Recombinant trypsin digestion (1×)

Cat.No.: HYI214

Product Description

Trypsin is a serine protease for the dissociation of attachment-dependent cell lines by cleavaging C-terminal peptide bonds of lysine and arginine, hydrolyzing intercellular protein, disrupting cell-to-cell connections and discreteizing tissues. Hyasen recombinant trypsin digestive solution, a high-purity enzyme from microbial fermentation, is an animal origin-free recombinant enzyme alternative to porcine or bovine trypsin for cell digestion in the fields of immune cell therapy, vaccine, drug screening, antibody and other fields. This product contains EDTA and with no phenol red.

Components

Components	Size-1	Size-2	Size-3
Recombinant trypsin digestion (1×)	100mL	500mL	1 L

Storage

Store at 2~8°C; Protect from light; Avoid repeated freeze-thaw.

Product Property

1. **Mild:** The dissociation is more specific and less toxic due to single enzyme action and high purity. This mechanism can also reduce the dissociation and destruction of various proteases in animal trypsin and other extraction reagents.
2. **Animal origin-free:** No animal-derived raw materials are used in the production process, so there is no risk of potential uncertainties such as exogenous virus contamination, and it complies with drug administration regulations.
3. **Stable:** It can be stored away from light for 12 months under 2~8°C or -20 ~ -5°C conditions.
4. **Convenient:** This product is a sterile preparation. It can replace trypsin in the experiments and dilution can reduce the activity.

Instructions

Recombinant Trypsin Digestion EDTA solution (1x) can be a direct replacement for trypsin in existing protocols.

1. Pre-warm trypsin digestive solution and complete growth medium to 37°C before use.
2. Aspirate spent medium and discard.

3. Wash cell monolayer with 5 mL of Dulbecco's Phosphate Buffered Saline (DPBS) without calcium and magnesium. Aspirate and discard.
4. Add an appropriate volume of trypsin digestive solution to flask. Ensure complete coverage of cell monolayer with trypsin digestive solution.
5. Incubate at 37°C until cells have detached. Observe cell monolayer using an inverted microscope to ensure complete cell detachment from the surface of the flask. Gently tap flask to dislodge cells if necessary.
6. Add 5-10 mL of pre-warmed complete medium to flask. Tilt flask in all directions to thoroughly rinse flask. Cell suspension to a 15mL conical tube.
7. Centrifuge at 100 × g for 5-10 minutes.
8. Discard supernatant and resuspend cell pellet with 2-5 mL of pre-warmed complete medium.
9. Determine viable cell density and percent viability using a Cell Counter.
10. Seed, incubate and subculture according to normal protocols depending on your cell type.
11. The digestive time, cell viability and the yield of the different cells can refer to the table below.

Cell line	Medium	Time (min)	Viability (%)
VERO	EMEM+5%FBS	8	99.9
MDCK	DMEM+5%FBS	15	100
293F	DMEM+5%FBS	2	97.3
CHO-K1	CHO cell culture medium	7	96.8

Notes

1. For your safety and health, please wear lab coat and gloves for operating.
2. This product cannot be used on the human body.
3. Please operate in a sterile environment.