

Hieff Trans™ UltraProFect Transfection Reagent

Product description

Yeasten Hieff Trans™ UltraProFect Transfection Reagent is a highly efficient transfection reagent designed specifically for protein expression, primarily used for transient transfection and protein production in CHO and 293 suspension systems. It combines the powerful capability of rapid, ultra-high yield transient protein production in suspension culture with the exceptional advantages of CHO and 293 cell expression systems. This transfection reagent is meticulously designed for high-density CHO and 293 suspension cultures, significantly enhancing protein expression outcomes.

In various CHO cell lines (including expiCHO, CHO-S, CHO-K1, etc.) and 293 cell lines (expi293, 293F, etc.), this transfection reagent achieves highly efficient protein expression. It meets the preparation needs of complex proteins such as antigen proteins, cytokines, monoclonal antibodies, nanobodies, and bispecific antibodies. It significantly improves expression efficiency and yield, fulfilling protein production requirements across diverse application scenarios.

Specifications

Cat.No.	40830ES01	40830ES03	40830ES10	40830ES60
Size	100 µL	1 mL	10 mL	100 mL

Components

Name	40830ES01	40830ES03	40830ES10	40830ES60
UltraProFect Transfection Reagent	100 µL	1 mL	10 mL	100 mL

Storage

Store at 2~8°C. Valid for 2 years.

Instructions

Taking a 30 mL transient expression system with expiCHO cells as an example

Preparation one day before transfection (Day-1):

Passage the cells one day before transfection. For expiCHO cells, the cell density on the day of transfection should reach approximately 6×10^6 cells/mL. For expi293 cells, the cell density on the day of transfection should reach approximately $4-6 \times 10^6$ cells/mL. (The specific cell density can be adjusted according to existing protocols.)

Cell transfection (Day 0):

1. Take the cell culture and test the cell density. When the cell density exceeds 6×10^6 cells/mL, dilute the cells to 6×10^6 cells/mL with fresh culture medium.
2. Take the transfection reagent and the required plasmid. Before use, pipette the transfection reagent and plasmid separately to mix well.
3. Take 1.5 mL (5% of the expression volume) of basal medium in a centrifuge tube, add 60 µg of plasmid (referring to the total amount of plasmid; if there are 2 plasmids, the total amount of the 2 plasmids is 60 µg) and

pipette to mix well. Then add 120 μ L of transfection reagent and pipette to mix well (if using a 293 cell line, use 90 μ L of transfection reagent for a 30 mL expression system). Incubate at room temperature for 15~20 min. (For other expression volumes, the amounts of transfection reagent and plasmid can be calculated proportionally.)

4. Directly add the incubated plasmid-transfection reagent complex dropwise to the cell solution, mixing while adding, to allow the complex to disperse quickly and evenly.

5. Place the flask after transfection in a cell culture shaker for incubation.

6. Feeding (Day 1 and Day 4): Perform feeding and expression level detection according to the existing laboratory feeding protocol.

Notes

1. This product is for research use only.
2. For your safety and health, please wear a lab coat and disposable gloves during operation.
3. If you want to further increase expression, you can lower the temperature to 32°C for culture, with all other parameters unchanged.