# 0.25% Trypsin, phenol red (1×)

## Description

TargetMol's 0.25% Trypsin, Phenol Red (1×) is a ready-to-use cell dissociation solution designed for routine passaging, harvesting, and single-cell dissociation of adherent cells. This product contains trypsin, enabling strong and rapid cell detachment, and is supplemented with phenol red as a pH indicator to allow real-time monitoring of the dissociation process.

The optimized formulation ensures efficient cell detachment while maximally preserving cell membrane integrity and biological activity. It is suitable for the culture and handling of a wide range of mammalian adherent cells. Supplied as a 1× working solution, it can be used directly without dilution. This product is applicable to multiple experimental scenarios, including routine cell culture, passaging, and pre-freezing treatment, making it an essential reagent for cell culture laboratories.

## Features

- **Ready to Use:** No additional dilution or preparation required; can be used directly for cell dissociation, saving experimental setup time.
- **Strong & Fast Dissociation:** 0.25% trypsin efficiently dissociates tightly adherent cells, significantly reducing dissociation time.
- **Phenol Red Indicator Included:** Allows real-time monitoring of the dissociation process, with intuitive color changes indicating progress.
- **Consistent Quality:** Manufactured with high-purity trypsin, sterile-filtered to ensure cell culture safety and reproducibility.
- **Broad Compatibility:** Suitable for routine passaging and dissociation of a wide range of mammalian cell lines.

## Application

For the dissociation, passaging, and collection of adherent cells.

## Instructions

**1. Preparation**

a) Take the trypsin solution from the refrigerator and prewarm it at 37 ˚C in a water bath or incubator for 5-10 minutes.

**Note:** Do not prewarm the entire bottle; only take out the volume you need.

b) Remove the old medium from the culture dish or flask, and gently rinse once with sterile PBS, Hanks, or serum-free medium to remove residual serum.

**Note:** Serum inhibits trypsin activity.

**2. Trypsinization**

a) Add an appropriate amount of trypsin solution to just cover the cell layer. Incubate at room temperature for 1-5 minutes, gently swirling the culture vessel occasionally to ensure even contact with the cells.

b) Observe under a microscope. When the cells begin to round up and detach from the bottom, dissociation is sufficient.

**3. Termination of Trypsinization**

a) Immediately add an equal or double volume of complete medium containing serum to stop the trypsin activity.

b) Gently pipette to mix, ensuring the cells are fully detached into a single-cell suspension.

**4. Cell Collection and Culture**

a) Transfer the cell suspension to a centrifuge tube and centrifuge at 1,000 rpm for 3-5 minutes.

b) Discard the supernatant and resuspend the cells in fresh medium. Proceed with counting, passaging, or seeding as required by your experiment.

## Storage

Store at 4 ˚C for 3 months; -20 ˚C for 2 years.

## Precautions

1. After use, immediately seal and store at 4 ˚C. For long-term storage, keep at -20 ˚C and avoid repeated freeze-thaw cycles.
2. Avoid excessively long trypsin dissociation, as this may cause cell damage or death.

3. For sensitive cells (e.g., primary cells or stem cells), consider shortening dissociation time or diluting the trypsin concentration.
4. This product contains phenol red as a pH indicator. If the pH slightly decreases for any reason, the solution may turn from red to orange. The orange solution can still be used normally, or, if needed, adjust the pH slightly with sterile 2 M NaOH before use.
5. Observe aseptic techniques to prevent microbial contamination.
6. The product is for R&D use only, not for diagnostic procedures, food, drug, household or other uses.
7. This product may irritate skin, eyes, and the respiratory tract. Please wear a lab coat and disposable gloves.

## How to Select Trypsin Cell Dissociation Solutions

| | Cells are sensitive to trypsin & dissociation time is difficult to control | Strong dissociation | To monitor the dissociation process | Without Phenol Red | Without EDTA |
|---|---|---|---|---|---|
| C0200<br>0.05% Trypsin-EDTA, phenol red (1×) | √ | | √ | | |
| C0201<br>0.25% Trypsin-EDTA, phenol red (1x) | | √ | √ | | |
| C0202<br>0.25% Trypsin-EDTA (1x) | | √ | | √ | |
| C0203<br>0.25% Trypsin, phenol red (1x) | | | √ | | √ |