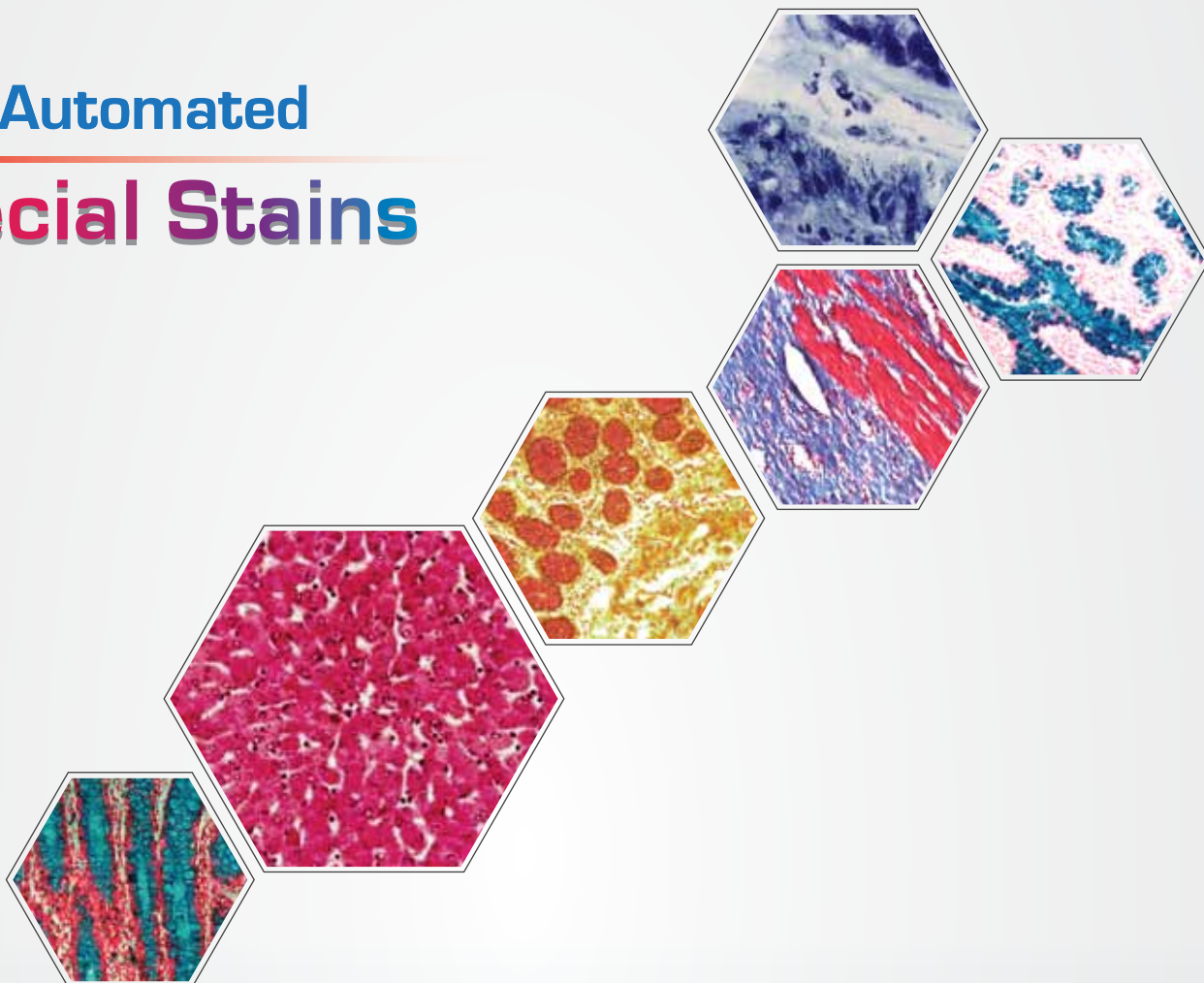


NEW

## Fully Automated Special Stains



Over 30 Stains  
GMS, Trichrome  
Reticulin and...

**Xmatrix<sup>®</sup>ELITE**

Elegance on the Glass Slide...  
...from Microtome to Microscope

**BioGenex**

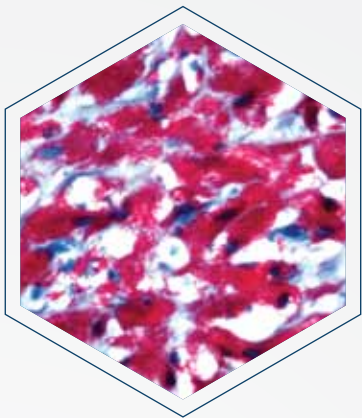


## Three Simple Steps:



## Key Features:

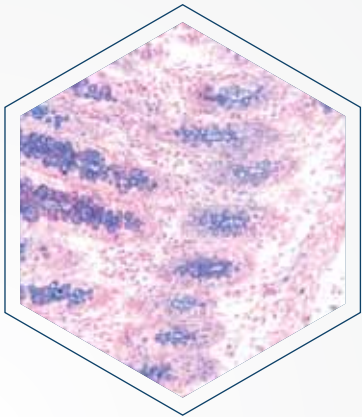
- Fully Automated – baking through final coverslip
- High capacity & High Throughput system
- Fast turnaround
- Broadest menu available from any where - over 30 SS
- Crisp, intense, reliable and reproducible stains
- Ability to optimize protocols for customized intensity
- Eco-friendly - up to 75% reduced
  - Reagent consumption
  - Waste generation
- Easy inventory management with RFID driven system
- Reports for inventory management and regulatory compliance



Acid-Fast Bacteria (AFB) Blue Stain

Acid-fast stain is used for demonstration of Mycobacterium tuberculosis in tissue sections and smears. Acid-fast bacilli (Mycobacteria) stain red while background & non Acid-fast bacteria stain blue.

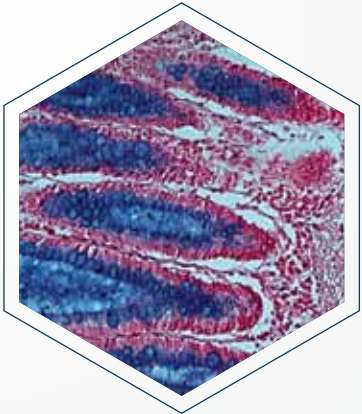
Catalog No.	: SS025
Acid-fast bacilli	: Red
Non Acid-fast bacteria	: Blue
Positive Control	: AFB infected tissue & Smears



Alcian Blue /PAS Stain

Alcian Blue/PAS stain utilizes the properties of both, the PAS and Alcian Blue methods. Acidic mucosubstances are stained with the Alcian Blue technique and neutral mucosubstances are stained by the PAS stain.

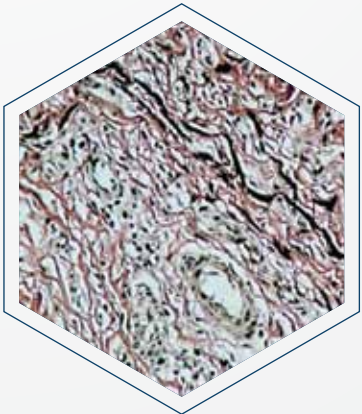
Catalog No.	: SS026
Acidic mucins	: Blue
Neutral mucins	: Magenta
Mixtures of above	: Blue/Purple
Nuclei	: Deep blue
Positive Control	: Intestine



Alcian Blue pH 2.5 Stain

Alcian Blue pH 2.5 stains both sulfated and carboxylated acid mucopolysaccharides as well as sulfated and carboxylated sialomucins (glycoproteins) to blue color. Nuclear fast red counter stains the nuclei in red color.

Catalog No.	: SS027
Acidic sulfated mucosubstances	: Blue
Nuclei	: Pink to Red
Cytoplasm	: Pale Pink
Positive Controls	: Small Intestine, Appendix, or Colon

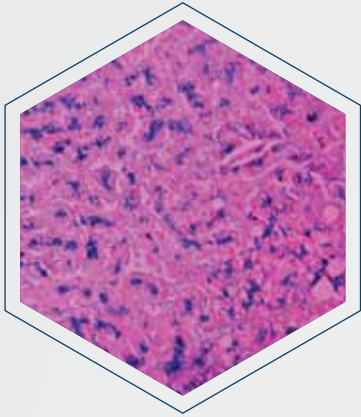


Elastic Stain

Elastic staining procedure can demonstrate elastic fibers which stain dark blue to black, whereas nuclei, collagen and other tissue elements stain blue, red and yellow, respectively.

Catalog No.	: SS029
Elastic fibers	: Blue-Black to Black
Nuclei	: Blue to Black
Collagen	: Red
Other tissue elements	: Yellow
Positive Controls	: Skin

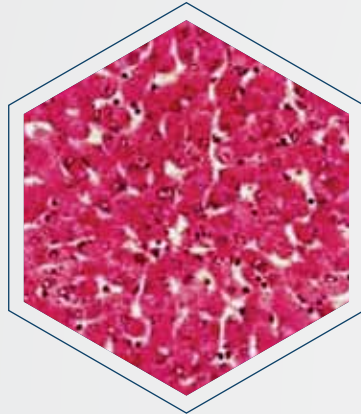
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## Iron Stain

In Iron staining method ferric iron, loosely bound in protein complexes, reacts with acidic potassium ferrocyanide producing a blue color.

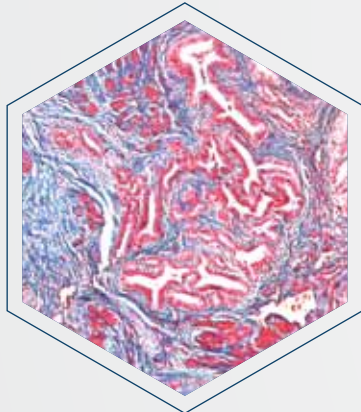
Catalog No.	: SS030
Iron (ferric form)	: Bright blue
Nuclei	: Red
Cytoplasm	: Pink
Positive Controls	: Liver & Spleen



## Periodic Acid-Schiff (PAS) Stain

PAS staining is mainly used for staining structures containing a high proportion of carbohydrate macromolecules such as glycogen, glycoprotein, & proteoglycans typically found in connective tissues, mucus, glycocalyx, and basal laminae.

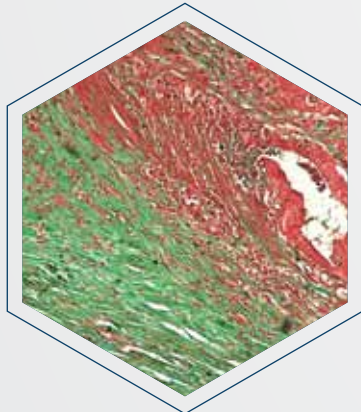
Catalog No.	: SS032
Glycogen & Mucin	: Red/Purple
Background	: Blue
Positive Controls	: Liver, Cardiac and Skeletal Muscle



## Gomori's Trichrome Blue Stain

Gomori's trichrome stain is useful in the study of diseases of connective tissue and muscles characterized by fibrotic and dystrophic changes, and to differentiate between collagen and smooth muscles.

Catalog No.	: SS033
Muscle fibres	: Red
Collagen	: Blue
Nuclei	: Blue Black
Positive Controls	: Uterus, Striated Muscle, Small Intestine or any other Connective tissue

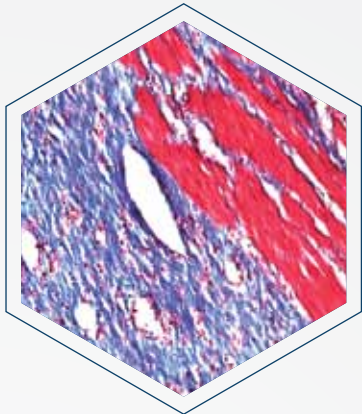


## Gomori's Trichrome Green Stain

Gomori's trichrome stain is useful in the study of diseases of connective tissue and muscle characterized by fibrotic and dystrophic changes and to differentiate between collagen and smooth muscles.

Catalog No.	: SS034
Muscle fibres	: Red
Collagen	: Green
Nuclei	: Blue black
Positive Controls	: Uterus, Striated Muscle, Small Intestine or any other Connective tissue

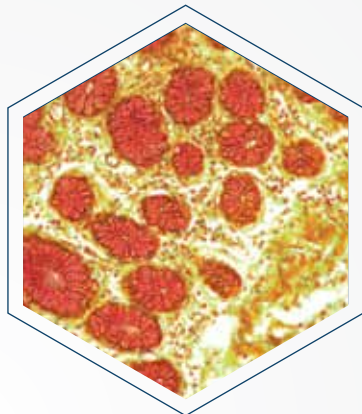




**Masson's Trichrome Stain**

Masson's Trichrome, a mixture of three stains, is useful in the study of diseases of connective tissue and muscle characterized by fibrotic and dystrophic changes. It also differentiates between collagen and smooth muscles.

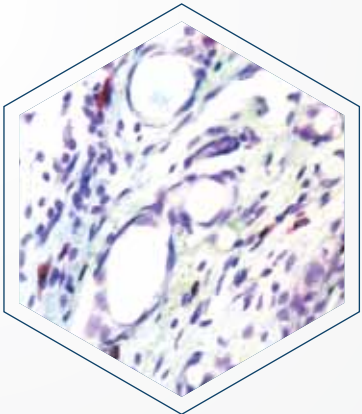
Catalog No.	: SS035
Collagen	: Blue
Nuclei	: Black
Muscle, Cytoplasm, Keratin	: Red
Positive Controls	: Skin, Lung, Stomach & Intestine



**Mucicarmine Stain**

Mucicarmine preferentially stains mucin and is used to identify primary tumor sites, distinguishing mucin-negative undifferentiated squamous cell lesions from mucinpositive adenocarcinomas.

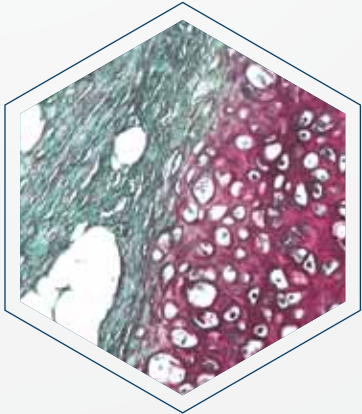
Catalog No.	: SS036
Mucins	: Deep Rose
Nuclei	: Black
Other Tissue elements	: Yellow
Positive Controls	: Colon



**Azure A Stain**

Mast cells normally present in the connective tissue of all organs are increased in many pathological conditions. Mast cell granules which are refractile and not readily identified in H&E stained sections are well demonstrated by Azure A method.

Catalog No.	: SS038
Mast cell granules	: Purple
Nuclei	: Blue
Background	: Pale blue
Positive Controls	: Skin

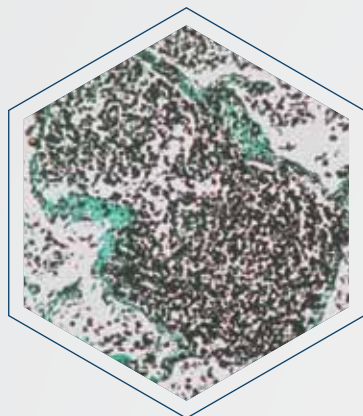


**Safranin O Stain**

Safranin O staining method is used for the detection of cartilage, mucin and mast cell granules on FFPE and frozen sections. The cartilage and mucin will be stained orange to red, and the nuclei will be stained black.

Catalog No.	: SS040
Nuclei	: Black
Cytoplasm	: Grey Green
Cartilage, Mucin & Mast cell granules	: Orange to Red
Positive Controls	: Cartilage

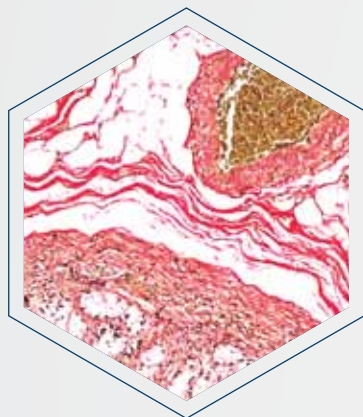
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## Grocott's Methenamine Silver (GMS) Stain

GMS staining is specific for demonstrating fungi in tissue sections. Fungi stain grey to black with a light green background.

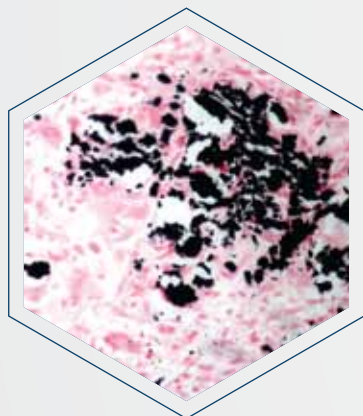
Catalog No.	: SS042
Fungi, <i>P. carinii</i> ,	
Histoplasma spp	: Black
Mucin	: Dark grey
Background	: Pale green
Positive Controls	: Fungi in tissue sections



## Van Gieson Stain

Van Gieson Stain is used to differentiate between collagen and smooth muscles in tumors and to demonstrate the increase of collagen in diseases.

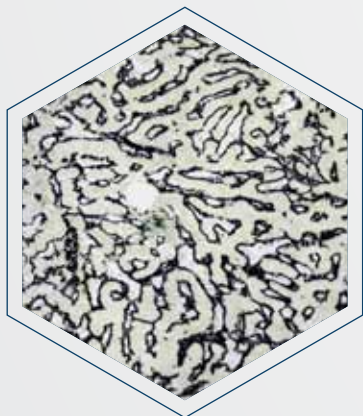
Catalog No.	: SS044
Collagen	: Bright red
Nuclei	: Blue black
Cytoplasm, Muscle,	
Fibrin & RBC's	: Yellow
Positive Controls	: Stomach



## von Kossa Stain

Abnormal deposits of calcium may be found in any area of the body. von Kossa staining is used to demonstrate deposits of calcium.

Catalog No.	: SS045
Nuclei	: Red
Cytoplasm	: Pink
Calcium salts	: Black or brown black
Positive Controls	: Tissue containing known positive calcium deposits, or undecalcified bone

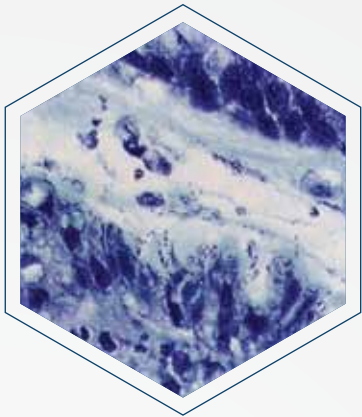


## Reticulin/No Counterstain Stain

Reticulin staining is used to visualize reticular fiber and used extensively in liver. Reticulin staining may be used for the differential diagnosis of tumors such as carcinomas, sarcomas and lymphomas.

Catalog No.	: SS046
Reticulin fibers	: Black
Nuclei	: Black
Positive Controls	: Liver & Spleen

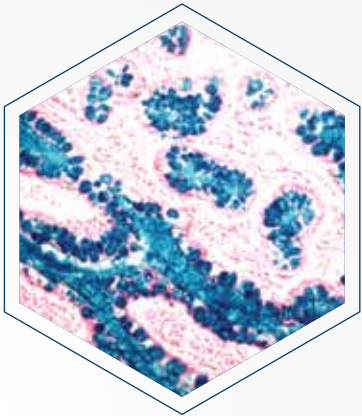
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## Giemsa Stain

Giemsa staining is useful for detecting *Helicobacter pylori*, the causative agent of most stomach and duodenal ulcers.

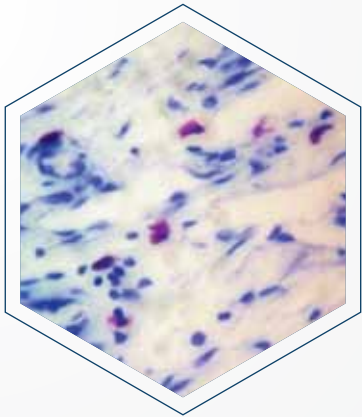
Catalog No.	: SS049
Helicobacter pylori & Nuclei stain	: Dark blue
Cytoplasm	: Pink
Positive Controls	: Helicobacter pylori in tissue sections



## Colloidal Iron Stain

Colloidal Iron stain is used to identify carboxylated, sulfated mucopolysaccharides and glyco-protein mucins which at low pH absorb colloidal ferric ions present in the tissues. The Prussian blue reaction demonstrates iron bound to the tissue.

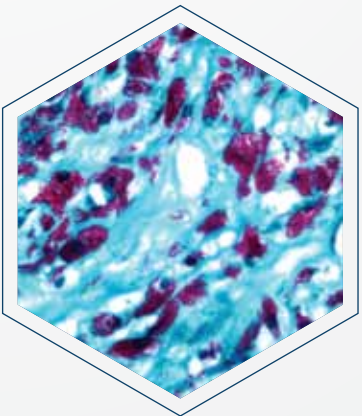
Catalog No.	: SS054
Acid mucins	: Deep blue
Nuclei	: Pink-Red
Cytoplasm	: Pink
Positive Control	: Small Intestine Tissue



## Toluidine Blue

Mast cells normally present in the connective tissue of all organs are increased in many pathological conditions. Mast cell granules which are refractile and not readily identified in H&E stained sections are well demonstrated by Toluidine blue staining method.

Catalog No.	: SS057
Mast cell granules sulphated & carboxylated mucins	: Purple
Nuclei	: Blue
Background	: Pale Blue
Positive Control	: Skin



## Acid-Fast Bacteria (AFB) Green Stain

Acid-fast stain is used for demonstration of *Mycobacterium tuberculosis* in tissue sections and smears. Acid-fast bacilli [Mycobacteria] stain red while background & non Acid-fast bacteria stain green.

Catalog No.	: SS059
Acid-fast bacilli	: Red
Non Acid-fast bacteria	: Green
Positive Control	: Mycobacterium infected tissues



# Ordering Information

Product Name	Pack Size	Cat. No.	Product Name	Pack Size	Cat. No.
Acid-Fast Bacteria Stain Kit (Blue)	50 Tests	SS025-50X	GMS Stain Kit	50 Tests	SS042-50X
Alcian Blue/PAS Stain Kit	50 Tests	SS026-50X	Oil Red O Stain Kit*	50 Tests	SS043-50X
Alcian Blue pH 2.5 Stain Kit	50 Tests	SS027-50X	Van Gieson Stain Kit	50 Tests	SS044-50X
Amyloid (Congo Red) Stain Kit*	50 Tests	SS028-50X	von Kossa Stain Kit	50 Tests	SS045-50K
Elastic Stain Kit	50 Tests	SS029-50X	Reticulin/No Counterstain Stain Kit	50 Tests	SS046-50X
Iron Stain Kit	50 Tests	SS030-50X	Reticulin/Nuclear Fast Red Stain Kit	50 Tests	SS047-50X
Warthin-Starry Stain Kit*	50 Tests	SS031-50X	Giemsa Stain Kit	50 Tests	SS049-50X
PAS Stain Kit	50 Tests	SS032-50X	Renal Masson's Trichrome Stain Kit	50 Tests	SS050-50X
Gomori's Trichrome Blue Stain Kit	50 Tests	SS033-50X	Alizarin Red Stain Kit*	50 Tests	SS052-50X
Gomori's Trichrome Green Stain Kit	50 Tests	SS034-50X	PAS for Fungi Stain Kit*	50 Tests	SS053-50X
Masson's Trichrome Stain Kit	50 Tests	SS035-50X	Colloidal Iron Stain Kit	50 Tests	SS054-50X
Mucicarmine Stain Kit	50 Tests	SS036-50X	Bielschowsky's Silver Stain Kit*	50 Tests	SS055-50X
Gram Stain Kit	50 Tests	SS037-50X	Nissl Stain Kit*	50 Tests	SS056-50X
Azure A Stain Kit	50 Tests	SS038-50X	Toluidine Blue Stain Kit	50 Tests	SS057-50X
Safranin O Stain Kit	50 Tests	SS040-50X	Jones Basement Membrane Stain Kit*	50 Tests	SS058-50X
Sudan Black B Stain Kit*	50 Tests	SS041-50X	Acid-Fast Bacteria Stain Kit (Green)	50 Tests	SS059-50X

\* To be released soon



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Xmatrx<sup>®</sup> ELITE assures accurate reagent dispensing using liquid level sensor, even distribution of reagents on the specimen and up to 75% reduced reagent consumption via coverslip micro-chamber, precise temperature control on each slide by eXACT<sup>™</sup> and eliminates cross contamination through the use of disposable pipette tips.

Xmatrx<sup>®</sup> ELITE maximizes the testing capacity, minimizes hands-on time, reduces errors and produces consistent and accurate results. This under-scores our commitment to provide a system to meet the needs of molecular pathology laboratory of today, tomorrow and beyond...

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