



## 1B-205

Ponceau 2R

## 1B-207

Xylidine Ponceau

In-vitro diagnostic agent

### Description

The product is a dry dye for the preparation of a dye solution (in water) for professional users for histology applications. The product 1B-205 is supplied in different pack sizes: 1B-205.00010 (10g bottle), 1B-205.00025 (25g bottle) and 1B-205.00100 (100g bottle).

The product 1B-207 is supplied in different pack sizes: 1B-207.00010 (10g bottle), 1B-207.00025 (25g bottle) and 1B-207.00100 (100g bottle).

### Main components

Xylidine Ponceau (CI 16150)

### Purpose

The dyes "Xylidine Ponceau" and "ponceau 2R" are used for cell diagnostics for the examination of histological samples (e.g. histological sections). In solution, the dye is used within trichrome staining (e.g. Masson Goldner Trichrome) and is used for differentiated connective tissue imaging. The dye solution is intended 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

Trichrome staining is based on simultaneous staining of several tissue components or by subsequent staining solutions. The basis of Masson Goldner trichrome staining is the different molecular size of the dyes (dispersity). After nucleus staining with iron haematoxiline solution according to Weigert, disperse dyes are used. While the finely dispersed phase penetrates quickly into all structures by means of the dye solution of 1B-205 or 1B-207, the coarse-dispersion phase penetrates more slowly by means of light green SF solution and stains the coarse



structures first. The fine-dispersion phase is over-stained here. To avoid overstaining, the coarse dispersion staining is interrupted before all the structures have been penetrated.

## Staining

Before staining, deparaffinise the sections and rehydrate them via a descending ethanol series. After nucleus staining with Weigert's ferric haematoxylin-use solution, the samples are transferred to distilled aqua and watered under running tap water. Then the samples are first stained using dye solution (0.1% of 1B-205 or 1B-207 in 1% acetic acid) and washed in acetic acid (1%). This is followed by staining with phosphormolybdic acid orange G and rinsing in acetic acid (1%).

Finally, the specimens are stained using light green SF solution and washed again in acetic acid (1%). After being rinsed under running tap water, the specimens are dehydrated via an ascending ethanol series and transferred to xylene.

To ensure the differentiability of the target structures, suitable control specimens should be kept along with the staining.

## Result

Cell nuclei	blue-black to brown
Cytoplasm	red
Muscles	brick red
Collagen connective tissue	green
Erythrocytes	orange-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 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