

## EDTA Buffer, pH 8.0



### Features

- Chelating agent
- Prevents DNA/RNA degradation
- Pre-set pH
- Exactly pre-weighed in pouches
- Dissolve and go for greater convenience

### Product description

The EDTA (ethylene-diamine-tetraacetic acid) molecule 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 becomes 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  $Ca^{2+}$  ions. Furthermore, EDTA is useful for cell culture procedures as it prevents clumping of cells in liquid suspension and detaches adherent cells when passaging.

Medicago's EDTA buffer is supplied in two sizes with pouches giving 500 ml or 1000 ml of 0.50 M EDTA buffer with pH 8.0 at 25°C when the contents of one pouch is dissolved in deionized water.

### 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

### Directions for use

Empty one pouch of the EDTA buffer in a laboratory flask or beaker placed on a magnetic stirrer. Add 300 ml of deionized water and stir the solution for a few minutes. Adjust the volume up to 500 ml or 1000 ml, stir until full dissolution and the buffer solution is ready to use.

### Specifications

Chemicals	Analytical grade
Format	Exactly pre-weighed powder mix
Concentration	0.50 M EDTA
Volume	500 ml and 1000 ml
pH	8.0 ± 0.05 at 25°C
Shelf life	Three years after production date

### Shipping and storage

EDTA buffer is shipped at room temperature. Store the pouches in a dry place at room temperature. The shelf life is three years.

### Tips and hints

If the contents of the pouch is not properly dissolved, make sure:

- the water temperature is 25°C (do not exceed this temperature)
- the buffer is properly stirred.

Sterilization can be performed by filtration. Filtrate the buffer solution through a 0.22 µm filter into a sterile flask. Keep the buffer solution at +4°C.

### Certifications

Medicago's laboratories and manufacturing site in Uppsala are ISO 9001:2008 and ISO 13485:2003 certified. Each stage of the manufacturing process is controlled and monitored by stringent quality control procedures to guarantee the highest possible quality and lot-to-lot reproducibility.



### Ordering information

Article no.	Product name	Pack size	Solution vol.
A12-9161-5	EDTA buffer pH 8.0	5 pouches	500 ml/pouch
A12-9160-5	EDTA buffer pH 8.0	5 pouches	1000 ml/pouch