Lipomaster 2000 Transfection Reagent

NB-54-0345-01
NB-54-0345-02

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#Cat: NB-54-0345-01 **Size: 1.5ml**
#Cat: NB-54-0345-02 **Size: 4x1.5ml**

Product Description:

Lipomaster 2000 Transfection Reagent is a liposome-mediated transfection reagent. It is applicable for plasmid DNA and RNA transfection of various adherent or suspension cells. Lipomaster 2000 Transfection Reagent has the excellent ability to form liposome/nucleic acid complexes and rapid release of nucleic acid transfected into cells, which ensures excellent transfection performance and extremely low cytotoxicity. The presence of serum and antibiotics does not affect its transfection effect, so the formed liposome/nucleic acid complex can be directly added to the complete medium. There is no need to change the medium before and after transfection, which simplifies the operation.

Components

Components	NB-54-0345-01	NB-54-0345-02
Lipomaster 2000 Transfection Reagent	1.5ml	4x1.5ml

Storage

Store at 2 ~ 8°C. Adjust the shipping method according to the destination.
▲Please invert this product upside down several times to mix thoroughly before each use. Do not freeze.

Applications

It is applicable for most eukaryotic cells: 293T, A549, HeLa, SW480, 4T1, Jurkat, NIH3T3, MDA-MB-453, Vero, K562, Raw264.7, etc.

Notes

For Research Use Only. Not for use in diagnostic procedures.

1. Cell density varies greatly with cell lines, and cell density directly determines transfection efficiency. In general, transfection can be performed when the cell density reaches 60% - 80% to achieve higher transfection efficiency. However, the optimal transfection density varies from cell to cell. Therefore, when transfecting a specific cell for the first time, the optimal transfection density of the cell can be confirmed by pre-experiment. In addition, please try to keep the same inoculum ratio during the transfection process to improve the repeatability of the experiment.
2. Guarantee high-quality DNA of high purity, sterility, and endotoxin-free.
3. The ratio of Lipomaster 2000 Transfection Reagent to DNA: When transfecting certain cells for the first time, the recommended ratio of DNA to Lipomaster 2000 Transfection Reagent is 1:3. That is, 3 µl Lipomaster 2000 Transfection Reagent is used for 1 µg DNA. The usage of Lipomaster 2000 Transfection Reagent used to transfect 1 µg of DNA can be adjusted between 1 - 5 µl to obtain better transfection efficiency.
4. Cell transfection experiments should be performed gently. Note that Lipomaster 2000 Transfection Reagent and DNA should be diluted separately with opti-MEM first, then add DNA/opti-MEM dropwise to Lipomaster 2000 Transfection Reagent/opti-MEM. Mix well to form complexes

Experiment Process

◇ Transient transfection of cells (take 24-well plate transfection as an example)

Cell inoculation

1. Subculture the cells about 24 h before transfection, and inoculate at a density of about 0.5 - 2 × 105 cells/well.
2. Overnight incubation

Formation of lipomaster 2000 Transfection Reagent/DNA complexes

1. Add 25 µl opti-MEM medium and 1.5 µl Lipomaster 2000 Transfection Reagent to a 1.5 ml sterile centrifuge tube, then mix gently with a pipette.
2. Add 25 µl opti-MEM medium and 0.5 µg DNA to a 1.5 ml sterile centrifuge tube, then mix gently with a pipette.
3. Add DNA/opti-MEM to Lipomaster 2000 Transfection Reagent/opti-MEM, mix gently with a pipette. Let it stand at room temperature for 5 min before transfection.

Transfection

1. Add the Lipomaster 2000 Transfection Reagent/DNA complex mixture to the culture medium, then shake the petri dish gently to disperse it evenly.

▲ For special cases, the fresh serum-containing medium can be replaced before transfection to prevent cell death caused by excessive cell density and insufficient nutrition during the culture period.

2. Overnight incubation for 24 - 48 h.

▲ If the fresh culture medium needs to be replaced after transfection, please replace it after 6 to 12 h of adding Lipomaster 2000 Transfection Reagent/DNA complexes.

◇Transfection system adjustment

Table 1. Recommended initial transfection conditions for different culture systems

Petri Dish		96-well Plate	24-well Plate	6-well Plate	6 cm Dish	10 cm Dish
Surface Area (cm2)		0.35	1.9	9.6	20	59
Complex Formation	Serum-free Media (µl)	2 × 5	2 × 25	2 × 100	2 × 250	2 × 500
	Lipomaster 2000 Transfection Reagent (µl)	0.3	1.5	7.5	30	45
Reaction	1 µg/µl plasmid (µl)	0.1	0.5	2.5	10	15
Complete Growth Media (ml)		0.1	0.5	2	5	10

▲The above protocol is for reference only and can be optimized according to the specific situation.