



2C-130

Carmin solution, according to Best

In-vitro diagnostic agent

Description

The product 2C-130 is a ready-to-use solution for professional users for application in histology. It is an aqueous dye solution mixed with ammonia. The product comes in 4 different pack sizes: 2C-130.00100 (100ml bottle), 2C-130.00250 (250ml bottle), 2C-130.01000 (1l. bottle) and 2C-130.10000 (10l. canister)

Main components

Carmin (CI 75470)	2.5%
Ammonia (CAS 7664-41-7)	0.3%
Potassium chloride (CAS 7447-40-7)	7.5%
Potassium carbonate (CAS 584-08-7)	1.5%

Purpose

The "carmin solution according to Best" is used for cell diagnostics for the examination of histological samples (e.g. histological sections), to stain glycogen in tissue. It is a ready-to-use dye solution 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 instance by means of buffered formol and fixation mixtures with ethanol and formalin and subsequent embedding in paraffin or frozen sections.

Test principle

Staining using carmin solution reflects the glycogen content of the hepatocytes. Glycogen in the tissue turns an intense red. Within the staining, the haematoxylin solution according to Mayer is used to differentiate the cell nuclei in blue to purple.





Staining

Before staining, deparaffinise the sections and transfer them to distilled water via a descending ethanol series. The samples are first stained using haematoxylin solution according to Mayer to display the cell nuclei. After being rinsed in distilled water, the samples are soaked under running tap water. This is followed by staining with carmine solution and subsequent rinsing. The staining with carmine solution can be done a second time until no more colour clouds come off the specimen. After staining, 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

Cell nuclei	blue to purple
Glycogen	red

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

https://www.kgu.de/zmorph/histopatho/histo4/pub/data/le/de/006_a.html