



2E-032

Weigert's iron haematoxylin A

In-vitro diagnostic agent

Description

Weigert's iron haematoxylin A is a ready-to-use solution for professional use in histology and cytology for staining tissue samples.

The product comes in 6 different pack sizes: 2E-032.00100 (100ml bottle), 2E-032.00250 (250ml bottle), 2E-032.00500 (500ml bottle), 2E-032.01000 (1l bottle), 2E-032.05000 (5l canister). and 2E-032.10000 (10l canister).

Main components

Ethanol 96% (CAS no.: 64-17-5)	1000 ml
Haematoxylin (C.I.: 75290)	10g/l

Purpose

Weigert's iron haematoxylin A is used for nuclear staining. It can be used alone or together with other dye solutions. A frequent use of iron haematoxylin is trichrome staining, in which the iron haematoxylin staining is followed by counterstaining with acidic dye solutions. When used as a sole reagent, iron haematoxylin is suitable for staining tonofibrils, mitochondria, glial fibres or myelin sheaths, for example.

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 fresh samples should be fixed immediately after collection. It should be noted that formalin-free fixatives have not yet been investigated for their applicability.

Test principle

Haematoxylin is a plant dye and is extracted from blue wood. Oxidation turns haematoxylin into haematein, the actual dye, which, however, binds poorly to tissue components. Only the addition of metal ions ("pickling") enables its use as a staining agent. The resulting metal complexes are called haematein or haematoxylin lacquers.

In ferrous haematoxylin, iron salts serve as both oxidising and mordanting agents. The reagent stains acidic or basophilic structures, such as the DNA contained in the cell nucleus. Unlike other haematoxylin, ferrous haematoxylin is acid stable, so it stays in the tissue even after acid counterstaining.



Staining

The hematoxylin is only pickled immediately before use.

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

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

Result

Nuclei: blue-black

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

Weigert, Eine kleine Verbesserung der Hämatoxylin-Van-Gieson-Methode, 1904, Z Wiss Mikr 21: 1–5