

EDTA cell detachment solution

CAT N°: LM-S2048

Storage conditions: +2°C to +8°C

Shelf life: 24 months

Composition: Displayed on website; also available on request

Colour: Colourless, clear solution

pH: 7.2 ± 0.3

Osmolality: 280 mOsm/kg ± 10 %

Endotoxin: < 1 EU/ml

Sterility tests:

- Bacteria in aerobic and anaerobic conditions
- Fungi and yeasts

Cell Growth test: Not applicable

Other tests:

Activity test: Cells detachment test with the L929 cell line

Recommended use:

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light (not necessary for saline solutions).
- Manipulate the product in aseptic conditions (e.g.: under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g.: gloves, mask, hygiene cap, overall...)

The product is intended to be used in vitro for research or further manufacturing only and not for use as an Active Pharmaceutical Ingredient or food or animal feed.

Application:

The EDTA cell detachment solution is used instead of Trypsin. It is a chelating agent that disperses the cells by cutting the cytoplasmic bridges between them.

The EDTA cell detachment solution has the advantage to bear the temperature of the autoclave, which is a guarantee of sterility. In addition, it is less aggressive cells that Trypsin, which is useful for studies on cell growth.

Uses:

To act, the EDTA cell detachment solution must be in a medium free of calcium and magnesium ions. It is generally used in PBS amended by deleting the calcium chloride and magnesium chloride (BioSera CAT N° LM-S2041).

- 1) Take 75 ml of EDTA cell detachment solution and complete to 100 ml with PBS. Autoclave at 120°C for 20 minutes.
- 2) Prepare a solution of CaCl₂ at 3.5 g/l and autoclave at 120°C for 20 minutes.
- 3) Discard the culture medium from the vial to transplant.
- 4) Rinse quickly but carefully the bottle with a little EDTA cell detachment solution-PBS, to remove calcium and magnesium ions remaining.
- 5) Add the EDTA cell detachment solution-PBS at 5 ml per 250 ml bottle.
- 6) Turn the bottle flat in the oven for 15 minutes.
- 7) After 15 minutes, take the bottle and add the CaCl₂ solution (0.2 ml per 250 ml) to neutralize the EDTA cell detachment solution.
- 8) Add the fresh medium directly under the same conditions than with Trypsin.
- 9) Shake, cells disperse.
- 10) Divide and put new bottles in the oven.

Signs of Deterioration:

Medium should be clear and free of particulate and flocculent material.
Do not use if medium is cloudy or contains precipitate.

Remarks: Not applicable