









Lipofectamine® RNAiMAX Reagent

 Package Contents	Catalog Number <ul style="list-style-type: none"> ▪ 13778-100 ▪ 13778-030 ▪ 13778-075 ▪ 13778-150 ▪ 13778-500 	Size <ul style="list-style-type: none"> 0.1 mL 0.3 mL 0.75 mL 1.5 mL 15 mL
 Storage Conditions	Store at 4°C (do not freeze).	
 Required Materials	<ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ▪ 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™ Alexa Fluor® 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 .	

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



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

 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® RNAiMAX used 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.

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	Procedure Details			
Day 0	1		Seed cells to be 60-80% confluent at transfection	Component	96-well	24-well	6-well
	2		Dilute Lipofectamine® RNAiMAX Reagent in Opti-MEM® Medium	Adherent cells	1–4 × 10 ⁴	0.5–2 × 10 ⁵	0.25–1 × 10 ⁶
Day 1	3		Dilute siRNA in Opti-MEM® Medium	Opti-MEM® Medium	25 µL	50 µL	150 µL
	4		Add diluted siRNA to diluted Lipofectamine® RNAiMAX Reagent (1:1 ratio)	Lipofectamine® RNAiMAX Reagent	1.5 µL	3 µL	9 µL
	5		Incubate	Opti-MEM® Medium	25 µL	50 µL	150 µL
	6		Add siRNA-lipid complex to cells	siRNA (10 µM)	0.5 µL (5 pmol)	1 µL (10 pmol)	3 µL (30 pmol)
Day 2–4	7		Visualize/analyze transfected cells	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.			
				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.			