

## Technical Data Sheet

Date: 16/09/2013

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

CAT N: LM-T1720

<b>Theoretical pH:</b>	7.3 ± 0.3
<b>Osmolality:</b>	300mOsm/kg ± 10 %
<b>Colour:</b>	orange – red, clear solution
<b>Storage conditions:</b>	- 20 °C
<b>Shelf life:</b>	24 months
<b>Sterility tests:</b>	- Bacteria in aerobic and anaerobic conditions - Fungi and yeast
<b>Activity test:</b>	Cells detachment test with the L929 cell line
<b>Composition:</b>	Displayed on website also available on request

#### Recommended use:

Use aseptic technique when handling this medium. Product is provided for in vitro laboratory use only, and not for drug, human or veterinary use.

#### 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 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) ref: LM-S2041  
Hank's Balanced Salt Solution (HBSS) ref: LM-S2039
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.