

PERIODIC ACID SCHIFF (PAS)

Histochemical Method for Glycogen 50 Tests

PRINCIPLE :

Periodic acid is an oxidant which breaks the C-C bonds in various structures, where these are present as 1: 2 glycol group {CHOH.CHOH}, converting them into dialdehydes {CHO.CHO}. The particular property of periodic acid is that it does not further oxidize the resulting aldehydes and these can, therefore, be localized by combination with Schiff's reagent to give a substituted dye which is red in color.

Schiff's reagent is prepared by dissolving basic fuchsin in water to which is then added HCL and sodium or potassium metabisulphite. The solution is at first dark red, but under the effect of the sulphur dioxide liberated, it becomes transformed into a colourless fluid known as the leucofuchsin. When this colourless fluid becomes in contact with any aldehyde substance, a dark purple compound is formed.

SAMPLE :

Fixed tissue section or blood film..

REAGENTS

1.	Periodic acid	25 ml
2.	Schiff's reagent	25 ml
3.	Methyl green	25 ml

PROCEDURE:

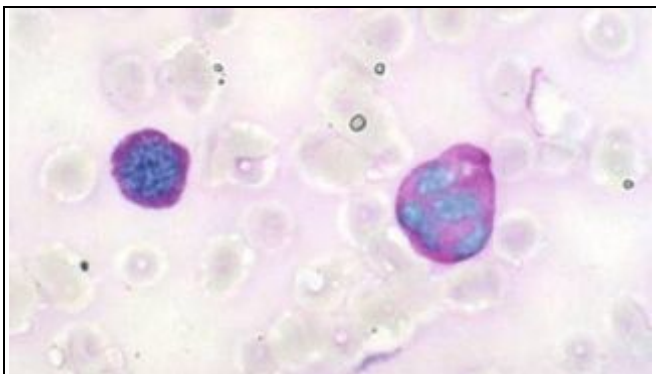
1. Bring sections (all types) to d. water.
2. Oxidize in periodic acid R1 (10 drops) for 5 minutes.
3. Wash in d. water for 2 minutes .
4. Stain sections for 20 minutes with Schiff's reagent R2 (10 drops)
5. Wash for 5 minutes in d. water .
6. Counterstain in methyl green R3 (10 drops) for 10 minutes
7. Wash in d. water for 2 minutes
8. Dehydrate in alcohol; clear in xylene and mount .

Results:

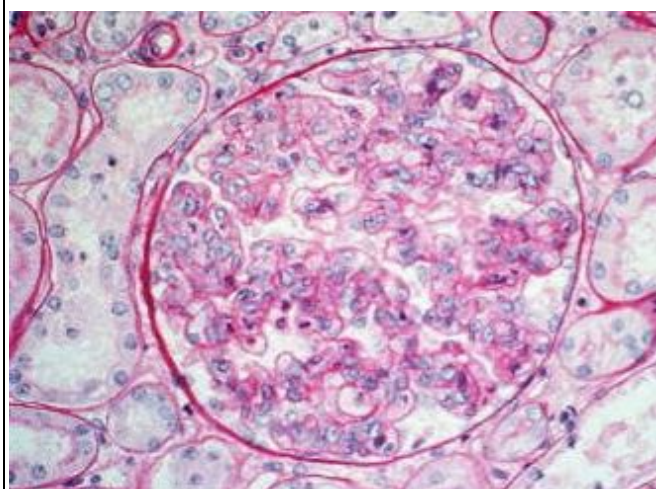
PAS — positive material : magenta red
Nuclei : Green .

REFERENCE:

Mc Manus,JFA. Amer.J.Path. (1948), 24, 643



Blood film



Kidney

Results:

Positive PAS substance Magenta red
Nuclei Green

BIO DIAGNOSTIC

DIAGNOSTIC AND RESEARCH REAGENTS

PERIODIC ACID SCHIFF (PAS)

Histochemical Method	
+4 to +8 °C	50 Tests
CAT. NO.	PA 26 12

FOR RESEARCH USE ONLY

REAGENTS

R1	Periodic Acid	25 ml
R2	Schiff's reagent	25 ml
R3	Methyl green	25 ml

CONTACTS

Tele: 02-33385184
 Mobil: 0109 – 349 20 77
 Fax : 02-33385184 (102)
 e.maile : info@bio-diagnostic.com
 Website: www.bio-diagnostic.com
 Adress: 29 Tahreer St., Dokki, Giza, Egypt