Trypsin-EDTA Solution with phenol red (0.25% Trypsin)

Cat.No.: HYI215

Product Description

Trypsin, CAS: 9002-07-7, is a serine protease. It cleaves peptide bonds at the C-terminus of lysine and arginine, hydrolyzes intercellular proteins and breaks intercellular junctions, thereby dissociating tissues or adherent cells into single cells.

This product contains 0.25% trypsin (irradiated protease mixture derived from porcine pancreas), 0.38 g/L EDTA and phenol red, dissolved in D-Hank's solution. It is filter-sterilized and can be directly used for the digestion of cultured cells and tissues.

Featuring rapid digestion, high safety and excellent stability, this product is intended solely for scientific research and production by professionals. It shall not be used for clinical diagnosis or any other purposes.

Components

Components	Size-1	Size-2	Size-3
Trypsin-EDTA Solution with phenol red (0.25% Trypsin)	100 mL	500 mL	1000 mL

Properties

- Appearance: Clear red liquid
- Osmotic pressure: 270~320 mOsm/kg
- pH range: 7.2~8.0 (at 25 °C)
- Microbiological test: Free of bacterial, fungal, mycoplasma and viral contamination

Storage

Store at -25 ~ -15 °C. Avoid repeated freeze-thaw cycles. Shelf life: 24 months.

Instructions

- **Digestion of Adherent Cells**

1. Aspirate the culture medium, and rinse cells with calcium- and magnesium-free PBS to remove residual medium.

2. Add an appropriate volume of Trypsin-EDTA Solution with phenol red (0.25% Trypsin), just enough to cover the cell layer. Incubate at room temperature for 0.5–2 min. Digestion time varies by cell type.
3. Observe under a microscope: stop the reaction when cells shrink obviously and morphological changes are visible at the bottom of the culture vessel, or when cells can be gently dislodged by pipetting. Add serum-containing complete medium or protease inhibitor to terminate digestion. Pipette to harvest cells, then centrifuge at 1000 rpm for 5 min to discard the supernatant. Resuspend the cell pellet with fresh medium for subsequent experiments.
4. If digestion is incomplete, add Trypsin-EDTA Solution with phenol red (0.25% Trypsin) and repeat the digestion procedure.

➢ **Digestion of Tissues**

Digestion time varies greatly among different tissues. Generally, stop digestion when the tissue can be fully dissociated.

Notes

1. Do not store this product at room temperature or 4 °C for extended periods.
2. Aliquot the product after thawing and avoid repeated freeze-thaw cycles.
3. Tissues and cells show varying sensitivity to trypsin. Determine the optimal digestion time according to practical conditions. Excessively long digestion will impair cell adhesion and growth.
4. Perform all operations in a sterile environment to prevent contamination.
5. Wear a lab coat and gloves during operation for personal safety and health.