Product Information

Name: Lipofectamine OM RNAiMAX Transfection Reagent

Catalog: OM626433

Size: 0.75 mL, 1.5 mL

Kit Contents:

Component	Size 1	Size 2
A. Lipofectamine OM RNAiMAX Transfection	0.75 mL	1.5 mL
B. LipoGene™ Reagent	0.75 mL	1.5 mL

Storage and Handling

Storage at 4℃. **Do not freeze**. Product is stable for 12 months from the date of receipt.

Product Description

Lipofectamine OM RNAiMAX is a newly developed and proprietary reagent for the transfection of nucleic acids into eukaryotic cells. It is suitable for transfecting plasmid DNA, RNAi plasmid (shRNA, miRNA) and Synthetic siRNA into mammalian cells.

Lipofectamine OM RNAiMAX has the following advantages:

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

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

c. Not necessary to remove complexes or change/add medium after transfection.

d. The amount of Lipofectamine OM RNAiMAX Reagent for successful transfection varies. Start any new transfection by testing the recommended two concentrations of Lipofectamine OM RNAiMAX 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

Lipofectamine OM RNAiMAX is designed to efficiently transfect difficult-to-transfect cells, yielding superior transfection performance across the broadest array of cell types.

Quality control

Lipofectamine OM RNAiMAX has been extensively tested by transfection of HEK293 cells with an EGFP reporter containing plasmid. Lipofectamine OM RNAiMAX is free of microbial contamination.

Guidelines for transfection

1. RNAi or siRNA transfection

Use this brief procedure to transfect RNAi or siRNA into mammalian cells in a 24-well format. For other formats, see Table 1. All amounts and volumes are given on a per well basis.

1.1 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.

1.2 For each transfection sample, prepare oligomer-Lipofectamine OM RNAiMAXTransfection Reagent complexes as follows:

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

b. Mix Lipofectamine OM RNAiMAXTransfection Reagent 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 Lipofectamine OM RNAiMAXTransfection Reagent. Mix gently and incubate for 10-15 min at room temperature.

1.3 Add the oligomer- Lipofectamine OM RNAiMAX Transfection Reagent complexes to each well containing cells and medium. Mix gently by rocking the plate back and forth. Incubate the cells at 37℃ 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.

2. Plasmid DNA transfection

Use the following procedure to transfect DNA into mammalian cells in a 24-well format. Prepare complexes using a DNA (µg) to Lipofectamine OM RNAiMAXTransfection Reagent (µL) ratio of 1:2 for most cell lines.

2.1 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.

2.2 For each transfection sample, prepare complexes as follows:

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

b. Mix Lipofectamine OM RNAiMAXTransfection Reagent gently before use, then dilute the appropriate amount (0.75 µL, 1.5 µL) in 25 µL of Opti-MEM Medium. Mix gently.

c. Add the diluted DNA to diluted Lipofectamine OM RNAiMAXTransfection Reagent (total volume = 50 µL). Mix gently and incubate for 10-15 min at room temperature.

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

2.4 Incubate cells at 37℃ 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 post transfection.

Table1. Scaling up or down Lipofectamine OM RNAiMAX Transfection Reagent Transfections

Culture vessel	Vol.growth medium	Vol.of dilution medium (µL)	DNA Transfection			siRNA Transfection	
			DNA (µg)	B. LipoGene ™ Reagent (µL)	A. Lipofectamine OM RNAiMAX Transfection (µL)	siRNA (pmol)	A. Lipofectamine OM RNAiMAX Transfection (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-well	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