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Tris-EDTA Antigen Retrieval Buffer 50x

Data Sheet

Cat.NO.: PR30002

General Information:

Sample type: FFPE tissues

Assay type: Immunohistochemistry

Concentration: 50x

pH (1x): 9.0

Description:

PR30002 is a Tris-EDTA based solution that can be used for performing heat-induced epitope retrieval (HIER) in immunohistochemistry applications. While treating tissues with formalin and xylene are necessary steps for fixation and deparaffinization in an immunohistochemistry workflow, such treatments often result in protein cross-linking leading to the masking of antigenic sites and the subsequent inhibition of antigen-antibody interactions. Antigen retrieval helps restore the structure of such proteins by breaking the cross-links and unmasking the antigenic sites, thereby making them more accessible to antibodies.

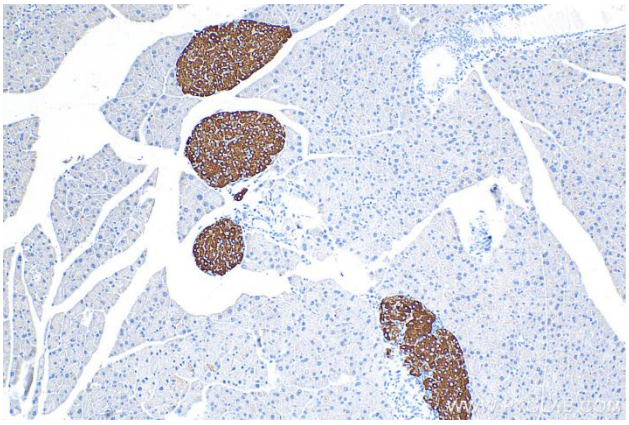
Size: 100mL

Storage: Stored at 2-8°C. This product is stable for 6 months from the date of receipt.

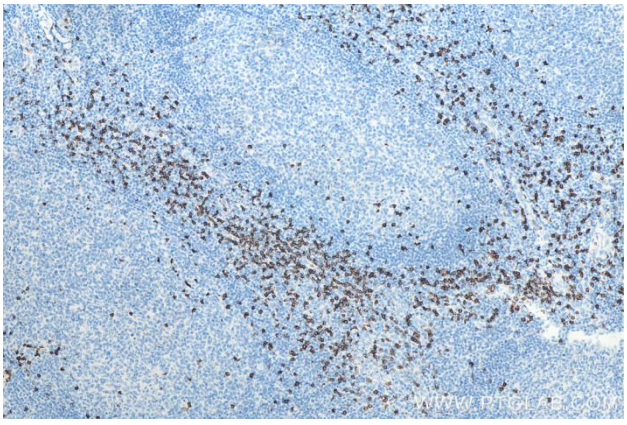
Application Note:

1. Dilute to 1x before use.
2. Calculate how much antigen retrieval buffer will be needed for the experiment to prepare an appropriate amount of 1x working solution. The working solution has a shorter shelf life than the concentrate.

Validation Data:



IHC analysis of mouse pancreas tissue with Proteintech's Synaptophysin rabbit polyclonal antibody (17785-1-AP). Heat-induced epitope retrieval was performed using Tris-EDTA Antigen Retrieval Buffer (PR30002).



IHC analysis of human tonsillitis tissue with Proteintech's CD8 mouse monoclonal antibody (66868-1-Ig). Heat-induced epitope retrieval was performed using Tris-EDTA Antigen Retrieval Buffer (PR30002).

Recommended Protocol:

1. Prepare slides from tissues sections following routine methods. Deparaffinize tissues with xylene and re-hydrate using a decreasing ethanol gradient.
2. Use concentrated PR30002 (Tris-EDTA Antigen Retrieval Buffer 50x) to prepare a 1x solution by adding the concentrated buffer to ddH_2O. For example, to make 500mL of 1x working solution, dilute 10mL PR30002 with 490mL ddH_2O.
   * 500mL of prepared 1x antigen retrieval buffer in a 1L beaker should be suitable for 1 or 2 slide baskets.
3. Heat 1x buffer solution to 95-98°C with a heating element.
   * Cover the beaker with a lid or foil to avoid vaporizing/vapor inhalation.
4. Place slide basket into heated antigen retrieval buffer. Maintain this temperature while incubating for 15-20 minutes.
5. Remove the beaker from heat and let it cool to room temperature (takes 35-40 minutes).
6. Perform subsequent steps of quenching, blocking, primary and secondary antibody incubation, signal development, counter staining and mounting before analyzing the slides.