LAMDA BIOTECH

PRODUCT INFORMATION

Catalog No.: TS316

Product Name: SusFexin

Size: 1ml

Description: **SusFexin** is a biodegradable polymer based transfection reagent for suspension cell transfection. When mix with DNA, it will form complex with DNA and transport the complex into a variety of suspension cell lines. A remarkable feature of the reagent is the rapid and complete degradation of polymer after transfection, leading to a much less cytotoxicity to the transfected cells and improving transfection efficiency and productivity of trans-gene expression.

Feature:

- *Superior transfection efficiency for suspension cell lines.*
- *No requirement of removal of serum from culture medium.*
- *No requirement for washing or changing of medium after transfection.*
- *Low cytotoxicity.*

Storage: **Store at 4°C.**

Protocols

Recommended Conditions for Transfection:

1. Make sure your plasmid DNA is in high quality, clean and sterile.
2. Dilute the Transfection Reagent and plasmid DNA in serum-free DMEM for transfection.
3. Make sure that the cells are healthy and greater than 90% viable before transfection.
4. Optimize transfection efficiency with the ratio of Transfection Reagent/DNA in the range of 2:1 to 3:1.

Typical Procedure for Suspension Cell Transfection (using 30ml CHO cells, scale up or down proportionally**):**

1. One day before transfection, freshly seed the cells properly and grow the cells for next day transfection.
2. On the day of transfection, make sure cell line at the density about 1×10^6 cells/ml in a total of 30 mL of culture medium.
3. Place the flask containing cells in a 37°C incubator on an orbital shaker. **Important:** For best results, make sure to have a single-cell suspension. It may be necessary to vortex the cells vigorously for 10–30 seconds to break down cell clumps. The viability of cells must be >90%.
4. For each transfection of 30ml suspension cell culture (1×10^6 cells/ml), dilute 25μg of plasmid DNA in 1ml of serum free DMEM. Vortex to mix.
5. Dilute 60μL of the **SusFexin** in 1ml of serum free DMEM. Vortex to mix.
6. Combine the above diluted **SusFexin** and the diluted DNA. Mix gently but well.
7. To allow the formation of **SusFexin-DNA Complex**, incubate the mixture for 10 minutes at room temperature. **Note:** Never incubate longer than 20 minutes for this step.
8. After 10 min incubation, transfer the entire 2 mL of the **SusFexin-DNA Complex** to the flask containing 30mL suspension cells.
9. Incubate the cells in a 37°C incubator with a humidified atmosphere of 8% CO_2 in air on an orbital shaker rotating at 125rpm.
10. Harvest cells or media (if recombinant protein is secreted) at around 48 hours post-transfection for downstream procedures.

Important Note:

1. When prepare the complex,never use Opti-MEM to dilute plasmid DNA and the **SusFexin** because trace amount of serum from Opti-MEM may interfere the formation of **SusFexin-DNA Complex**.
2. For productive transfection of different suspension cell lines, pilot experiments may be needed to optimize cell density, cell viability, and Transfection Reagent/DNA ratio for each cell line.