IVD For In-Vitro Laboratory Use Only CE

Issue No: 0417-06 (08/12/21)

Product Protocol

Product Name	PAS Stain Kit (modified McManus 1946)

Product Code	RRSK15-100

Reagents

Periodic Acid Solution 1%	1x 50ml
Haematoxylin Harris	1x 50ml
Schiff reagent (Feulgen)	1x 50ml

General Information

Number of Tests:	100 (based on bench top staining)
Procedure Time:	45 minutes (approximate)
Shelf Life:	3 Years (from date of manufacture)
Storage:	Schiff reagent 2-8 °C. Other Reagents 15-25 °C.

Principle

This kit is used for the demonstration of neutral mucins, glycogen and some early lipofuchsins. The technique is based upon the reactivity of free aldehyde groups within carbohydrates whereby the schiff reagent forms a bright red magenta end product

Specimen Collection

Formaldehyde based fixatives are recommended. Tissues should be processed and embedded in paraffin wax and cut at 5 microns.
Avoid use of glutaraldehyde and mercuric fixatives. Can be used on resin sections

Protocol

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1. Dewax sections, hydrate through alcohols and rinse in tap water
2. Oxidise slides with periodic acid solution for 5 minutes
3. Wash well in several changes of distilled water
4. Stain with Schiff reagent for 20 minutes at room temperature
5. Wash slides well in running tap water for 5-10 minutes (sections should macroscopically be pink/magenta in colour)
6. Stain sections in haematoxylin for 1 minute
7. Wash well in water, differentiate in 0.5% acid alcohol and blue in running water or Scotts tap water substitute
8. Dehyrate, clear and mount

Results

Nuclei:	Blue-Black
Glycogen	Magenta
Neutral/sialomucins	Magenta
Various glycoproteins, early lipofuchsins	Magenta

Notes

1. Staining times may be modified to provide varying intensities of staining
2. It is recommended that a control slide be used with all sections
3. Glycogen may be removed to demonstrate other PAS positive material or to confirm the presence of glycogen. Treat one known positive control for glycogen with 1% lipase (not supplied) at 37 degrees C for 20 minutes. Wash well in water for 5-10 minutes then continue for PAS protocol
   Results: Lipase digested section: No magenta/red staining

Stability

If correctly stored the reagents are usuable until the expiry date

Disposal

Observe local waste disposal regulations

Any serious incident that has occurred in relation to the device shall be reported to the manufacturer and the competent authority of the member state in which the user and/or the patient is established

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