

EDTA Buffer

pH 8.0

Product	Catalog No.	Package size
EDTA buffer (pH 8.0) (1000 mL/bag)	61262	10 bags

Product description

EDTA (ethylene-diamine-tetraacetic acid) is a chelating agent widely used in molecular biology to sequester divalent and trivalent metal ions such as calcium and magnesium. This ability prevents DNA and RNA degradation as metal-dependent enzymes acting as nucleases become deactivated. A fully deprotonated EDTA molecule will bind directly to the metal ion making the buffer suitable for adding to stored blood as an anti-coagulant to bind Ca²⁺ ions. Furthermore, EDTA is useful for cell culture procedures as it prevents clumping of cells in liquid suspension and detaches adherent cells when passaging.

EDTA buffer is supplied in bags, each for 1000 mL of 0.50M EDTA buffer with pH8.0 at 25°C when the contents of one pouch is dissolved in deionized water.

Product Specifications

Chemicals	Analytical grade
Format	Pre-weighed powder
Concentration	0.050M EDTA
Volume	500mL and 1000mL
pH (25°C)	8.0 ± 0.05
Shelf life	Three years after production date

Applications

- Added to stored blood as an anticoagulant
- Inhibits metal-dependent enzymatic reactions
- Prevents cell-to-cell joining of cadherins
- Used in electrophoresis buffers TAE and TBE
- Component in TE buffers for DNA and RNA applications
- Cell culture procedures.

Product Use

Empty 1 bag of EDTA buffer into a laboratory flask or beaker placed on a magnetic stirrer. Add 700 mL of deionized water and stir the solution for a few minutes. Adjust the volume to 1000 mL and stir until fully dissolved. The solution is ready to use.

Stability

EDTA buffer is shipped at room temperature. Store the bags in a dry place at room temperature. Shelf life is three years after production date.

Tips and tricks

If the contents of the bag do not dissolve properly, make sure:
- the water temperature is 25°C (do not exceed this temperature)
- the buffer solution is properly stirred.

Sterilization can be performed by filtration or autoclaving. Filter the buffer solution through a 0.22µm filter into a sterile flask or autoclave for 15 to 20 minutes. Keep the buffer solution at +4°C.

Safety information

When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the appropriate material safety data sheets (MSDSs). These are available online as pdf-file or upon request (contact@cube-biotech.com).