ExCell

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ExCell Bio

OptiVitro® Recombinant Trypsin Digestive Solution RF01

For Research and Manufacturing Use

Not Intended for Diagnostic and Therapeutic Use

User Manual

Catalog Number RF000-N031

RF000-N031S

PRODUCT DESCRIPTION

OptiVitro® Recombinant Trypsin Digestive Solution RF01 is a recombinant enzyme solution specifically formulated for gentle and effective cell dissociation across various cell culture applications. This solution features a defined composition, is free of animal-derived ingredients, and minimizes cellular damage to enhance viability post-digestion. It is suitable for serum-free culture systems, particularly in the gentle digestion and subculturing of sensitive cells, including stem cells and primary cells.

SPECIFICATION, STORAGE AND TRANSPORTATION REQUIREMENT

Product Name	Cat.#	Specification	Storage	Transportation	Shelf Life
OptiVitro® Recombinant Trypsin Digestive Solution RF01	RF000-N031	200 mL	2-8℃ Protect from light	< 25℃ Protect from light	18 months
OptiVitro® Recombinant Trypsin Digestive Solution RF01(Sample)	RF000-N031S	50 mL	2-8℃ Protect from light	< 25℃ Protect from light	18 months

HANDLING RECOMMENDATIONS

1. Please make sure to store the product in a light-protected environment, avoid fluorescent lamps or other lamplight exposure, and better to use colored packaging bags in the refrigerator or warehouse.
2. During the transportation of the product, it should be kept away from light. This is to prevent the product from being affected by the irradiation of fluorescent lamps or other light sources, which may lead to discoloration.
3. During the transportation of the product to the clean area, it is essential to carry out a cleaning process. The cleaning method may involve disinfectant wiping, and not utilize UV irradiation.

Note: *When passing through transfer windows equipped with UV lamp, remember to proactively turn off the UV lamp inside the transfer window.*

INSTRUCTION FOR USE

The following protocol provides a general guide for using OptiVitro® Recombinant Trypsin Digestive Solution RF01 (RF01) in cell passaging. Adjustments can be made according to specific cell type requirements and culture systems.

1. Pre-warm RF01 and complete growth medium to 37℃ based on cell volume and culture requirements, RF01 may be used at ambient room temperature for many types of cells.
2. Discard the spent medium and wash cell surfaces with 10 mL of Dulbecco's Phosphate Buffered Saline (DPBS) without calcium and magnesium.
3. Add OptiVitro® Recombinant Trypsin Digestive Solution RF01 (typically 6 mL per T-175 flask) and gently tilt to distribute. Ensure complete coverage of cell monolayer with RF01.
4. Incubate at 37℃ for 3-5 minutes, observing cells under a microscope until over 80% are detached. Gently tap flask to dislodge cells if necessary.
5. Add an equal volume of medium or buffer to halt digestion, and pipette to achieve a single-cell suspension. Transfer the cell suspension to a 15 mL conical tube. If more than 80% detachment is achieved, proceed immediately. Over-incubation may cause clumping. For high-confluence cultures, cells may detach in sheets and require additional pipetting.
6. Centrifuge at 300 × g for 5 minutes.
7. Discard the supernatant and resuspend the cell pellet in pre-warmed complete medium at an appropriate density to maintain optimal growth. Percent viability using a Cell Counter, or similar automated or manual methods may be used.
8. Place cells in a humidified incubator at 37℃ with 5% CO_2. Incubate and subculture according to normal protocols depending on your cell type.

DISCLAIMER

1. Use the product according to the manual instructions. Deviations from these instructions are at the user's risk, and our company will not be responsible for any resulting product performance deviations.
2. This product is for scientific research and commercial production only and is not intended for clinical diagnosis or treatment. Users assume all risks for unauthorized use, and our company shall not be responsible for any consequences.