



2E-052

Weigert's iron haematoxylin B In-vitro diagnostic agent

Description

The product 2E-052 is a ready-to-use solution for professional users in histology and cytology. It is an aqueous dye solution mixed with metal salts. The product comes in 6 different pack sizes: 2E-052.00100 (100ml bottle), 2E-052.00250 (250ml bottle), 2E-052.00500 (500ml bottle), 2E-052.01000 (1l bottle), 2E-052.05000 (5l canister) and 2E-052.10000 (10l canister).

Main components

Deionised water (CAS no.: 7732-18-5)	1000 ml
Iron(III) chloride hexahydrate (CAS no. 10025 -77-1)	12.6g/l
Hydrochloric acid 25% (CAS no. 7647-01-0)	10 ml/l
Ethanol (C ₂ H ₆ O)	20 ml/l

Purpose

The "iron haematoxylin B" solution is used for cell diagnostics for the examination of histological specimens (e.g. histological sections), for staining cell nuclei. This is Weigert stock solution B, which is mixed with Weigert stock solution A in a ratio of 1:1 before use. The dye solution is intended for professional users. The core staining with Weigert iron haematoxylin is particularly stable in counterstaining with acid dye solutions and can be used for trichrome staining (e.g. Masson Goldner Trichrome). The solution can also be used alone as a staining agent to visualise tonofibrils, glial fibres, nuclear division figures, mitochondria and myelin sheaths.

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 iron haematoxylin solution A is mixed with the stock solution B in a ratio of 1:1 before use (working solution). First, the haematoxylin oxidises to haematein. The addition of metal salts (iron(III) chloride) leads to complexation of the metal ions with the haematein, resulting in a strongly positively charged haematoxylin varnish. The colouring is done in acidic solution.

Staining

Before staining, the sections must be deparaffinised and rehydrated via a descending ethanol series. After being stained with Weigert's ferric haematoxylin working solution, the samples are transferred to distilled aqua and watered under running tap water. The samples are then dehydrated over an ascending ethanol series and transferred to xylene.

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 black to brown

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. The working solution is stable for 6 days at 4–8 °C.

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

