided)

Small Intestine, Colon

#### **Uses/Limitations**

For In-Vitro Diagnostic use only. Do not use if reagents become cloudy or precipitate Do not use past expiration date. Use caution when handling reagents. Non-Sterile Intended for FFPE sections cut at 5-10µm. This procedure has not been optimized for frozen sections. Frozen sections may require protocol modification.

#### Storage

Store kit and all components at room temperature (18-25°C).

#### Safety and Precautions

Please see current Safety Data Sheets (SDS) for this product and components GHS classification, pictograms, and full hazard/precautionary statements.

#### Prepare the Following Solutions Immediately Before Use. Working Colloidal Iron Solution:

- 1 part Acetic Acid Solution (12%) 3 parts Distilled Water
- 4 parts Colloidal Iron Stock Solution

Example: 1ml Acetic Acid Solution (12%), 3mls Distilled Water, 4mls Colloidal Iron Stock Solution.

Example (dropper): 5 drops Acetic Acid Solution (200 $\mu$ l), 15 drops Distilled Water (600 $\mu$ l), 20 drops Colloidal Iron Stock Solution (800 $\mu$ l). Total: 1600 $\mu$ l or 1.60ml. (1 drop = ~40 $\mu$ l)

#### Procedure

1. Deparaffinize sections if necessary and hydrate to distilled water.

2. Cover tissue section with Acetic Acid Solution (12%) for 30 seconds.

3. Place slide in Working Colloidal Iron Solution for 30 minutes with occasional gentle agitation. Use once and discard.



Acid mucopolysaccharides in Human Colon stained with Colloidal Iron Stain Kit

4. Rinse thoroughly in 3 changes of Acetic Acid Solution (12%) for 2 minutes each.

5. Mix equal volumes of Hydrochloric Acid Solution (1N) and Potassium Ferrocyanide Solution 3% to make a Working Iron Stain Solution.

6. Stain slide in Working Iron Stain Solution for 10 minutes with occasional gentle agitation. Use once and discard.

- 7. Rinse in 3 changes of distilled water.
- 8. Stain tissue section with Van Gieson's Solution for 30 seconds.
- 9. Dehydrate in 3 changes of absolute alcohol.
- 10. Clear, and mount in synthetic resin.

#### **References**

 Muller, G. ACTA Histochem (Jena); 2:68, 1955

 2.Tickoo, S.K., et al. Colloidal iron staining in renal epithelial neoplasms, including chromophobe renal cell carcinoma: emphasis on technique and patterns of staining. American Journal of Surgical Pathology, 1998 April; 22(4): pages 419-424.





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