

# Periodic Acid Schiff (PAS) Diastase Stain Kit

**Description:** The Periodic Acid Schiff (PAS) Diastase Stain Kit is intended for use in histological demonstration of lymphocytes and mucopolysaccharides. The  $\alpha$ -Amylase digestion step acts on glycogen to break it into smaller sugars that are then washed off the tissue section allowing visual comparison of digested and undigested slides. The PAS reaction in tissue sections is useful for the demonstration of mucopolysaccharides.

PAS Positive Material: Magenta  
Nuclei: Blue

**Uses/Limitations:** Not to be taken internally.  
For In-Vitro Diagnostic use only.  
Histological applications.  
Do not use if reagents become cloudy.  
Do not use past expiration date.  
Use caution when handling reagents.  
Non-Sterile.

**Control Tissue:** Liver

**Kit Contents:**

Kit Contents	Volume	Storage
Alpha-Amylase Solution (1%)	250 ml	2-8° C
Periodic Acid Solution	250 ml	2-8° C
Schiff's Solution	250 ml	2-8° C
Hematoxylin, Mayer's	2x125 ml	18-25°C
Bluing Reagent	2x125ml	18-25°C

**Precautions:** Avoid contact with skin and eyes.  
Harmful if swallowed.  
Follow all Federal, State, and local regulations regarding disposal.

Storage: 2° C - 25° C

**Mixed Storage Conditions.**  
**Separate Contents.**

**Procedure:**


1. Deparaffinize two identical sections if necessary and hydrate to distilled water.
2. If sections are Zenker-fixed, remove mercuric chloride crystals using iodine and clear with sodium thiosulfate. Rinse in running tap water.
3. Apply Alpha-Amylase Solution (1%) to one slide and incubate for 10-30 minutes at room temperature.
4. Rinse in 2 changes of distilled water.

Note: The remainder of this procedure is performed on both the "digested" and "undigested" slides.

5. Apply Periodic Acid Solution (1%) to tissue section and incubate for 5 minutes.
6. Rinse slide in 4 changes of distilled water.
7. Apply Schiff's Solution to tissue section and incubate for 10-20 minutes.
8. Rinse slide in warm running tap water for 2 minutes.
9. Rinse slide in distilled water.
10. Apply Hematoxylin, Mayer's (Lillie's Modification) to tissue section and incubate for 1 minute.
11. Rinse in running tap water for 1 minute followed by 2 changes of distilled water.
12. Apply Bluing Reagent for 5 seconds and rinse in distilled water.
13. Dehydrate through graded alcohols.
14. Clear, and mount in synthetic resin.

**References:**

1. Culling CFA, Allison RT, Barr WT.: Cellular Pathology Technique, 4<sup>th</sup> Edition. Butterworths, Pages 216-220, 1985.
2. Sheenan, D.C., Hrapchak, B.B. Theory and Practice of Histotechnology, 2<sup>nd</sup> Edition. CV Mosby, Columbus, OH. Pages 164-167, 1980.

Storage: 2° C  25° C

**Mixed Storage Conditions.**  
**Separate Contents.**