

NEUTRAL RED powder dye, C.I. 50040

IVD *In vitro* diagnostic medical device CE

Basic Red 5, BSC certified stain

For supravital staining of blood cells using Neutral Red-Janus Green B method

INSTRUCTIONS FOR USE

REF Catalogue number: NR-P-25 (25 g)

Introduction

Histology, cytology and other related scientific disciplines study the microscopic anatomy of tissues and cells. In order to achieve a good tissue and cellular structure, the samples need to be stained in a correct manner. Neutral Red powder dye is used in various staining methods in microscopy. It is used for supravital leukocyte staining, for nuclei staining, and for fluorescent staining. It can also be used as a counterstain during Gram staining, as well as a part of Twort's histological dye for polychromatic staining.

Product description

- **Neutral RED** - Biological Stain Commission (BSC) certified powder dye for preparing the solution for staining blood cells acc. to Neutral Red-Janus Green B method

Other preparations and reagents used in preparing the dye solution:

- Sodium chloride (NaCl)
- Janus Green B powder dye (product code JG-P-25)

Preparing the dye solution

Staining solution acc. to Neutral Red-Janus Green B method:

Neutral Red powder dye solution:

- Dissolve 0.5 g of Neutral Red powder dye in 50 ml of distilled/deionized water.
- Dissolve 0.45 g of NaCl in 10 ml of distilled/deionized water.
- Mix the two solutions and filter.

Janus Green B solution:

- Dissolve 0.25 g of Janus Green B powder dye in 25 ml of distilled/deionized water and filter.

Solution for staining:

- Mix 25 mL of Neutral Red powder dye and 25 mL of Janus Green B powder dye solution.

Results

Basophil granules - dark fire brick red

Eosinophil granules - yellow or light orange

Neutrophil granules - light pink

Monocyte vacuoles - light orange

Mitochondria - green

Note: The listed results refer to Neutral Red-Janus Green B staining.

Note

The mentioned formulation is only one of the ways of preparing the dye solution. Neutral Red dye is the most commonly used dye acc. to Neutral Red-Janus Green method. Depending on personal requests and standard laboratory operating procedures, the dye solution can be prepared according to other protocols.

Preparing the sample and diagnostics

Use only appropriate instruments for collecting and preparing the samples. All the samples must be processed with the most modern technology and be visibly marked. Follow the manufacturer's instructions for handling. In order to avoid mistakes, staining must be conducted by a trained professional. Only trained medical personnel may make a diagnosis. Use only microscope according to standards of the medical diagnostic laboratory. In order to avoid an erroneous result, a positive and negative check is advised before application.

Safety at work and environmental protection

Handle the product in accordance with safety at work and environmental protection guidelines. Used solutions and out of date solutions should be disposed of as special waste in accordance with national guidelines. Chemicals used in this procedure could pose danger to human health. Tested tissue specimens are potentially infectious. Necessary safety measures for protecting human health should be taken in accordance with good laboratory practice. Act in accordance with signs and warnings notices printed on the product's label, as well as in BioGnost's material safety data sheet which is available on demand.














Storing, stability and expiry date

Keep Neutral Red powder dye in a tightly closed original package at temperature between 15°C and 25°C. Keep in dry places, do not freeze and avoid exposure to direct sunlight. Expiry date is stated on the product's label.

References

1. Conn, J. (1977): *Biological Stains*, 9th ed. Baltimore: Williams and Wilkins Co.
2. Carson, F. L., Hladik, C. (2009): *Histotechnology: A Self-Instructional Text*, 3rd ed., Chicago: ASCP Press
3. Twort, F. W. (1924): An improved neutral red, light green double stain for staining animal parasites, microorganisms and tissues, *Journal of State Medicine*, 32: 351.
4. Gram, H. C. (1884): Über die isolierte Färbung der Schizomyceten in Schnitt- und Trockenpräparaten, *Fortschritte der Medizin* 2: 185-9.

NR-P-25, V2-EN2, 30 September 2015, VR/IŠP

	Refer to the supplied documentation		Storage temperature range		Number of tests in package		Product code		European Conformity
	Refer to supplied instructions		Keep away from heat and sunlight		Valid until		Lot number		Manufacturer
	For <i>in vitro</i> diagnostic use only		Keep in dry place		Caution - fragile				



BIOGNOST Ltd.
Medjugorska 59
10040 Zagreb
CROATIA
www.biognost.com

