



1B-211

Light green SF, yellowish

1B-213

Lissamine green SF

1B-215

Acid green

In-vitro diagnostic agent

Description

The products 1A-211, 1A-213 and 1A-215 are dry dyes for professional users in histology, which are used to prepare a staining solution.

The product comes in 5 different pack sizes: 1B-211.00010 (10g bottle), 1B-211.00025 (25g bottle), 1B-211.00100 (100g bottle), 1B-211.00500 (500g bottle) and 1B-211.01000 (1kg bucket)

The product comes in 3 different pack sizes: 1B-2113.00010 (10g bottle), 1B-213.00025 (25g bottle) and 1B-213.00100 (100g bottle)

The product comes in 3 different pack sizes: 1B-215.00010 (10g bottle), 1B-215.00025 (25g bottle) and 1B-215.00100 (100g bottle)

Main components

Light green SF (C.I. 42095)

Purpose

Light green SF yellowish, lissamine green SF and acid green are used for cell diagnostics for the examination of histological samples (e.g. histological sections, collagen fibres). These are dry dyes for professional users, and are used to prepare a staining solution. The staining solution is used for overview staining for the differentiation of cell and tissue components (e.g. for Masson-Goldner trichrome 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: Sections of human tissue (3–5 µm thickness) after fixation, for instance, by buffered formol and fixation mixtures with ethanol and formalin and subsequent embedding in paraffin.

Test principle

The dry dyes are used to prepare a staining solution (e.g. for Masson's trichrome staining according to Goldner). The dyes differ in molecular size and therefore result in a differentiated staining of the individual tissue components.



Staining

For trichrome staining, three different staining solutions are combined. Before staining, deparaffinise the sections and transfer them to distilled water via a descending ethanol series. After cell nucleus staining with Weigert's iron haematoxylin staining solution, the samples are washed under running tap water.

First, the samples are stained with acid fuchsin solution and rinsed in acetic acid solution (1.0%). The samples are stained one more time with Orange G solution and rinsed in 1.0% acetic acid solution. This is followed by staining with light green SF solution and rinsing with acetic acid solution (1.0%). The samples are then transferred an ascending ethanol series into xylene. 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	dark brown to black
Cytoplasm, muscles	brick red
Connective tissue, acidic mucosal substances	green
Erythrocytes	bright orange

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 5 to 30 °C, avoiding direct sunlight.

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 dyes are 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