Trypsin/EDTA Solution, 0.25% (T/E)

Catalog #0103

Product Description

Trypsin is a serine protease produced in the pancreas. Ethylenediaminetetraacetic acid (EDTA) is a chelating agent which sequesters metal ions such as Ca^{+2} and Mg^{+2}, enhancing the trypsinization reaction. 0.25% Trypsin/EDTA solution (T/E) is a sterile, phosphate and HEPES-buffered saline solution with a pH of 7.4 at room temperature. It contains 0.25% trypsin and 0.5 mM EDTA.

Product Use

0.25% Trypsin/EDTA solution is used to detach adherent cells from a culture surface. T/E is for research use only. It is not approved for human or animal use, or for application in *in vitro* diagnostic procedures.

Storage

Store the Trypsin/EDTA solution at -20°C. Once thawed, store at 4°C for up to one month.

Shipping

Dry ice.

Procedure

Incubating cells with too high a trypsin concentration or for too long of a time period can damage cell membranes and result in cell death. **Primary cells are especially sensitive to trypsin.** If unsure about the concentration of trypsin to use, use a low concentration (1:10 or 1:5) diluted in Ca^{+2} and Mg^{+2}-free salt solution (DPBS; Cat #0303). The T/E concentration and time required to remove cells from the culture surface is dependent on the cell type, population density, and serum concentration in the growth medium. The time of trypsin exposure should be kept to a minimum.

1) Aspirate culture media from vessel and rinse the cells with DPBS.
2) Add just enough diluted T/E solution to cover the cells. Incubate the vessel in a 37^{o}C incubator for 1 minute then monitor cells under a microscope until 90% are rounded up.
3) Transfer T/E solution to a tube and neutralize with TNS.
4) Gently tap the side of the vessel to dislodge cells from the surface. Check under a microscope to make sure that all cells detach.
5) Add TNS to the flask and collect cells in the centrifuge tube. Rinse the flask with additional TNS to collect the residual cells.
6) Centrifuge the tube at 1000 rpm for 5 minutes. Resuspend cells in culture medium by gently and slowly pipetting the cell suspension.

Caution: If handled improperly, some components of this product may present a health hazard. Take appropriate precautions when handling this product, including the wearing of protective clothing and eyewear. Dispose of properly.