Product Information

LipoGeneOM 2000SS Transfection Reagent

Catalog: OM625685

Unit Size: 0.75mL, 1.5mL

Kit Contents:

Component	Size 2
LipoGene OM2000SS Reagent	1.5 mL
OM2000SS Reagent	1.5 mL

Storage and Handling

Storage at 4℃. **Do not freeze**. Product is stable for at least 12 months from date of receipt when stored as recommended.

Description

LipoGeneOM 2000SS is a newly developed and proprietary reagent for the transfection of nucleic acids into eukaryotic cells. It is suitable for transfecting DNA, RNA, and oligonucleotides into mammalian cells.

LipoGeneOM 2000SS has the following advantages:

a. Superior performance—the highest transfection efficiency in many cell types and formats.

b. Improved cell viability—gentle on your cells, with low toxicity.

c. It is not necessary to remove complexes or change/add medium after transfection.

d. The amount of LipoGeneOM 2000SS Reagent for successful transfection varies. Start any new transfection by testing the recommended two concentrations of LipoGeneOM 2000SS Reagent to determine an optimum Amount.

e. Versatile—one reagent for DNA, RNA, and co-transfection.

The complexes can be removed after 4-6 hours by replacing with refresh medium (optional).

Efficiently Transfect Difficult-to-Transfect Cells

LipoGeneOM 2000SS is designed to efficiently transfect difficult-to-transfect cells, yielding superior transfection performance across the broadest array of cell types.

Quality control

LipoGeneOM 2000SS has been extensively tested by transfection of HEK293 cells with an EGFP reporter containing plasmid. LipoGeneOM 2000SS is free of microbial contamination.

Guidelines for transfection

1. Plasmid DNA transfection

Use the following procedure to transfect DNA into mammalian cells in a 24-well format. For other formats, see "Scaling up or down transfections". All amounts and volumes are given on a per well basis. Prepare complexes using a DNA (μg) to LipoGeneOM 2000SS (μl) ratio of 1:2 for most cell lines.

1.1 Seeding cells for transfection

The day before transfection, plate cells in 500 μl of growth medium without antibiotics so that cells will be 70-90% confluent at the time of transfection.

1.2 For each transfection sample, prepare complexes as follows:

a. Prepare 2-tube DNA dilution solutions: Dilute DNA (0.5-1ug/μL) in 25 μL of Opti-MEM Reduced Serum Medium without serum (or other medium without serum). then add 1μL OM2000SS reagent to each tube and mix gently.

b. Mix LipoGeneOM 2000SS gently before use, then dilute the appropriate amount (0.75μL, 1.5μL) in 25 μl of

Opti-MEM Medium. Mix gently.

c. add the diluted DNA to diluted LipoGeneOM 2000SS (total volume = 50 µl). Mix gently and incubate for 10-15min at room temperature.

1.3 Add the 50 µl of complexes to each well containing cells and medium. Mix gently by rocking the plate back and forth.

1.4 Incubate cells at 37°C in a CO_2 incubator for 2-4 days prior to testing for transgene expression.

Note: Medium may be replace with complete growth medium within 4–24 hours posttransfection.

2. RNAi or siRNA transfection

To transfect cells with siRNA, follow the protocol as described for DNA but do not add OM2000SS Reagent when diluting the siRNA. Use this brief procedure to transfect RNAi or siRNA into mammalian cells in a 24-well format.

2.1 One day before transfection, plate cells in 500 µl of growth medium without antibiotics such that they will be 30-50% confluent at the time of transfection. **Note:** Transfecting cells at a lower density allows a longer interval between transfection and assay time, and minimizes the loss of cell viability due to cell overgrowth.

2.2 For each transfection sample, prepare oligomer-LipoGeneOM 2000SS complexes as follows:

a. Dilute 15 pmol RNAi or siRNA oligomer in 25 µL Opti-MEM Medium. Mix gently.

b. Mix LipoGeneOM 2000SS gently before use, then dilute 1.5 µL in 25 µL Opti- MEM Medium and mix gently.

c. add the diluted oligomer to the diluted LipoGeneOM 2000SS Mix gently and incubate for 10-15min at room temperature.

2.3 Add the oligomer- LipoGeneOM 2000SS complexes to each well containing cells and medium. Mix gently by rocking the plate back and forth. Incubate the cells at 37°C in a CO_2 incubator for 24-96 hours until you are ready to assay for gene knockdown. Medium may be changed after 4-6 hours.

Table1. Scaling up or down LipGene OM2000SS Transfection Reagent Transfections

Culture vessel	Vol.growth medium	Vol. of dilution medium (µL)	DNA Transfection			siRNA Transfection	
			DNA (ug)	OM2000SS Reagent (µL)	LipoGene 2000SS(µL)	siRNA (pmol)	LipoGene 2000SS (µL)
96-well	100 µL	2×5	0.1	0.2	0.15, 0.3	3	0.3
24-well	500 µL	2×25	0.5	1	0.75, 1.5	15	1.5
12-well	1 mL	2×50	1	2	1.5, 3	30	3
6 孔板	2 mL	2×125	2.5	5	3.75, 7.5	75	7.5
60-mm	5 mL	2×250	5.5-11	11-22	8.25, 16.5	166	17
10 cm	10 mL	2×500	14-28	28-56	21.7, 43.4	434	43