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Microscopy

Phloxin B (C.I. 45410)

for microscopy Certistain®

IVD

In Vitro Diagnostic Medical Device



This staining dye "Phloxin B (C.I. 45410) - for microscopy Certistain®" is used for human-medical cell diagnosis and serves the purpose of the histological investigation of sample material of human origin. It is a dry staining dye that is used to prepare a staining solution, that when used together with other in vitro diagnostic products from our portfolio makes target structures in histological specimen materials (by fixing, where necessary embedding, staining with the above phloxin B solution, counterstaining, mounting) evaluable for diagnostic purposes.

Principle

Phloxin B belongs to the group of xanthene dyes.

It is used for various staining methods, such as overview staining with hematoxylin, cytoplasm staining, staining of nucleoli, selective staining of viral inclusions and other dense structures, such as neurosecretory granules, and staining of inflammatory exudates.

In the routinely performed Hematoxylin and Eosin (H&E) overview staining procedure, phloxin is used in combination with eosin to counterstain cellular components.

The combination of both dyes results in a broader color range in the tissue. Cytoplasm and intercellular substances are stained pink to red, while erythrocytes will appear with yellow to orange color.

Sample material

Sections of formalin-fixed, paraffin-embedded tissue (3 - 5 µm thick paraffin sections) or cell smears are used as starting material.

Reagents

Cat. No. 115926

Phloxin B (C.I. 45410) 25 g
for microscopy Certistain®

Color Index No.: 45410

Color Index Name: Acid red 92

Also required:

Cat. No. 106308 di-Sodium tetraborate decahydrate 500 g, 1 kg
for analysis ACS,ISO,Reag. Ph Eur

Cat. No. 115943 Methylene blue (C.I. 52015) 25 g, 100 g
for microscopy Certistain®

Sample preparation

The sampling must be performed by qualified personnel.

All samples must be treated using state-of-the-art technology.

All samples must be clearly labeled.

Suitable instruments must be used for taking samples and their preparation.

Follow the manufacturer's instructions for application / use.

Deparaffinize and rehydrate sections in the conventional manner.

Reagent preparation

Phloxin B solution

For preparation of approx. 100 ml solution mix:

Phloxin B Certistain®	5 g
Distilled water	100 ml
dissolve and filter	

Borax-methylene blue solution

For preparation of approx. 100 ml solution mix:

di-Sodium tetraborate decahydrate	1 g
Certistain® Methylene blue	1 g
Distilled water	100 ml
dissolve and filter	

The freshly prepared staining solutions should be filtered before use.

Diluted borax-methylene blue solution

For preparation of approx. 100 ml solution mix:

Borax-methylene blue solution	10 ml
Distilled water	90 ml
mix	

Procedure

Staining of cytoplasm in the staining cell

Deparaffinize histological slides in the conventional manner and rehydrate in a descending alcohol series.

The slides should be allowed to drip off well after the individual staining steps, as a measure to avoid any unnecessary cross-contamination of solutions.

The stated times should be adhered to to guarantee an optimal staining result.

Slide with histological specimen	
Distilled water	1 min
Phloxin B solution	20 min
Distilled water	rinse
Diluted borax-methylene blue solution	30 min
Distilled water	rinse
Ethanol 96 %	1 min
Ethanol 96 %	1 min
Ethanol 100 %	1 min
Ethanol 100 %	1 min
Xylene or Neo-Clear®	1 min
Xylene or Neo-Clear®	1 min
Mount the Neo-Clear®-wet slides with Neo-Mount® or the xylene-wet slides with e.g. Entellan® new and cover glass.	

After dehydration (ascending alcohol series) and clearing with xylene or Neo-Clear®, histological samples can be mounted with water-free mounting agents (e.g. Neo-Mount®, Entellan®, DPX new or Entellan® new) and a cover glass and can then be stored.

The use of immersion oil is recommended for the analysis of stained slides with a microscopic magnification >40x.

Result

Cell nuclei	blue
Acidic mucosubstances	pink

Technical notes

The microscope used should meet the requirements of a medical diagnostic laboratory.

When using histoprocessors and automatic staining systems, please follow the instructions for use supplied by the supplier of the system and software.

The freshly prepared staining solutions should be filtered before use.

Remove surplus immersion oil before filing.

Diagnostics

Diagnoses are to be made only by authorized and trained personnel.

Valid nomenclatures must be used.

Further tests must be selected and implemented according to recognized methods.

Suitable controls should be conducted with each application in order to avoid an incorrect result.

Storage

Store Phloxin B (C.I. 45410) - for microscopy Certistain® at +5 °C to +30 °C.

Shelf-life

Phloxin B (C.I. 45410) - for microscopy Certistain® can be used until the stated expiry date.

After first opening of the bottle, the contents can be used up to the stated expiry date when stored at +5 °C to +30 °C.

The bottles must be kept tightly closed at all times.

Additional instructions

For professional use only.

In order to avoid errors, the application must be carried out by qualified personnel only.

National guidelines for work safety and quality assurance must be followed. Microscopes equipped according to the standard must be used.

Protection against infection

Effective measures must be taken to protect against infection in line with laboratory guidelines.

Instructions for disposal

The package must be disposed of in accordance with the current disposal guidelines.

Used solutions and solutions that are past their shelf-life must be disposed of as special waste in accordance with local guidelines. Information on disposal can be obtained under the Quick Link "Hints for Disposal of Microscopy Products" at www.microscopy-products.com. Within the EU the currently applicable REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 applies.

Auxiliary reagents

Cat. No.	100496	Formaldehyde solution 4%, buffered, pH 6.9 (approx. 10% Formalin solution) for histology	350 ml and 700 ml (in wide neck bottle), 5 l, 10 l, 10 l Tritripac®
Cat. No.	100579	DPX new non-aqueous mounting medium for microscopy	500 ml
Cat. No.	100974	Ethanol denatured with about 1 % methyl ethyl ketone for analysis EMSURE®	1 l, 2.5 l
Cat. No.	103999	Formaldehyde solution min. 37% free from acid stabilized with about 10% methanol and calcium carbonate for histology	1 l, 2.5 l, 25 l
Cat. No.	104699	Immersion oil for microscopy	100-ml dropping bottle, 100 ml, 500 ml
Cat. No.	106308	di-Sodium tetraborate decahydrate for analysis ACS,ISO,Reag. Ph Eur	500 g, 1 kg
Cat. No.	107164	Paraffin pastilles solidification point about 56-58°C for histology	10 kg (4x 2.5 kg)
Cat. No.	107961	Entellan® new rapid mounting medium for microscopy	100 ml, 500 ml, 1 l
Cat. No.	108298	Xylene (isomeric mixture) for histology	4 l
Cat. No.	109016	Neo-Mount® anhydrous mounting medium for microscopy	100-ml dropping bottle, 500 ml
Cat. No.	109843	Neo-Clear® (xylene substitute) for microscopy	5 l
Cat. No.	111609	Histosec® pastilles solidification point 56-58°C embedding agent for histology	1 kg, 10 kg (4x 2.5 kg), 25 kg
Cat. No.	115161	Histosec® pastilles (without DMSO) solidification point 56-58°C embedding agent for histology	10 kg (4x 2.5 kg), 25 kg
Cat. No.	115943	Methylene blue (C.I. 52015) for microscopy Certistain®	25 g, 100 g

Hazard classification

Cat. No. 115926

Please observe the hazard classification printed on the label and the information given in the safety data sheet.

The safety data sheet is available on the website and on request.

Main components of the product

Cat. No. 115926

C.I. 45410

$C_{20}H_2Br_4Cl_4Na_2O_7$

M = 829,64 g/mol

Other IVD products

Cat. No.	101646	PAS staining kit for detection of aldehyde and mucosubstances	2x 500 ml
Cat. No.	102480	Eosin-Phloxine solution, alcoholic for microscopy	500 ml, 1 l
Cat. No.	105174	Hematoxylin solution modified acc. to Gill III for microscopy	500 ml, 1 l, 2.5 l
Cat. No.	105175	Hematoxylin solution modified acc. to Gill II for microscopy	500 ml, 2.5 l
Cat. No.	107509	Pararosaniline (chloride) (C.I. 42500) for microscopy Certistain®	25 g, 100 g
Cat. No.	109033	Schiff's reagent for microscopy	500 ml, 2.5 l
Cat. No.	109149	Mayer's hemalum solution for microscopy	500 ml, 1 l, 2.5 l
Cat. No.	109204	Giemsa's azur eosin methylene blue solution for microscopy	100 ml, 500 ml, 1 l, 2.5 l

Cat. No.	109844	Eosin Y-solution 0.5% aqueous for microscopy	1 l, 2.5 l
Cat. No.	117081	Eosin Y solution 1%, alcoholic for microscopy	1 l

 Consult instructions for use


 Manufacturer

 Catalog number

 Batch code

 Caution, consult accompanying documents

 Use by YYYY-MM-DD

 Temperature limitation

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Merck KGaA, 64271 Darmstadt, Germany
Tel. +49(0)6151 72-2440
www.microscopy-products.com

EMD Millipore Corporation, 290 Concord Road, Billerica, MA 01821, USA, Tel. +1-978-715-4321

