

Tee Technology (Triggered Endosomal Escape) DNA Delivery

To find the ideal conditions, DreamFect™ must be tested at ratios of **2 µL/µg**, **3 µL/µg** and **4 µL/µg** (µL of DreamFect Gold / µg of DNA). For the DNA quantity, we suggest **0.125 µg** per well in 96-well, **0.5 µg** per well in 24-well and **2 µg** per well in 6-well.

1. Prepare 3 wells: seed the cells to be at 70% confluent on the day of transfection



96-well plate
0.05-0.2 x 1.10⁵ cells



24-well plate
0.5-1 x 1.10⁵ cells



6-well plate
2-5 x 1.10⁵ cells

2. Prepare 3 identical tubes of DNA



96-well plate

0.125 µg in 25 µL of serum-free medium or buffer **X 3**

24-well plate

0.5 µg in 50 µL of serum-free medium or buffer **x 3**

6-well plate

2 µg in 100 µL of serum-free medium or buffer **x 3**

3. Prepare 3 tubes of DreamFect



96-well plate

0.25 µL/0.375 µL/0.5 µL in 25 µL of serum-free medium or buffer

24-well plate

1 µL/1.5 µL/2 µL in 50 µL of serum-free medium or buffer

6-well plate

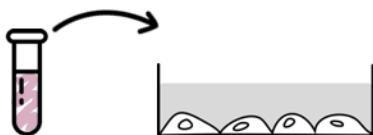
4 µL/6 µL/8 µL in 100 µL of serum-free medium or buffer

4. Mix each DNA suspension to each tube of DreamFect



Incubate 15—20 min at RT

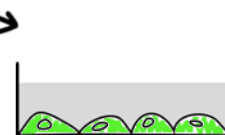
5. Distribute each mix dropwise onto the cells to insure uniform distribution



Distribute each preparation of complexes in each well



Incubate 24 to 72 h at 37°C RT



Chose the best ratio DNA: DreamFect

Contact us regarding protocols for DNA transfection in suspension cells, optimization procedures or for gene silencing with siRNA at: tech@ozbiosciences.com or visit our website: www.ozbiosciences.com.

Before you begin

DreamFect™ is a lipopolyamine formulation specifically designed to achieve high transfection efficiency in a wide variety of cell lines and primary cells.

Protocol | General considerations

- Allow reagents to reach room temperature.
- Use medium w/o any supplement for preparation of complexes, avoid using RPMI.
- Sensitive cells may need a medium change 3-4 h after transfection. Optionally, replace medium 24h post-transfection.

1. Cells preparation:

One day before transfection prepare the cells according to table 1 (recommended 70% confluence).

Cell culture format	Adherent cell nb. / well
96-well	0.05-0.2 x 1.10 ⁵
24-well	0.5-1 x 1.10 ⁵
6-well	2-5 x 1.10 ⁵

Table 1: Cell number suggested per well.

2. Preparation of DNA/DreamFect complexes:

a. **DNA:** Dilute the indicated quantity of DNA in **25** to **100 µL** of culture medium w/o supplement (refer to Table 2).

b. **DreamFect:** vortex the reagent and dilute the indicated quantity of DreamFect in **25** to **100 µL** of culture medium w/o supplement (refer to Table 2).

c. Add DNA solution to DreamFect solution, mix gently by carefully pipetting up and down.

d. Incubate the mixture at room temperature for **15-20 min.**

⚠ Do not vortex or centrifuge.

3. Transfection:

a. Add the complexes onto cells drop by drop and gently rock the plate to ensure a uniform distribution.

b. Cultivate the cells at **37°C** in a CO₂ incubator under standard conditions until evaluation of transgene expression.

Cell culture format	DNA quantity	DreamFect volume	Dilution volume	Transfection volume
96-well	0.125 µg	0.375 µL	2 x 25 µL	200 µL
24-well	0.5 µg	1.5 µL	2 x 50 µL	500 µL
6-well	2 µg	6 µL	2 x 100 µL	2 mL

Table 2: Recommended DNA amounts, DreamFect volumes and transfection conditions.

Protocol | Suspension cells | siRNA transfection | Protein production

Contact us regarding protocols for DNA transfection in suspension cells, optimization procedure, gene silencing with siRNA, protein production, co-transfections... or any technical question:

✉ - tech@ozbiosciences.com.

Use, handling and storage

For Research Use Only. Not for use in humans. Not for use in diagnostic or therapeutic purposes.

Shipping conditions: Room Temperature

Storage conditions DreamFect: 4°C

Shelf life: 1 year from the date of purchase

Kit contents

DF40500: 500 µL of DreamFect

DF41000: 1 mL of DreamFect

DF45000: 5x1 mL of DreamFect

Certificate of analysis on demand.

Related Products

Ref	Description
#DG80500	DreamFect Gold transfection reagent
#PG61000	PolyMag Neo for hard-to-transfect cells
#PL00020	pVectOZ transfection plasmids – positive controls

Purchaser Notification | Conditions of Sale

This product is sold in accordance with our general conditions of sale that you can find on our website: <https://ozbiosciences.com/content/3-terms-and-conditions>.