

Harris HTX



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| REF 01800 01800-EX |
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INTENDED PURPOSE

Harris HTX is a staining solution intended for use in in vitro diagnostics for the staining of histological and cytological human tissue samples. Staining with Harris HTX enables quality and results for pathological diagnosis and is intended for use by trained personnel in pathology laboratories.

USE

Harris HTX is used to visualise the cell nucleus primarily in cytology but also in histological tissue material. Harris HTX is used in cytology according to Papanicolaou or together with Eosin Y 0.2 % in Eosin Y 0.2 % – Hematoxylin routine staining.

Histological and cytological staining solutions are used to visualise different components in cells and tissues. Without staining, these are, in principle, transparent and difficult or impossible to distinguish under a microscope.

Hematoxylin is a natural dye that must be oxidised to haematein and be combined with a mordant to enable the cell nucleus to be stained. The combination with oxidised haematoxylin and aluminium salt is one of the most useful stains for cell nuclei. Harris HTX is chemically oxidised and ready to use and has aluminium salt as mordant.

Harris HTX is used for histological staining together with eosin in haematoxylin and eosin staining. H&E staining is the most common general stain in cell diagnostics.

Harris HTX is a regressive staining solution, which means that it contains a high concentration of dye and stains the whole cell intensively. Differentiation in hydrochloric spirit when excess dye is washed off is required after staining to obtain good nucleus staining with the correct intensity.

After staining with Mayer's HTX, the nucleus is purple. A blue colour provides better contrast to the cytoplasmic stains, which are often different shades of pink. The bluing is obtained when the sections are rinsed in tap water (or dipped in a weak alkaline solution). After bluing, the cell nuclei are clear and defined, while the background is colourless. Differentiation in hydrochloric spirit is performed first after bluing.

Harris HTX staining can be customised depending on the user, and the protocol can be modified to provide the desired intensity and specificity. The method is repeatable and reproducible as far as possible due to its subjective nature. It is possible to destain/re stain the same section. Under- and over-staining can be corrected by adjusting the protocol. All adjustments to the protocol must be made by trained personnel.

SPECIFICATION

Composition

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| Aluminium sulphate tetradecahydrate | 5–10 % |
| Ethanol | <6 % |
| Haematoxylin | <1 % |

Properties

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| pH | 2.63 ± 0.2 |
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INSTRUCTIONS FOR USE

Storage and shelf life

Protect from direct sunlight. Store in a cool place. Store in tightly sealed original packaging. Store in a dry place.

The product has a shelf life of 18 months from the date of manufacture in unopened packaging. The expiry date is printed on the package label.

Warnings/precautions for safe handling

Classification and labelling information in accordance with Regulation (EC) No 1272/2008 (CLP) can be found on the product label and/or safety data sheet.

Ensure good ventilation. Avoid contact with skin and eyes. An emergency shower and eye wash facilities must be available at the workplace.

Wear tight-fitting safety goggles or a face shield. Protective gloves must be worn, as the product stains. Wear suitable protective clothing to protect against splashes or contamination. Use respiratory protection in case of insufficient ventilation.

Waste management

The product is classified as hazardous waste. Present for destruction according to local regulations. See safety data sheet for more information.

Sample material

The various types of samples that can be analysed are histological and cytological tissue samples.

Preparations

The solution does not need to be filtered.

Instructions

Protocol Harris HTX/Eosin Y 0.2 %:

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| Oven drying 60° | 20–30 min |
| Histolab Clear (Xylene) | 2–5 min |
| Histolab Clear (Xylene) | 2–5 min |
| Absolute Ethanol | 2–5 min |
| Absolute Ethanol | 2–5 min |
| Ethanol 96 % | 2–5 min |
| Water (dist.) | 1–5 min |
| Harris HTX | 5 min |
| Water (tap) | 4–6 min |
| Hydrochloric spirit | Short dip |
| Water (tap) | 4–6 min |
| Eosin Y 0.2 % | 30 sec |
| Water (tap) | 30 sec |
| Ethanol 96 % | 30 sec |
| Absolute Ethanol | 1 min |
| Absolute Ethanol | 1 min |
| Histolab Clear (Xylene) | 2 min |
| Histolab Clear (Xylene) | 2 min |
| Mount with Pertex [®] | |

Allow the slides to drip off thoroughly between each step to avoid transfer between solutions.

Allow Histolab Clear to dry/evaporate slightly before mounting the cover slip with Pertex[®]. Mounting with Pertex[®] provides lasting stain, shape and structure in the tissue during long-term storage.

Expected result, Harris HTX – Eosin Y 0.2 %:

Nuclei blue
 Smooth muscle pale pink
 Collagen pink
 Erythrocytes red-orange



ADDITIONAL INFORMATION

Use equipment and reagents suitable for in vitro diagnostics.

When staining in instruments, follow the instructions for use supplied with the instrument.

All serious incidents that have occurred in connection with the product must be reported to the manufacturer and the competent authority.

SOURCES

Theory and Practice of Histotechnology, second edition, Sheehan, Hrapchak
Histology – A Self Instructional Text, Carson
Theory and Practice of Histotechnology, 3rd edition, Bancroft, Stevens

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