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Tris-EDTA Buffer 10X pH9

PRESENTATION:

Concentrated buffer solution (10 x), with a final pH of 9.0. The presentations for this product are:

Reference	Concentrated solution (mL)	Final diluted solution (mL)
MAD-004070R	100	1000
MAD-004070R-5	500	5000
MAD-004070R-10	1000	10000

INTENDED USE:  Product for in vitro diagnostic use

SPECIFICITY, INTERFERENCE AND LIMITATIONS:

Tris-EDTA buffer is used in heat induced antigen retrieval (HIER) methods. When working on formalin fixed paraffin embedded tissue sections, certain antibodies require antigen unmasking for retrieving the immunoreactivity that had been masked by the fixing process.

APPLICATIONS:

The HIER has improved immunohistochemical staining in conventional surgical pathology as it improves the antigen unmasking and the staining intensity. The use of these techniques has its best advantages in case of nuclear antigens that present a marked increase in signal intensity.

Before the HIER, a previous dewaxing step is required.

PRODUCT COMPOSITION:

TRIZMA BASE + EDTA (pH9.0)

RECOMMENDATIONS FOR USE:

The Tris-EDTA Buffer is 10x concentrated and therefore before use it should be diluted in a 1:10 range with distilled or deionized water (one part Tris-EDTA Buffer and 9 parts water).

1. - Cut and mount sections on charged slides or silane coated.
2. - Dewaxing (using xylene or substitute) and rehydrate the tissue sections through decreasing serial dilution of ethanol. Then proceed with the steps 3 and 4.
3. - Unmasking: various alternative methods could be used to carry out the antigen retrieval process using the diluted Tris-EDTA Buffer:

3.1 Unmasking in microwave: Place the sections in the diluted solution of Tris-EDTA Buffer (Coplin jar or other container with a volume as large as the laboratory considers) and bring the microwave oven at 700 watts (watt) for 10-15 minutes. Cool to room temperature.

3.2 Unmasking in pressure cooker: Fill the pressure cooker with 1-2 litres of diluted Tris-EDTA Buffer. While hydrating the slides, heat the solution avoiding boiling. Then immerse the

sections in the preheated buffer and close the pressure cooker. Wait until the pressure rises to the second notch and run from here 1-2 minutes (depending on the antigen unmasking). Remove and cool the pot (you can speed up the process placing the pot under running water). Open when no pressure and cool the slides inside of the pot for 20-30 minutes.

Note: this product is not suitable for simultaneous dewaxing, rehydration and antigen retrieval in automated systems (like Thermo Fisher's Pt Module or Dako's Pt Link). For these devices, please use the alternative products, refs. MAD-004072R/D and MAD-004072R/D-5

4. - Remove the sections and place them into the usual washing buffer (recommended TBS / TBS-Tween pH 7.5 – reference MAD-004077R).

5. - Proceed with the immunostaining protocol as usual.

SAFETY RECOMMENDATIONS:

This product is intended for laboratory professional use only. The product is NOT intended to be used as a drug or for domestic purposes. The current version of the Safety Data Sheet for this product can be downloaded by searching the reference number at www.vitro.bio or can be requested at regulatory@vitro.bio.

STORAGE:

Store until the expiry date of the product at room temperature, away from any sources of intense heat or cold.

BIBLIOGRAPHY:

1. Norton A.J., et al; Brief, high temperature heat denaturation (pressure-cooking): a simple and effective method of antigen retrieval for routinely processed tissues. *J Pathol* 173 (4): 371-391(1994).
2. Clive R. Taylor, M.D., Ph.D., Shan-Rong Shi, M.D., and Richard J. Cote, M.D. *Appl Immunohistochem* 4 (3): 144-166, 1996
1. Suthipintawong C., et al; Immunostaining of cell preparations: a comparative evaluation of common fixatives and protocols. *Diagn Cytopathol* 15: 167-174 (1996)

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

	Health product for in vitro diagnosis.		Expiration date
	Catalog number		Temperature limit
	Lot code		Manufacturer
	Refer to the instructions of use		Sufficient content for <n> assays
	Material safety data sheet		