



**Diagnostic  
BioSystems**

## Instructions For Use KT 024-IFU

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### Mucicarmine Stain Kit

(Modified Southgate's)

#### Description and Principle

Mucicarmine Stain Kit (Modified Southgate's) is intended for use in the histological visualization of acid mucopolysaccharides in tissue sections. This product is useful in distinguishing mucin negative undifferentiated squamous cell lesions from mucin positive adenocarcinomas. In addition, this product will stain the mucopolysaccharide capsule of *Cryptococcus neoformans*.

Carmine dye is a natural occurring dye that combines with an aluminum mordant to form a positively charged chelation complex. This cationic complex binds to anionic groups of acid mucopolysaccharides. Nuclei are stained with a rapid and progressive Mayer hematoxylin solution. Tartrazine provides a contrasting yellow counterstain.

#### Expected Results

Mucin:	Pink/Red
Capsule of <i>Cryptococcus</i> :	Red
Nuclei:	Blue to Green
Other tissue components:	Yellow

#### Kit Contents

	Volume	Storage
1. Hematoxylin, Mayer's	125 ml	18-25°C
2. Bluing Reagent	125 ml	18-25°C
3. Mucicarmine Solution	125 ml	2-8°C
4. Tartrazine Solution	125 ml	18-25°C

#### Suggested Controls (not provided)

Colon, Intestine, Bronchi Epithelial cells.

#### Uses/Limitations

For In-Vitro Diagnostic use only.

Do not use if reagents become cloudy or precipitate

Do not use past expiration date.

Use caution when handling reagents.

Non-Sterile

Intended for FFPE sections cut at 5-10µm.

This procedure has not been optimized for frozen sections.

Frozen sections may require protocol modification.

#### Storage

Mixed storage conditions. Store according to individual label instructions.

#### Safety and Precautions

Please see current Safety Data Sheets (SDS) for this product and components GHS classification, pictograms, and full hazard/precautionary statements. If there is any serious incident that has occurred in relation to the device, please contact the manufacturer: Diagnostic BioSystems Technical Support at (925) 484-3350, extension 2 or [techsupport@dbiosys.com](mailto:techsupport@dbiosys.com). If required, please report to the Competent Authority of the Member State in which the user and/or patient is established.



Epithelial mucins in Human GI tract demonstrated with Mucicarmine Stain Kit

#### Procedure:

1. Deparaffinize sections if necessary and hydrate to distilled water.
2. Stain slide in Hematoxylin for 2-3 minutes.
3. Rinse for 2 minutes in running tap water.
4. Dip slide in Bluing Reagent for 30 seconds.
5. Rinse slide in distilled water.
6. Stain slide in Mucicarmine Solution for 30 minutes.
7. Rinse quickly in tap water followed by a quick rinse in distilled water.
8. Stain slide in Tartrazine Solution for 1 minute.
9. Rinse slide 1 time in absolute alcohol.
10. Dehydrate slide quickly in 3 changes of absolute alcohol.
11. Clear in 2 changes of xylene or xylene substitute, and mount in synthetic resin.

#### References

1. Sheenan, D.C., Hrapchak, B.B. Theory and Practice of Histotechnology, 2nd Edition. Battelle Press, Columbus, OH. Pages 172-173.

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