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DATA SHEET

Rev.ver: 01

1. Identification

Product Name: **Trypsin - EDTA Solution 1x** 0.05% trypsin, 0.02% EDTA in Hanks' Balanced Salt Solution w/ Phenol red Sterile filtered

Catalog.no: **CCDR016**

2. Description

Trypsin-EDTA Solution 1x is a ready-to-use reagent formulated for the detachment and dissociation of adherent mammalian cells during sub-culturing and routine maintenance. It contains 0.05 % (w/v) trypsin and 0.02 % (w/v) EDTA disodium salt in Hanks' Balanced Salt Solution (HBSS) without calcium and magnesium ions, ensuring optimal enzymatic activity and preventing cell clumping. Phenol Red is included as a visual pH indicator to monitor medium conditions during use.

This solution enzymatically cleaves peptide bonds at the carboxyl side of lysine and arginine residues, aided by EDTA which chelates divalent cations (Ca^{2+}, Mg^{2+}) that promote cell adhesion. The absence of these ions enhances detachment efficiency while minimizing cell damage. The reagent is sterile-filtered (0.22 µm), ready for direct use in aseptic cell-culture procedures and is suitable for routine sub-culturing, passaging, and harvesting of adherent cell lines in research and biotechnology applications.

3. Storage/Stability

Store the product at -20°C. This has an expiration period of 1 year. Reagent label bears expiration date.

4. Procedure

Directions for Use: Cell Dissociation

1. Remove the used medium from the culture vessel.
2. Wash the cell layer once with salt solution (without calcium and magnesium) and discard.
3. Add enough Trypsin-EDTA solution to cover the cells.
4. Gently rock the vessel so the solution spreads evenly.
5. Incubate at 37 °C for 2–3 minutes and watch under a microscope until cells round up and detach. If needed, tap the vessel gently to help release cells.
6. Add growth medium with serum to stop trypsin activity.
7. Pipette gently to make a single-cell suspension.
8. Count and transfer cells for subculture

5. Precautions and Disclaimer

This product is for research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.