

## 10X Citrate Buffer For Heat-Induced Epitope Recovery, pH 7.0

- Catalog No.:** K 036
- Intended Use:** To recover antigens masked by because fixation in cross linking fixatives such as formalin.
- Introduction:** In order to perform immunostaining tissue specimens should be preserved in an appropriate fixative. Fixation stops tissue autolysis, preserves tissue structures, and immobilizes antigens. However, antigens undergo chemical alteration of their primary, secondary and tertiary structures during fixation. Antigenic sites may be masked due to changes induced in the epitope or neighboring proteins. Enzymatic treatment with proteolytic enzymes (i.e. pepsin, trypsin or pronase) has been performed to expose the masked antigens. Shi et al. (1991) have reported that treating tissue sections with a heavy metal solution in a microwave oven can cover masked antigens significantly. However, heavy metals in the solution increase the risk of toxic exposure to lab personnel. To reduce the risk, we have developed an antigen unmasking solution which is free of heavy metals. The reagent is provided in a convenient 10X concentrate. Use of this antigen recovery buffer avoids unnecessary heavy metal exposure to lab personal and other handling and disposal issues.
- Format:** 500mL (10x concentrated) clear buffer
- Storage:** Store at room temperature
- Preparation of Reagent:** Dilute one part buffer with nine parts distilled water.
- Procedure:**
1. Deparaffinize and rehydrate tissue sections.
  2. Fill a coplin jar with sufficient 1x Citrate Buffer to cover tissue sections on the slides.
  3. Place coplin jar in steamer or water bath.
  4. Heat steamer or water bath containing coplin jar to 95-100°C.
  5. Place deparaffinized slides (1-3 slides/jar) in the coplin jar and incubate for 20-40 minutes (optimal incubation time should be determined by the end user).
  6. Remove coplin jar from the water bath and allow the slides to cool for 20 minutes to reach room temperature.
  7. Wash slides in de-ionized water and then with wash buffer. Proceed with immunostaining.
- Reference:** Shi et al. J Histochem Cytochem 39: 741, 1991.

### IVD: For In Vitro Diagnostic Use

DBS will not be held responsible for patent infringement or other violation that may occur with the use of our product

**DBS**

1020 Serpentine Lane, # 114, Pleasanton, CA 94566 Tel: 925 484 3350, Fax: 925 484 3390

Website: [www.dbiosys.com](http://www.dbiosys.com) e-mail: [customersupport@dbiosys.com](mailto:customersupport@dbiosys.com)