# 0.25% Trypsin Solution, with EDTA, phenol red dissolved in PBS

**Cat. No.: PB180229**

**Size: 100 mL**

## General Information

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| **Product Form** | Liquid |
| **Concentration** | 0.25% |
| **pH** | 7.0-7.4 |
| **Phenol red** | 10 mg/L |
| **Dissolvent** | 10 mM PBS |
| **EDTA·2Na** | 0.2 g/L |
| **Trypsin** | 2.5 g/L |
| **Storage** | -5~-20°C |
| **Shipping** | Ice bag |
| **Expiration date** | 12 months |

## Product Description

Trypsin is a serine hydrolase that can cut the base-side segment of the lysine and arginine residue in the polypeptide chain, hydrolyze the protein between the cells, and destroy the connection between the cells, so that the tissue or the adherent cells are dispersed into a single cell. The activity of the trypsin is related to the characteristics of the tissue or the cells, the concentration of the trypsin, the temperature and the time of action. At pH 8.0 and 37°C, the effect of the trypsin is the best. Therefore, the concentration of trypsin, the temperature and the time of the pancreatic enzyme should be grasped to avoid the excessive damage of the cells.

In general, the frequently-used working concentration of the trypsin is 0. 25%, while the concentration of trypsin for the semi-adherent cells or the cells is 0.05%. Since EDTA is able to bind $Ca^{2+}$ and $Mg^{2+}$ to destroy the cell connection to promote the dissociation of the cells, a certain amount of EDTA is often added to the trypsin solution to enhance the dissociation effect.

## Notes

1. This product is only used for scientific research or further research, not for diagnosis and treatment.
2. It is necessary to pay attention to the aseptic operation and avoid the contamination.
3. It is not suitable for long time storage at room temperature or 2-8°C.
4. Thaw in 2-8°C and mix fully before use. Avoid repeated freezing and thawing. It is recommended to aliquot the solution and store at -5~-20°C.
5. Because the sensitivity to trypsin of different tissues or cells are differently. The reaction time of trypsin should be determined according to the actual situation. Otherwise it will affect the the adhesion and growth of cells.
6. This product contains phenol red. Upon freezing, the solubility of carbon dioxide increases, which leads to acidification of the internal solution and a decrease in pH, resulting in a pink or yellow coloration. Upon thawing, the solubility of carbon dioxide decreases, causing the release of carbon dioxide, an increase in pH, and a return of the solution's color from pink or yellow to red.