

1.01376.0025

Microscopy

Neutral red (C.I. 50040)

for microscopy Certistain®

IVD In Vitro Diagnostic Medical Device



for supravital staining of leukocytes

This staining dye "Neutral red (C.I. 50040) - for microscopy Certistain®" is used for human-medical cell diagnosis and serves the hematological 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 (by fixing, embedding, staining with the above neutral red solution, counterstaining, mounting) in hematological specimen materials evaluable for diagnostic purposes.

Principle

Neutral red belongs to the group of azines.

Neutral red can be used for several staining such as supravital staining of leukocytes.

In histology for nuclear staining, fluorescence staining, polychrome staining or for counterstaining in Gram staining.

Sample material

Capillary blood

Reagents

Cat. No. 1.01376.0025

Neutral red (C.I. 50040) 25 g
for microscopy Certistain®

Color Index No.: 50040

Color Index Name: Basic red 5

Also required:

Cat. No. 106404 Sodium chloride 500 g, 1 kg, 5 kg
for analysis EMSURE®
ACS,ISO,Reag. Ph Eur

Cat. No. 201677 Janus Green B Aldrich

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.

Reagent preparation

Neutral red solution

For preparation of approx. 60 ml solution mix:

Solution A:

Neutral red (C.I. 50040) Certistain®	0.5 g
Distilled water	10 ml
dissolve	

Solution B:

Sodium chloride	0.45 g
Distilled water	10 ml
dissolve	

Mix both solutions and filter.

Janus green B solution

For preparation of approx. 25 ml solution mix:

Janus Green B	0.25 g
Distilled water	25 ml
dissolve and filter	

Neutral red-Janus green B solution, working solution

For preparation of approx. 25 ml solution mix:

Neutral red solution	25 ml
Janus green B solution	0.25 ml
mix	

The freshly prepared staining solutions should be filtered before use.

Procedure

Supravital staining of leukocytes

Bring 2 µl Neutral red-Janus green B solution (working solution) to a glass slide, mix with 10 µl blood.

Cover with a cover glass, seal the rims.

Check immediately and after 2 hours under the microscope.

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

Result

Basophilic granules	brick red
Eosinophilic granules	yellow or light orange
Neutrophilic granules	pale pink
Vacuoles of monocytes	salmon
Mitochondria	green

Technical notes

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

The freshly prepared staining solutions should be filtered before use.

Remove surplus immersion oil before filling.

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 Neutral red (C.I. 50040) - for microscopy Certistain® at +5 °C to +30 °C.

Shelf-life

Neutral red (C.I. 50040) - 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.	104699	Immersion oil for microscopy	100-ml dropping bottle, 100 ml, 500 ml
Cat. No.	106404	Sodium chloride for analysis EMSURE® ACS,ISO,Reag. Ph Eur	500 g, 1 kg, 5 kg
Cat. No.	201677	Janus Green B	Aldrich

Hazard classification

Cat. No. 1.01376.0025

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. 1.01376.0025

C.I. 50040

$C_{15}H_{17}ClN_4$

M = 288.78 g/mol

Other IVD products

Cat. No.	100362	Silver plating kit acc. to von Kossa for the detection of microcalcification	1 set
Cat. No.	103981	M-FIX™ spray fixative for cytodiagnosis	100 ml, 1 l
Cat. No.	109204	Giemsa's azur eosin methylene blue solution for microscopy	100 ml, 500 ml, 1 l, 2.5 l
Cat. No.	111885	Gram-color stain set for the Gram staining method	1 set

Literature

1. Löffler, H., Rastetter, J., Haferlach, T, Atlas der klinischen Hämatologie, 2004, Springer-Verlag Berlin Heidelberg
2. Conn's Biological Stains: A Handbook of Dyes, Stains and Fluorochromes for Use in Biology and Medicine, 10th Edition, (ed. Horobin, R.W. and Kiernan, J.A). Bios, 2002



Consult instructions
for use



Manufacturer



Catalog number



Batch code



Caution, consult
accompanying documents



Use by
YYYY-MM-DD



Temperature
limitation

Status: 2017-09-21

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