



## 3F-153

Ruthenium red

In-vitro diagnostic agent

### Description

The product 3F-153 is a dye for professional use in histology. The product comes in 16 different pack sizes 3F-153.00001 (1g bottle), 3F-153.00005 (5g bottle), 3F-153.00010 (10g bottle), 3F-153.00040 (40g bottle), 3F-153.00080 (80g bottle), 3F-153.00100 (100g bottle), 3F-153.00150 (150g bottle), 3F-153.00180 (180g bottle), 3F-153.00200 (200g bottle), 3F-153.00250 (250g bottle), 3F-153.00280 (280g bottle), 3F-153.00300 (300g bottle), 3F-153.00350 (350g bottle), 3F-153.00500 (500g bottle), 3F-153.00565 (565g bottle) and 3F-153.00700 (700g bottle).

### Main components

Ruthenium red (C.I. 77800)

### Purpose

The dye "ruthenium red" is used for cell diagnostics for the examination of histological samples. It is a dry dye for professional users. It can be used for staining specific polysaccharide structures in histology and cytology and is used, for example, to detect pectin.

### 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: Histological sections after fixation, for instance by means of buffered formol and fixation mixtures with ethanol and formalin and subsequent embedding in paraffin or frozen sections, as well as clinical material from cytology.

### Test principle

The ruthenium red is used to stain specific polysaccharide structures. Ruthenium red is prepared by reduction of ruthenium(III) chloride with ethanol and subsequent reaction with an ammonia solution. The stained structures appear bright red under the light microscope.

### Staining

Before staining, the samples must be deparaffinised and rehydrated via a descending ethanol series. After staining with a ruthenium red solution, the samples must be rinsed under running tap water and then microscopically examined. Polysaccharide structures show a red colouration.



## Result

Polysaccharides	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

