



1A-402

Nuclear Fast Red

In-vitro diagnostic agent

Description

The product 1A-402 is a dye for use in histology and cytology. It is a dry dye for preparing a staining solution for professional users.

The product comes in 5 different pack sizes: 1A-402.00001 (1g bottle), 1A-402.00005 (5g bottle), 1A-402.00010 (10g bottle), 1A-402.00025 (25g bottle) and 1A-402.01000 (1kg bottle)

Main components

Nuclear Fast Red (C.I. 60760)

Purpose

Nuclear Fast Red is used for cell diagnostics for the examination of histological samples (e.g. histological sections). It is a ready-to-use dye solution for professional users. It can be used as a counterstain for histochemical reactions (e.g. Prussian blue staining for iron detection or silver plating). Nuclear Fast Red is also used as a core colouring in Alcian blue stainings.

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 formalin fixation and subsequent embedding in paraffin as well as fresh, native blood or bone marrow smears.

Test principle

When Nuclear Fast Red is mixed with aluminium sulphate as a mordant, a colour varnish is produced that allows red nuclear staining.

Staining

To prepare the staining solution, stir 0.2 g of Nuclear Fast Red into 200 ml of boiling aluminium sulphate solution 5 % aqueous and boil for 5–10 minutes. Filter after cooling.

Before staining, deparaffinise the histological sections and transfer them to distilled water via a descending ethanol series.

After rinsing with distilled water, the staining is carried out with Nuclear Fast Red aluminium sulphate solution 0.1%. Subsequently, the samples are washed once more in distilled water and 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

Nuclei: dark red

Cytoplasm: light 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

