

SP969 Warthin Starry Stain GCC

For the demonstration of Spirochaetes.

KIT CONTENTS

Silver nitrate 2%	30ml	Silver nitrate 10%	50ml
Hydroquinone 3%	30ml	Gelatine reagent	10 x 45gm
Buffer conc	2 x 50ml	Pipettes (dispensing)	2

Prepare the following solutions:

Silver compounds form turbid solutions with many impurities found on unclean equipment and in tap water. It is essential that all equipment is well rinsed in deionised /distilled water and that dilution water is of highest possible quality (deionised or distilled).

A -pH 3.70 buffer ready for use – dilute 10ml of Buffer conc to 100ml with deionised/distilled water. Store refrigerated.

B - Silver stain 1% - Dilute 5ml of Silver nitrate 10% stock to 50ml with pH3.70 buffer .

Gelatine reagent - Place one 45gm Gelatine reagent bottle in a beaker of water at approx 70-80C for 5-10 minutes or so shaking occasionally to liquefy the contents. Ensure full contents of the bottle are transferred to your staining jar.

C – Developer –In a suitable staining jar dispense 45gm (ml) of gelatine reagent, add 2.5ml (gm) of Silver nitrate 2% mix well and raise temperature to 56C and keep until needed - **just immediately before use** add 3ml (gm) of Hydroquinone 3%.

If microwave method is being used there is no need to preheat this reagent.

GENERAL METHOD

Controls – tissue known positive for Spirochaetes or H. Pylori.

- 1). Deparaffinize and hydrate to deionised water.
- 2). Raise Silver stain (solution **B**) to 56 C in Coplin jar or similar on a waterbath
- 3). Place slides in Silver stain at 56 C for 1 hour.
- 4). Drain off slides and leave in Coplin jar add the warmed (56 C) developer (solution **C**) .
- 5). Remove control slide at intervals judging development by eye. (Usually 1-3 minutes , sections should be pale brown)
CARE- HOT !
- 6). Wash carefully in HOT tap water. (CARE !)
- 7). Dehydrate, clear and mount in DPX if required.

MICROWAVE METHOD

Based on using a 750 Watt microwave

- 1). Deparaffinize and hydrate to deionised water.
- 2). Place slides in Silver stain (solution **B**) in microwavable Coplin jar or similar and microwave on full power for 20 seconds followed by 1 minute standing time.
- 3). Drain off slides (CARE - HOT !) and leave in Coplin jar add the developer (solution **C**) . Microwave on full power for 15-20 seconds Agitate the slides in the developer gently (CARE – HOT), check by eye the stage of development- they should be light brown. Development time 10-30 seconds after the microwave stage.

4). Wash carefully in HOT tap water. (CARE !)

5). Dehydrate, clear and mount in DPX if required.

RESULTS

Spirochaetes - Black
Background - Light brown – pale yellow .

HEALTH & SAFETY

We have no control over any microwave equipment – therefore the user should familiarise themselves with the operation of the lab microwave if used and satisfy themselves that the method applied and the equipment is safe .We will not accept any liability for incidents involving microwave equipment. Wear eye and skin protection when using. Do not consume these reagents. Keep stored in a refrigerator (4 C) in the kit packaging or in a cool darkened cupboard.

Silver nitrate is harmful if in contact with skin and eyes. and will stain the skin . If in contact with eyes treat with eye-bath for 5 minutes.

If in contact with skin wash with soap and water

.All other reagents in this kit a low risk or harmless when used as directed. However, as with all laboratory reagents some persons may be susceptible to irritation and sensitivity if in contact with any chemical reagent.. Always observe good laboratory practise when handling laboratory reagents.

ACCIDENTAL SPILLAGE & WASTE DISPOSAL

In the volumes supplied in the kit and when in use, this product is unlikely to present a serious spillage risk.

Dispose of to the Public Sewer diluting greatly with water.

UNSATISFACTORY PERFORMANCE

As part of our duty to monitor product performance and our policy of continual improvement. Please report to us any unsatisfactory performance you may experience with this product. If any reagent degrades before expiry date of shelf life we will replace that reagent free of charge.

GCC Diagnostics guarantees that the highest quality reagents are supplied with this product to give reliable results time and again and that this product conforms to the information contained in this leaflet. This product is supplied for Laboratory use only, the user should however, determine the suitability of this product for their particular use. This product is supplied strictly subject to our terms of supply and sale.

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