

Tris/EDTA, Heat-Induced Epitope Retrieval (10x, Tween20)

Instructions For Use

These instructions apply to the WellMed Citrate buffer, Heat-Induced Epitope Retrieval (10x, Tween20).

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1: Intended Use

For In Vitro Diagnostic and Research Use. WellMed Tris/EDTA is intended for use in immunohistochemistry for heat-induced epitope retrieval.

2: Summary and explanation

WellMed Tris/EDTA buffer, is designed for use during heat-induced epitope retrieval (HIER) on formalin-fixed paraffin-embedded tissue sections prior to antibody application. In immunohistochemistry (IHC), protein cross-links are formed during formalin or other aldehyde fixation. These cross-links mask the antigenic sites in tissue specimens and results in weak or false negative staining in immunohistochemical detection of proteins. The use of this Tris-EDTA buffer in combination with heat ensures that the antigenicity of proteins modified, thus enhancing staining intensity of antibodies. For the recommended pre-treatment technique, please refer to the individual antibody's instructions for use. This buffer is a 10x concentrate solution and must be diluted 1:10 with deionized water before using. The final ready-to-use solution should have a pH of 9.0 ± 0.3 . The buffer can be used for a maximum of three runs within five days after dilution.

3: Reagents supplied

Catalog Number	Contents	Volume
HIER1000TEC	Tris/EDTA buffer, Heat-Induced Epitope Retrieval (10x, Tween20), Clear	1000 ml
HIER1000TEB	Tris/EDTA buffer, Heat-Induced Epitope Retrieval (10x, Tween20), Blue	1000 ml
HIER500TEC	Tris/EDTA buffer, Heat-Induced Epitope Retrieval (10x, Tween20), Clear	500 ml
HIER500TEB	Tris/EDTA buffer, Heat-Induced Epitope Retrieval (10x, Tween20), Blue	500 ml
HIER250TEC	Tris/EDTA buffer, Heat-Induced Epitope Retrieval (10x, Tween20), Clear	250 ml
HIER250TEB	Tris/EDTA buffer, Heat-Induced Epitope Retrieval (10x, Tween20), Blue	250 ml
HIER100TEC	Tris/EDTA buffer, Heat-Induced Epitope Retrieval (10x, Tween20), Clear	100 ml
HIER100TEB	Tris/EDTA buffer, Heat-Induced Epitope Retrieval (10x, Tween20), Blue	100 ml

4: Recommended Usage

Before use dilute 1:10 with deionized water. The final ready-to-use solution should have a pH of 9.0 ± 0.3.

Protocol:

1. Deparaffinize and rehydrate the tissue slides.
2. Fill the PT Module tank with 150 ml of Tris/EDTA buffer and 1,350 ml of deionized water, to obtain 1,500 ml of ready-to-use solution (1:10 dilution).
3. Pre-heat the PT Module until temperature reaches 65°C and place the formalin-fixed slides in slide racks into the PT Module tank.
4. Heat the Tris/EDTA buffer and slides to 98°C and incubate for 15 minutes.
5. Cool slides in the PT Module to 65°C.
6. Remove slides and cool to room temperature for at least 5 minutes in a PBS or TBS based buffer.
7. Continue with staining according to IHC protocol.

Note: Alternative heating sources, such as a microwave or a pressure cooker, can be used to replace the PT Module tank. The optimal incubation time for these heating sources should be determined by authorised personnel / researchers.

5: Warnings and precautions

Refer to SDS.

6: Storage

Store at room temperature. Do not use after the expiration date.

7: Microbiological state

Product(s) not sterile.

8: Supplied as

10x concentrate solution, in clear and blue.

9: Troubleshooting

Please contact WellMed by phone or by email.

10: Reference

[1] Yagi, N., Satonaka, K., Horio, M., Shimogaki, H., Tokuda, Y., & Maeda, S. (1996). The Role of DNase and EDTA on DNA Degradation in Formaldehyde Fixed Tissues. *Biotechnic & Histochemistry*, 71(3), 123–129. <https://doi.org/10.3109/10520299609117148>

[2] Hoffman, E. A., Frey, B. L., Smith, L. M., & Auble, D. T. (2015). Formaldehyde Crosslinking: A Tool for the Study of Chromatin Complexes. *Journal of Biological Chemistry*, 290(44), 26404–26411. <https://doi.org/10.1074/jbc.r115.651679>