

# **Colloidal iron Stain Kit**

# IN VITRO DIAGNOSTIC DATASHEET

This kit is used for the histochemical staining of acid mucopolysaccharide.

## INTENDED USE : IN VITRO DIAGNOSTIC USE

**DESCRIPTION :** The colloidal iron technique is for the detection of acid mucopolysaccharides and is based upon the attraction of ferric cations in a colloidal ferric oxide solution for the negatively charged carboxyl and sulfate groups of acid mucins and proteoglycans. The tissue bound ferric ions are visulaised by treatment with potassium ferrocyanide to form bright blue deposits of ferric ferrocyanide or prussian blue.

### **SPECIMEN COLLECTION :**

Fixation in routine Buffered Formalin solution is satisfactory. Paraffin sections at 5 microns.

REAGENTS :	150 TEST	
Ferric Chloride Solution (29% aqueous)	1x 50ml	
Acetic Acid Solution (<25% Solution)	1x 50ml	
Colloidal Perls Reagent A (5% Hydrochloric Acid	l) 1x 50ml	
Colloidal Perls Reagent B (5% Potassium Ferror	cyanide) 1x 50ml	
Neutral Red 0.5% Aqueous Solution	1x 50ml	
* Number of TEST calculated according to 330 microliter per slide.		

CATALOG NO :	
PROCEDURE TIME :	Approximate 90 minute.

## PREPARATION

### **Stock Colloidal Iron Solution**

Boil 125ml of distilled water and add 2.2ml of the ferric chloride (29%) solution. Continue to boil until the solution turns dark red then the Stock Solution should be removed from the heat and cooled. *Stable for 1 year.* **Colloidal Iron Working Solution** 

PLKit100-150

Mix 1 part of the *Stock Colloidal iron solution* with 1 part *Acetic acid solution*. Prepare fresh prior to staining. **Colloidal Perls Working Solution** 

Mix 1 part of Colloidal Perls A with 1 part Colloidal Perls B. Mix well and use fresh.

# PROCEDURE

- 1. Deparaffinise sections, hydrate to water.
- 2. Dilute 1 part acetic acid with 1 part distilled water. Then treat sample 1 minute.
- 3. Cover the test slide (not control) with **Colloidal iron working solution** for 1 hour.
- 4. Rinse in diluted acetic acid solution for 3 minutes. Repeat 4 times.
- 5. Place test and control slide in freshly prepared Colloidal Perls working solution for 20 minutes.
- 6. Rinse briefly in distilled water.
- 7. Stain with 0.5% Neutral Red solution for 5 minutes.
- 8. Rinse well in water and blot dry.
- 9. Dehydrate quickly through alcohols, clear in xylene and mount.

### **RESULTS** :

Proteoglycans, acid mucins, hyaluronic acid :	Bright Blue
Collagen :	Pale Blue
Nuclei :	Red

**STORAGE AND STABILITY :** This product is stable for 36 months when stored in +15 /+25 C **TROUBLESHOOTING :** Please contact Patolab Technical Support by e-mail ( patolab@patolab.com.tr ).



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