



1A-294

Resorcinol fuchsin, according to Weigert

In-vitro diagnostic agent

Description

The product 1A-294 is a dry dye for the preparation of a staining solution for professional users for histology applications. It is a reaction product of fuchsin and resorcinol mixed with iron chloride. The product comes in 4 different pack sizes: 1A-294.00005 (5g bottle), 1A- 294.00010 (10g bottle), 1A-294.00025 (25g bottle) and 1A-294.00100 (100g bottle)

Main components

Reaction product consisting of: Fuchsin basic ($C_{20}H_{19}N_3- HC$)I +
resorcinol ($C_6H_6O_2$) Iron(III) chloride ($FeCl_3 \cdot 6 H_2O$)

Purpose

The dye "resorcinol fuchsin according to Weigert" is used for cell diagnostics for the examination of histological samples (e.g. presentation of elastic connective tissue fibres). It is a dry dye for the preparation of a corresponding staining solution for professional users. The solution is often used in combination with other staining methods (e.g. van Gieson staining, Goldner staining).

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: Elastic connective tissue fibres after fixation, for instance by means of buffered formol and fixation mixtures with ethanol and formalin, Bouin, Susa and Helly.

Test principle

The envelope layer of elastic connective tissue fibres is negatively charged. The positively charged dye resorcinol fuchsin attaches to the elastic fibres through electropolarity and interfacial absorption and colours them dark purple. A suitable counterstain is Nuclear Fast Red. Resorcinol fuchsin is intended for *in vitro* diagnostic use.



Staining

Before staining, deparaffinise the sections and transfer them to distilled water via a descending ethanol series. The dye is dissolved in 70% ethanol (or isopropanol) with the addition of 0.5% hydrochloric acid. After being stained with this resorcinol fuchsin solution, the samples are rinsed in distilled water. After rinsing, the samples are transferred to xylene via an ascending ethanol series. 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

Chromatin of the cell nuclei	blue
Elastic fibres	grey to black

By adding hydrochloric or acetic acid (pH < 2.0), the colour of the cell nuclei can change to reddish. The staining of the cytoplasm depends on the counterstain used.

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