



First for Pathology
A THERMO FISHER SCIENTIFIC COMPANY

Southgate Mucicarmine

For In-Vitro Diagnostics

For Professional Use Only

Southgate Mucicarmine is intended for use in the histological visualisation of acid mucopolysaccharides in tissue sections.

Mucin is a secretion produced by a variety of epithelial cells and connective tissue. Certain inflammations and carcinomas result in excess mucin secretion.

Sample Preparation

Any well-fixed tissue may be used.

Mode of Action

Aluminium is believed to form a chelation complex with the carmine, binding the acid groups of the mucin and attaching the red colour to the complex in a dye-lake formation. Iron haematoxylin is used to stain the nuclei, and the metanil yellow is the counterstain. (Sheehan, pg 168)

Warnings and Precautions

Southgate Mucicarmine is highly flammable. Keep away from all sources of ignition. Refer to the Safety Data Sheet.



Ingredients

Substance	CAS	Conc
Ethanol	64-17-5	30-60%
Aluminium Hydroxide	21645-51-2	0 – 1%
Carmine	1390-65-4	0 – 1%
Aluminium Chloride	7446-70-0	0 – 1%
Water	7732-18-5	Balance

Specifications

Southgate Mucicarmine

Appearance Dark Red Liquid
pH @ 25°C 2.5-3.5

Stability

The expiry date of each reagent is printed on the label. Store each reagent away in sealed bottle away from heat and light.

This product should not be used if 1) the appearance has changed; 2) the expiration date has passed; or 3) there are other signs of deterioration.

Technical Procedure

1. Prepare working solution of Weigert's Haematoxylin by combining equal volumes of Weigert Haematoxylin Part A and Part B;
2. Prepare working solution of Southgate Mucicarmine by diluting the Southgate Mucicarmine Stain 1:4 (10mls stain : 30mls tap water);
3. Deparaffinise slides to deionised water;
4. Place slides in Weigert Haematoxylin working solution for 1-7 minutes;
5. Wash in running tap water 5 minutes
6. Stain in working mucicarmine solution for 30minutes or longer at room temperature. Increased temperature may result in decreased staining times;
7. Rinse in deionised water;
8. Stain in Metanil yellow, 30 sec to 1 minute;
9. Rinse quickly with deionised water;
10. Dehydrate, clear and coverslip using synthetic mounting medium

Results and Interpretation

Only experienced and suitably qualified persons should carry out interpretation of stained slides.

Mucine	Deep Rose
Nuclei	Black
Other tissue elements	Yellow

Notes

- Do not substitute deionised/distilled water when preparing Mucicarmine working solution. Scotts Blue Tap water may be used;
- Alternate counterstains that also demonstrate mucins (eg Ehrlich's haematoxylin) should be avoided

References

Survana KS, Layton C, and Bancroft JD. *Bancroft's Theory and Practice of Histological Techniques, 7th Ed.* London, Churchill Livingstone, 2012

Sheehan, D.C. and Hrapchak B.B, *Theory and Practice of Histotechnology, 2nd Edition;* 1987, Battelle Press



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Carson, Freida; Hladick, Christa; Histotechnology – A Self Instructional Text; 3rd Edition; American Society for Clinical Pathology Press 2009

Prophet, E.; Mills, B; Arrington, J; Sobin, L; Laboratory Methods in Histotechnology; Armed Forces Institute of Pathology; American Registry of Pathology; Washington DC 1994

Ordering

Product	Size	Code
Southgate Mucicarmine	100mL	FNNFG018
Weigert's Haematoxylin A	500mL	FNNFG075
Weigert's Haematoxylin B	500mL	FNNFG076
Scotts Blue Solution	5L	FNNII021