

## Citrate Antigen Retrieval Solution (50X)

### C752119

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Store at 2-8°C for 12 months. Store at -20°C for 24 months

#### **Introduction:**

Citrate Antigen Retrieval Solution is one of the most commonly used Antigen Retrieval Solutions and can be used for antigen retrieval of paraffin sections, frozen sections and other samples after fixation with paraformaldehyde, formaldehyde or other aldehyde reagents.

This product employs the widely used sodium citrate buffer (pH 6.0), which can effectively remove cross-linking between proteins caused by aldehyde fixation reagents and fully expose epitopes in samples such as paraffin sections, thereby improving the immunostaining effect significantly.

Normally, paraffin sections require antigen retrieval, whereas frozen sections can be stained without antigen retrieval. This product is particularly suitable for paraffin sections, but can also be used for other samples such as frozen sections.

#### **Usage method:**

##### **1. Antigen retrieval of paraffin sections.**

a. Dewaxing: Dewax the section in xylene for 5 min and then replace with fresh xylene for a total of 3 dewaxes. Then immerse the section in absolute ethanol for 5 min, twice; 90% ethanol for 5 min, twice; 70% ethanol for 5 min, once; and distilled water for 5 min, twice.

b. Antigen retrieval: Dilute this product with ddH<sub>2</sub>O or Milli-Q water at 1:50 to obtain the Antigen Retrieval Solution (1X). Immerse the sections in Antigen Retrieval Solution (1X) and heat at 95-100 °C for approximately 20 minutes (The heating time can be within 10-30 minutes, depending on the sample and the target protein). The Antigen Retrieval Solution (1X) should be preheated to 95-100°C before use, either in a normal water bath or in a microwave oven. If using microwave, care needs to be taken to avoid flash boiling and excessive water evaporation. Then cool to room temperature in approximately 20-30 minutes. Wash 1-2 times with Immunostaining Wash Buffer for 3-5 minutes each time. Subsequent immunostaining steps such as blocking can then be performed.

##### **2. Antigen retrieval of frozen sections.**

Wash the sections with Immunostaining Wash Buffer for 5 minutes. Immerse the sections in Antigen Retrieval Solution (1X) and heat at 95-100 °C for approximately 20 minutes (The



heating time can be within 10-30 minutes, depending on the sample and the target protein). The Antigen Retrieval Solution (1X) should be preheated to 95-100°C before use, either in a normal water bath or in a microwave oven. If using microwave, care needs to be taken to avoid flash boiling and excessive water evaporation. Then cool to room temperature in approximately 20-30 minutes. Wash 1-2 times with Immunostaining Wash Buffer for 3-5 minutes each time. Subsequent immunostaining steps such as blocking can then be performed.

**Matters needing attention:**

1. This product must be diluted 50 times with ddH<sub>2</sub>O or Milli-Q water prior to use.
2. This product is for R&D only. Not for drug, household, or other uses.
3. For your safety and health, please wear a lab coat and disposable gloves during the operation.

