## Lipofectamine® RNAiMAX Reagent

#### Package Contents

Catalog Number	Size
13778-100	$0.1  \mathrm{mL}$
13778-030	$0.3  \mathrm{mL}$
13778-075	0.75 mL
13778-150	1.5 mL
13778-500	15 mL



## Storage Conditions

Store at 4°C (do not freeze).



#### Required Materials

- siRNA or miRNA (10 μM stock)
- Opti-MEM® Reduced Serum Medium
- Eppendorf tubes



#### **Timing**

Preparation: 10 minutes Incubation: 5 minutes Final Incubation: 1-3 days



#### Selection Guide

Lipofectamine® Reagents

Go online to view related products.



# Product Description

■ Lipofectamine® RNAiMAX Transfection Reagent is a proprietary formulation for transfecting small RNAs (e.g., siRNA, Silencer® Select siRNA, Stealth® RNAi, mirVana™ miRNA mimics and inhibitors) into a wide range of eukaryotic cells.



#### Important Guidelines

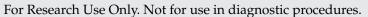
- RNA-Lipofectamine® RNAiMAX complexes must be made in serum-free medium such as Opti-MEM® Reduced Serum Medium and can be added directly to cells in culture medium, in the presence or absence of serum/antibiotic.
- It is not necessary to remove complexes or change/add medium after transfection.
- Use 10 nM RNAi duplex as a starting point. BLOCK-iT<sup>TM</sup> Alexa Fluor<sup>®</sup> Red Fluorescent Oligo (Cat. no. 14750100) can be used to determine transfection efficiency.



#### Online Resources

Visit our product page for additional information and protocols. For support, visit www.lifetechnologies.com/support.







#### **Protocol Outline**

- A. Plate cells so they will be 60-80% confluent at the time of transfection.
- B. Prepare RNA-lipid complexes.
- C. Add RNA-lipid complexes to cells.

### Lipofectamine® RNAiMAX Transfection Protocol

**1** See page 2 to view a typical RNAiMAX transfection procedure.

#### **Transfection Amounts**

	96-well	24-well	6-well
Final siRNA used per well	1 pmol	5 pmol	25 pmol
Final Lipofectamine® RNAiMAXused per well	0.3 μL	1.5 μL	7.5 µL

#### Reverse Transfection of RNAi

Reverse transfection is faster to perform than forward transfection and is the method of choice for high-throughput transfection. Perform reverse transfection by preparing complexes inside the wells, and then adding cells and medium. Because the cells and siRNA-lipid complexes are prepared on the same day, we recommended using 2.5× more cells than for a regular transfection method.

- **1** Scaling Up or Down Transfections
- Limited Product Warranty and Disclaimer Details

### Typical RNAiMAX Transfection Procedure

Transfect cells according to the following table. The transfection is designed for one RNA amount combined with one amount of Lipofectamine® RNAiMAX. The prepared mix is enough to have triplicates (96-well), duplicates (24-well), and single well (6-well) transfections, and account for pipetting variations. For additional information on scaling your transfection reaction, see page 1.

	Timeline Steps			
Day 0	1		Seed cells to be 60-80% confluent at transfection	
	2		Dilute Lipofectamine® RNAiMAX Reagent in Opti-MEM® Medium	
	3	>	Dilute siRNA in Opti-MEM® Medium	
Day 1	4		Add diluted siRNA to diluted Lipofectamine® RNAiMAX Reagent (1:1 ratio)	
	5	5	Incubate	
	6		Add siRNA-lipid complex to cells	
Day 2-4	7		Visualize/analyze transfected cells	

Procedure Details			
Component	96-well	24-well	6-well
Adherent cells	$1-4 \times 10^4$	$0.5-2 \times 10^5$	$0.25-1 \times 10^6$
Opti-MEM® Medium	25 μL	50 μL	150 µL
Lipofectamine® RNAiMAX Reagent	1.5 µL	3 µL	9 µL
Opti-MEM® Medium	25 μL	50 μL	150 µL
siRNA (10 μM)	0.5 µL (5 pmol)	1 μL (10 pmol)	3 μL (30 pmol)
Diluted siRNA	25 μL	50 μL	150 µL
Diluted Lipofectamine® RNAiMAX Reagent	25 μL	50 μL	150 µL
Incubate for 5 minutes at room temperature			

#### Incubate for 5 minutes at room temperature.

Component	96-well	24-well	6-well
siRNA-lipid complex per well	10 μL	50 μL	250 μL
Final siRNA used per well	1 pmol	5 pmol	25 pmol
Final Lipofectamine® RNAiMAX used per well	0.3 μL	1.5 µL	7.5 µL

Incubate cells for 1–3 days at 37°C. Then, analyze transfected cells.