



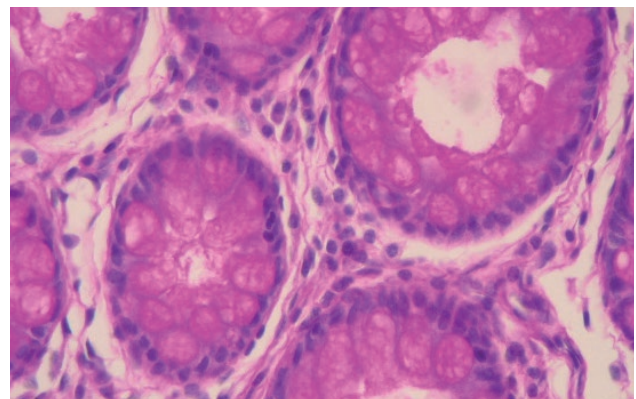
PAS Kit for clinical diagnosis

Periodic Acid-Schiff (PAS) is a staining method used to detect **polysaccharides** in sections of formal fixed and paraffin embedded tissues.

It is one of the most commonly used staining in histology for **glycogen** and **mucosubstances** and is used to evidence the presence of aldehyde groups formed by prior oxidation of carbohydrates.

The basis of the reaction is to oxidize the tissues by periodic acid to increase the number of carbonyl groups (aldehydes or ketones) present in them. Subsequently, the sample is treated with the Schiff reagent which reacts with two contiguous aldehyde groups resulting in a characteristic red-purple coloration. Further staining with Alcian blue allows to **differentiate neutral and acidic mucopolysaccharides**.

PAS staining can be used to assist in the **diagnosis** of several **medical conditions** as Glycogen storage disease (versus other storage disorders), Adenocarcinomas, which often secrete neutral mucins, Paget disease of the breast, etc. The **PAS Kit** consists of all the reagents involved in this staining.



Main advantages

- All reagents are ready for use.
- Supplied in easy-to-use 30 ml dropper bottles.
- Optimal sample staining.
- Sufficient quantity to perform up to 100 tests.
- No additional equipment required.
- Standard procedure included in each box.



Complies with CE marking requirements for in vitro diagnostic medical devices. See instructions on www.itwreagents.com.

Contents of the Kit

Reagent A: Periodic Acid.....	30 ml
Reagent B: Schiff reagent.....	30 ml
Reagent C: Potassium Metabisulfite solution.....	30 ml
Reagent D: Fixing Solution.....	30 ml
Reagent E: Mayer's Hematoxylin.....	30 ml

Sufficient for 100 tests.

Stability and storage

The PAS Kit is stable for 10 months. Store at between +2 and +8°C.

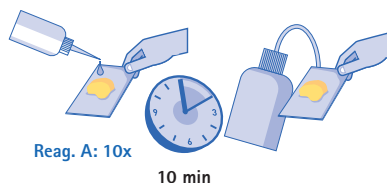




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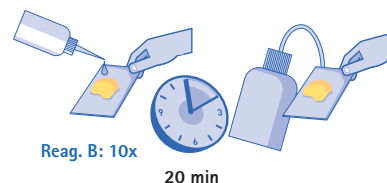
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Procedure



Reag. A: 10x

10 min



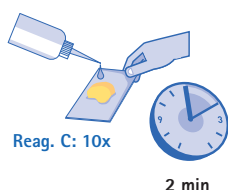
Reag. B: 10x

20 min

1 Once deparaffined and rehydrated, rinse the specimens with distilled water.

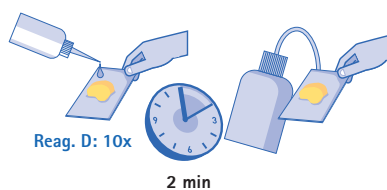
2 Add 10 drops of Reagent A to the section. Allow to react for 10 minutes. Wash with distilled water.

3 Add 10 drops of Reagent B to the section. Allow to react for 20 minutes. Wash with distilled water.



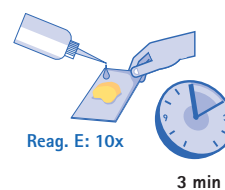
Reag. C: 10x

2 min



Reag. D: 10x

2 min



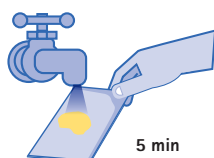
Reag. E: 10x

3 min

4 Add 10 drops of Reagent C to the section. Allow to react for 2 minutes. Drain the slide.

5 Without washing, add 10 drops of Reagent D to the section. Allow to react for 2 minutes. Wash with distilled water.

6 Add 10 drops of Reagent E to the section. Allow to react for 3 minutes.



5 min



7 Rinse in running water for 5 minutes.

8 Dehydrate using increasing alcohol concentrations, rinse with xylene, mount and observe under the microscope.



Results

Nucleus: Blue

PAS-positive substances → Red to purple

- simple polysaccharides (glycogen)
- neutral mucopolysaccharides
- mucoproteins (mucines)
- glycoproteins
- basement membrane
- glycolipids

Alcian-PAS staining:

- MPSA (Acidic Mucopolysaccharides) → Blue
- MPSN (Neutral Mucopolysaccharides) and glycoproteins → Intense red

Description	Code	Package
PAS Kit for clinical diagnosis	256676.0922	Kit
Related product (for carbohydrates differentiation)		
Alcian Blue 8 GX (C.I. 74240)	254584.1604	5 g
for clinical diagnosis	254584.1606	25 g

IP-037EN

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