



2E-050

Picric fuchsin, van Gieson

In-vitro diagnostic agent

Description

Picric fuchsin, van Gieson 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-050.00100 (100ml bottle), 2E-050.00250 (250ml bottle), 2E-050.00500 (500ml bottle), 2E-050.01000 (1l bottle), 2E-050.05000 (5l canister). and 2E-050.10000 (10l canister).

Main components

Picric acid (moistened) (C.I.: 10305)	10g/l
Acid fuchsin (C.I.: 42685)	1.0g/L

Purpose

Van Gieson staining is used for differentiated visualisation of connective tissue structures. This is a trichrome staining process in which, in addition to the two dyes picric acid and acid fuchsin, iron haematoxylin is also used.

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 starting material for the staining is fixed tissue sections embedded in paraffin. Susa, Helly, formalin or Bouin are recommended as fixing solutions.

Test principle

First, the nucleus is stained with iron haematoxylin, which has the necessary acid stability compared to the subsequently applied dyes. This is followed by simultaneous staining with the finely dispersed picric acid and the coarsely dispersed acid fuchsin. If the staining is interrupted in time, the different dispersity and diffusion speed of the two dyes enables the differentiated representation of structures. The finely dispersed picric acid can penetrate all tissue structures, while the coarsely dispersed acid fuchsin can only penetrate sufficiently wide structures.



Staining

Besides picric-fuchsin, van Gieson, iron haematoxylin according to Weigert is needed for the staining.

Deparaffinise the sections and rehydrate in descending alcohol series. Afterwards, the nucleus is stained with iron haematoxylin according to Weigert. After the rinsing with distilled water, the picric-fuchsin staining is carried out.

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

Result

Collagenous connective tissue:	red
Musculature, cytoplasm, glial fibrils:	yellow
Amyloid, hyaline, colloid, mucus:	graded yellow to red
Nuclei:	black-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.

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

Gray, The Microtome's Formulary and Guide, 1954, The Blakiston