

## Technical Data Sheet

12/07/2017

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### Trypsin 0.25% - EDTA 0.02% in HBSS w/o Calcium w/o Magnesium w/ Phenol Red

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Product code:  
LM-T1721

<b><u>Theoretical pH :</u></b>	7.3 ± 0.3
<b><u>Osmolality :</u></b>	300 mOsm/kg ± 10 %
<b><u>Colour :</u></b>	orange - red, clear solution
<b><u>Storage conditions :</u></b>	-20°C
<b><u>Shelf life :</u></b>	24 months
<b><u>Sterility tests :</u></b>	<ul style="list-style-type: none"><li>- bacteria in aerobic and anaerobic conditions</li><li>- fungi and yeast</li></ul>

#### **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 :**

Trypsin is a porcine pancreas-derived enzyme that is commonly used for the dissociation and disaggregation of anchorage-dependent mammalian cells and tissues. The concentration of trypsin necessary to dislodge non sensitive cells from their substrate, is 0.25%. 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.

## **Storage / Stability :**

This product does contain phenol red. The product is shipped on dry ice and there could be significant CO<sub>2</sub> buildup in the package. This CO<sub>2</sub> may enter the solution and lower the pH slightly, giving an orange (around pH 6.5) vs. pinkish (around 7.3) color. The solution, if orange (acidic) should still be good to us as is, or sodium hydroxide may be added to adjust the pH.

## **Uses :**

The Trypsin 0.25% EDTA 0.02% in HBSS w/o Calcium w/o Magnesium w/ 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.  
Dulbecco's Phosphate Buffered Saline (DPBS)
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.
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.