

## Technical Data Sheet

12/07/2017

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### Recombinant Trypsin EDTA 1X in PBS w/o Calcium w/o Magnesium w/o Phenol Red

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Product code:  
LM-T1701

**Theoretical pH :** 7.3 ± 0.3

**Osmolality :** 290 mOsm/kg ± 10 %

**Colour :** colourless

**Storage conditions :** -20°C

**Shelf life :** 24 months

**Sterility tests :**

- bacteria in aerobic and anaerobic conditions
- fungi and yeast

**Cell growth test :**  
No cell growth test, but activity test with adherent cells

**Composition :**  
Available on request

**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
- 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...)
- In order to preserve all product qualities, it is recommended to thaw out the flask, to aliquote, then to re-freeze the produced flasks rather than to thaw out and re-freeze the flask at each use.
- It is recommended to use the product immediately after its thaw out.

The product is intended to be used in vitro, in laboratory only. Do not use it in therapy, human or veterinary applications.

## **Applications :**

Recombinant Trypsin is a genetically engineered protein expressed in E-Coli. As such it is totally animal free. Free from contaminating enzymes like chymotrypsin as well as protease inhibitors. Recombinant Trypsin eliminates the risk of viruses, or other potential adventitious agents found in animal derived components. It is highly stable with a high purity (95%). It is widely used in insulin manufacturing, vaccines and cell culture applications. EDTA, a chelating agent, enhance the enzymatic activity by removing calcium and magnesium ions. These ions obscure the peptide bonds on which trypsin acts as well as enhancing cell to cell adhesion.

## **Uses :**

The Recombinant Trypsin EDTA 1X in PBS w/o Calcium w/o Magnesium w/o Phenol Red is a ready to use solution.

1. Frozen products can either be thawed in a 37°C water bath or overnight at to 2 to 8°C.
2. Aspirate the spent medium from the culture vessel and discard.
3. Rinse the monolayer with either a small amount of trypsin solution or a calcium and magnesium-free salt solution (as listed below), aspirate, and discard.
4. Add enough trypsin solution, prewarmed in a 37°C water bath, to completely cover the cell monolayer.
5. Incubate the flask at 37°C, or for more sensitive cultures, at room temperature or 2 to 8°C (the time required to remove cells from the culture surface is dependent on cell type, population density, serum concentration in the growth medium, potency of trypsin and time since last subculture. Trypsin causes cellular damage and time of exposure should be kept to a minimum).
6. When the trypsinization process is complete, cells will appear rounded upon microscopic examination and the solution in the flask will appear cloudy. Check the flask often to avoid overexposure which can damage the cells.
7. The trypsin should be neutralized either with serum containing medium or trypsin inhibitor. Gently centrifuge the cell suspension and discard the trypsin-containing supernatant.
8. Resuspend the cell pellet with fresh medium and count or culture as desired.