

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

Catalog Number RF000-N031S





PRODUCT DESCRIPTION

OptiVitro[®] Recombinant Trypsin Digestive Solution RF01 is a carefully formulated, recombinant enzyme solution designed 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

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

| PERFORMANCE, APPLICATION AND RESTRICTION

- 1. Store RF01 in a dark environment, ideally in colored packaging to protect it from light exposure.
- 2. RF01 is also stable when stored in PET bottles at 2°C to 8°C to 18 months.
- 3. During transport, avoid prolonged exposure to fluorescent or other types of lighting to prevent discoloration.
- 4. For transport to sterile areas, implement thorough cleaning and sterilization methods, such as disinfectant wiping (avoid UV sterilization).
 - 5. For transfer through UV-sterilized windows, switch off UV lamps in advance.



INSTRUCTION FOR USE

The following protocol provides a general guide for using OptiVitro® Recombinant Trypsin Digestive Solution 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 °C based on cell volume and culture requirements.
 - 2. Note: RF01 may be used at ambient room temperature for many types of cells.
- 3. Discard the spent medium and wash cell surfaces with 5 mL of Dulbecco's Phosphate Buffered Saline (DPBS) without calcium and magnesium.
- 4. Add OptiVitro® Recombinant Trypsin Digestive Solution RF01 (typically 6-10 mL per T-175 flask) and gently tilt to distribute. Ensure complete coverage of cell monolayer with RF01.
- 5. Incubate at 37°C for 3-5 minutes, observing cells under a microscope until over 80% are detached. Gently tap flask to dislodge cells if necessary.
- 6. 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.
- 7. Note: 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.
 - 8. Centrifuge at $300 \times g$ for 5 minutes.
- 9. Discard the supernatant and resuspend the cell pellet in pre-warmed complete medium at an appropriate density to maintain optimal growth.
 - 10. Note: Percent viability using a Cell Counter, or similar automated or manual methods may be used.
 - 11. Place cells in a humidified incubator at 37°C with 5% CO₂.
 - 12. Note: Incubate and subculture according to normal protocols depending on your cell type.



DISCLAIMER

1. The product should be used according to the instructions in the manual. If the experimenter fails to operate according to the instructions, our company will not be responsible for any deviation in product performance caused by this.

2. The product is only used for scientific research and commercial production, and is not suitable for clinical diagnosis and treatment. Otherwise, all consequences arising shall be borne by the experimenter, and our company shall not be responsible.

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