



5B-535

Haematoxylin, puriss.
In-vitro diagnostic agent

Description

The product 5B-535 is a ready-to-use solution for professional users in histology and cytology. The product comes in 11 different pack sizes: 5B-535.00005 (5g bottle), 5B- 535.00010 (10g bottle), 5B-535.00025 (25g bottle), 5B-535.00100 (100g bottle), 5B-535.00500 (500g bottle), 5B-535.01000 (1kg bucket), 5B-535.04000 (4kg barrel, 5B-535.05000 (5kg barrel), 5B-535.10000 (10kg drum), 5B-535.20000 (20kg drum) and 5B-535.25000 (25kg drum)

Main components

Haematoxylin (C.I. 75290)

Intended use

"Haematoxylin, puriss" solution is used for cell diagnostics for examining histological samples (e.g. histological sections) and is used to stain cell nuclei. The dye solution is intended for professional users.

Sample material and sample preparation

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

Sample material: Sections of human tissue after fixation, for example by buffered formol and fixation mixtures with ethanol and formalin and subsequent embedding in paraffin or frozen sections, as well as clinical material from cytology.

Test principle

The basis of haemalaun staining is first the oxidation of haematoxylin to haematein. The addition of potassium aluminium sulphate dodecahydrate leads to a complexation of the metal ions with the haematein, resulting in a connection of the positively charged aluminium-haematein complex with the negatively charged phosphatases of the nuclear DNA. The chromatin of the cell nuclei turns blue.

Staining

Before staining, deparaffinise the sections and transfer them to distilled water via a descending ethanol series. The colouring can be progressive or regressive. In progressive staining (especially for haemalaun), after staining with haematoxylin solution, the excess colour of the samples is washed out by rinsing in distilled water. The dye is then converted into a water-insoluble varnish by rinsing in tap water. In regressive staining (especially for iron haematoxylins), the samples are first overstained and differentiated by subsequent rinsing in hydrochloric acid solution.

The samples are then transferred to xylene via an ascending ethanol series. The samples can be covered with a synthetic covering medium for subsequent examination under a microscope.

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

Cell nuclei

blue

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

