









1A-170

Jenner`s dye In-vitro diagnostic agent

1A-172

May-Grünwald`s dye In-vitro diagnostic agent

Description

Products 1A-170 and 1A-172 are dyes for use in cytology. This is a dry dye for the preparation of a staining solution for professional users.

The product 1A-170 is supplied in 8 different pack sizes: 1A-170.00010 (10g bottle), 1A- 170.00025 (25g bottle) 1A-170.00100 (100g bottle), 1A-170.01000 (1kg bucket), 1A-172.05000 (5kg drum), 1A-172.10000 (10kg drum), 1A-172.25000 (25kg drum) and 1A-172.27000 (27kg drum)

The product 1A-172 is supplied in 8 different pack sizes: 1A-172.00010 (10g bottle), 1A- 172.00025 (25g bottle) 1A-172.00100 (100g bottle), 1A-172.01000 (1kg bucket), 1A-172.20000 (20kg drum), 1A-172.28000 (28kg drum), 1A-172.29000 (29kg drum) and 1A-172.60000 (60kg drum)

Main components

Methylene blue (C.I.52015) 52.0% Eosin (C.I.45380) 49.0%

Purpose

May-Grünwald's dye is used for the examination of haematological-cytological sample material such as whole blood and bone marrow smears. It is a dry dye for preparing a staining solution for professional users. It can be used for overview staining of cell components.

Sample material and sample preparation

Sampling may only be carried out by qualified personnel. All samples must be processed with state-of-theart technology. All samples must be clearly labelled.

Sample material: air-dried blood or bone marrow smears, as well as clinical material from cytology such as urine sediment, sputum, smears from fine needle aspiration biopsies (FNAB), rinsing fluids, imprints.

Test principle

In haematological diagnostics, the May-Grünwald stain is often used in combination with other staining solutions, e.g. the Giemsa solution as Pappenheim (MGG) overview stain. The staining of the cell nuclei is based on the molecular interaction between the eosin G dye and an azure B-DNA complex.











Staining

To prepare the dye solution, dissolve 0.12 g May-Grünwald's dye in 100 ml methanol and stir for one hour at room temperature. Leave to stand for 24 hours and filter.

The slide with the air-dried smear is treated directly with the staining solution. After rinsing it in a buffer solution, allow it to air dry.

The samples can be covered with a synthetic covering medium for subsequent microscopy.

To ensure the differentiability of the target structures, suitable control specimens should be kept along with the staining.

The usual staining protocols known from literature must be used.

Staining may only be carried out by qualified personnel.

Result

Nuclei: (red) purple

Cytoplasm of lymphocytes: blue

Cytoplasm of monocytes: grey-blue
Neutrophil granules: light
purple Eosinophil granules: brick-red

Basophil granules: dark purple to black

Platelets: purple

Erythrocytes: reddish to brownish

Precautionary measures

When removing the product, care must be taken to avoid contamination of the storage vessel. Once the solution has been removed, it must not be returned to the canister. If turbidity or solids appear, discard the product. The product is intended for single use and must not be reused.

Storage and shelf life

Store the unopened containers in a dry place at 15 to 25 °C, avoiding direct sunlight.

The shelf life is 5 years. See also the best-before date (BBD) on the label. Once the containers have been opened, the shelf life corresponds to the best-before date, as long as the storage conditions are observed and the solution is handled properly.

Safety notice

If any serious incidents occur in connection with the product, please report them to the manufacturer and the national authority.











Literature

Romeis, Mikroskopische Technik, Editors: Maria Mulisch, Ulrich Welsch, 2010, Springer Spektrum, 18th edition