

Silver Methenamine (PASM), Kit

Reference: AP0120



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INTENDED USE AND PRESENTATION:

For *in vitro* diagnostic use.

AP0120. 100 Tests.

APPLICATIONS:

The Silver Methenamine (PASM) kit was designed to show argyrophilic elements and mucopolysaccharides (basal membranes, mycetes, bacteria etc.) in tissue sections. Recommended method to examine basal membrane in renal biopsy.

The interpretation of the stain results is the full responsibility of the user. Any experimental result must be confirmed by a medically established diagnostic product or procedure.

PRODUCT COMPOSITION:

The Silver Methenamine (PASM) kit is composed by:

Reagent	Name	Volume	Storage
A	Periodic acid solution	30 mL	2-8 °C
B	Silver nitrate solution	30 mL	2-8 °C
C	Hexamethylenetetramine solution	30 mL	2-8 °C
D	Sodium tetraborate solution	30 mL	2-8 °C
E	Gold chloride solution	30 mL	2-8 °C
F	Fixing solution	30 mL	2-8 °C

METHODS AND PROCEDURE:

Principles of the method: Periodic acid reacts with glycolic and glycoaminic groups in mucopolysaccharide chain oxidating them to aldehydic groups and thus breaking the chain itself. These newly-formed aldehydic groups reduce silver chloride, which is part of the silver-methenamine complex, to metallic silver and make it visible.

Warning: As in all reactions with silver salts, it is essential to use perfectly clean glassware and excellent distilled or deionized water. Do not touch reagents containing silver salts with metallic objects (tweezers etc.)

Specimen: Paraffin-embedded tissue samples should be used.

Procedure time: 60-90 minutes.

Staining procedure:

- 1) Deparaffinize and hydrate for paraffin section.
- 2) Put the crystal in distilled water.
- 3) Pour over the section from 2 to 5 drops of **Reagent A** and leave for 30 minutes.
- 4) Wash with distilled water.
- 5) Mix in a separate pot or tube 5 drops of **Reagent B**, 5 drops of **Reagent C** and 5 drops of **Reagent D**. Stir and put 2 to 5 drops of the mixture in the section and incubate in a moist chamber at 60 °C for 60 minutes.
- 6) Take out the incubation box from the oven and check the tone of impregnation, if it is correct wait 5 minutes at room temperature and rinse in distilled water. If it is weak reincubate in the oven and check every 5 minutes.
- 7) Wash in distilled water.
- 8) Place in section 2 to 5 drops of **Reagent E** and leave for 1 minute.
- 9) Wash in distilled water.
- 10) Put in Section 2 to 5 drops of **Reagent F** and leave for 1 minute.
- 11) Wash in distilled water.
- 12) Dehydrate, clear in xylene and mount the preparation.

See our web site at www.gennova-europe.com for detailed protocols ancillary reagents and support products.

EXPECTED RESULTS:

During the reaction of the different solutions of the kit with the tissue sections, resulting in the following stains:

Basement membranes, glycogen, mycetes and bacterial capsule	Black
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REQUIRED MATERIALS BUT NOT SUPPLIED:

All reagents, materials, and laboratory equipment for this procedure are not provided with this kit. This includes adhesive slides and cover slips, positive and negative control tissues, xylene or adequate substitute, ethanol, distilled H₂O, pipettes, Coplin jars, glass jars, moist chamber, histological baths, mounting materials, and microscope.

Buffered solutions for and other auxiliary reagents are available from Gennova Scientific.



Catalog number



Batch code



In Vitro diagnostic medical device



Temperature limitation



Expiration date



Test number



Manufacturer



See instruction for use



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STORAGE AND STABILITY:

Store at 2-8 °C until the expiration date printed on product label. Do not use after the expiration date. Keep the containers tightly closed. After the first opening, the product is usable until the expiry date stated on label of intact product. Waste from solutions must be disposed under the procedure of hazardous substance. If the product is stored under different conditions from those stipulated in these technical indications, the new conditions must be verified by the user.

Gennova Scientific guarantees that the product will maintain all of the described characteristics from the production date until the expiration date, as long as the product is stored and used as recommended. No other guarantees are provided. Under no circumstances is Gennova Scientific obliged to cover damages caused by use of this reagent.

TROUBLESHOOTING:

If unusual staining is observed or any other deviations from the expected results, please read these instructions carefully, and if this does not solve the problem, please contact Gennova Scientific's technical support department or your local distributor.

PRECAUTIONS:

Use only by qualified personnel. Read with attention the information written on the label (dangerous symbols, risks and safety phrases). Consult always the safety data sheet (MSDS) where the information about the risks of the preparation, precautionary measures during use, first aid and disposal are available. Use proper protective equipment in order to avoid contact with reagents and samples in the eyes, skin, and mucosal tissues. MSDS is available upon request.

PERFORMANCE CHARACTERISTICS:

Gennova Scientific has performed studies to evaluate the functioning of this product, concluding that the product is both specific and sensitive for recommended use.

BIBLIOGRAPHY:

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Doyle G D Campbell E. The periodic acid silver methenamin (PASM) staining of renal biopsies. Light and electron microscopy study. Irish J. Med. Sci., 145: 127; 1976
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Temperature limitation



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