









2C-307

Eosin Y solution, Ulm, alcoholic In-vitro diagnostic agent

Description

Eosin Y solution, Ulm is a ready-to-use solution for professional use in histology and cytology for staining tissue samples.

The product comes in 2 different pack sizes: 2E-032.00500 (500ml bottle) and 2E-032.01000 (1I bottle)

Main components

Ethanol 96% denatured (CAS no.: 64-17-5) 1000 ml Eosin G (C.I.: 45380) 1.25g/l

Purpose

Eosin Y is the most important cytoplasmic dye. Connective tissue components such as collagen or keratin are also stained, as are core structures. Hence, a frequent application of Eosin Y is counterstaining after previous nuclear staining with haematoxylin (HE staining). However, eosin Y can also be used as a sole dye.

Sample material and sample preparation

Samples may only be taken by qualified personnel. All samples must be processed with state-of-the-art technology. All samples must be clearly labelled.

The starting material for staining are paraffin sections, alternatively frozen sections, furthermore cytological sample material such as smears, fine needle biopsies, rinsing fluids, sputum or urine.

Test principle

Eosin (tetrabromofluorescein) is a negatively charged acidic dye and binds to positively charged structures, such as plasma proteins. Acidification of the solution intensifies the staining. However, an excessively acidic environment can prevent differentiation after previous nuclear staining, which is why HE staining is carried out at a pH of 4 to 6.

Staining

If paraffin sections are used as starting material, deparaffinise sections and rehydrate in descending alcohol series.

HE staining is carried out as a regressive staining, i.e. a longer staining ("overstaining") with haematoxylin is carried out first, followed by differentiation with acidic eosin solution after blueing in tap water.











The usual staining protocols known from literature must be used. Staining may only be carried out by qualified personnel.

Result

Cytoplasm, collagen: red to pink Erythrocytes: orange

Nuclei: blue/dark purple

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 2 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

Lang, Histotechnik - Praxislehrbuch für die Biomedizinische Analytik, 2012, Springer Wien New York, 2nd edition

Busch, Über die Doppelfärbung des Ossificationsrandes mit Eosin und Haematoxylin, 1878, Arch Physiol: 594–595