GeticoFect RNAiPlus Transfection Reagent User Manual

Ordering Information

Product Name	Product Number	Specification	Storage
GeticoFect RNAiPlus Transfection Reagent	133201	0.75 mL	4°C
GeticoFect RNAiPlus Transfection Reagent	133202	1.5 mL	4°C
GeticoFect RNAiPlus Transfection Reagent	133203	15 mL	4°C

Product Description

GeticoFect RNAiPlus transfection reagent delivers high-efficiency transfection across the broadest range of cell types, suitable for siRNA-mediated gene knockout experiments. RNAiPlus is a proprietary, optimized nano-transfection reagent specifically designed for delivering siRNA or miRNA into all cell types.

For common cell types, GeticoFect RNAiPlus offers higher efficiency and lower reagent consumption than other reagents, providing better cost-performance for users. The 1.5 mL specification is sufficient for up to 1000 transfection reactions (in 24-well plates).

Shipping and Storage

Ship with ice packs. Store at 2–8°C. Do not freeze.

Transfection Protocol

Note: The dosage of transfection reagent varies by cell type and experimental conditions. Gradient optimization is recommended for initial use.

1. Inoculate cells to 70–90% confluence and perform transfection according to the following cell counts:

Culture Vessel	96-Well	24-Well	6-Well
Cell Count	1–4×10^4	0.5–2×10^5	0.25–1×10^6

2. Take a new EP tube, dilute GeticoFect RNAiPlus reagent with Opti-MEM medium as below, prepare two replicates, and mix thoroughly:

Culture Vessel	96-Well	24-Well	6-Well
Opti-MEM Medium	5 µL	25 µL	125 µL
GeticoFect RNAiPlus	0.3 µL	1.5 µL	7.5 µL

3. Take a new EP tube, dilute the siRNA sample to be transfected with Opti-MEM medium to prepare the siRNA premix, and mix thoroughly:

Culture Vessel	96-Well	24-Well	6-Well
Opti-MEM Medium	5 µL	25 µL	125 µL
RNAiER	0.3 µL	1.5 µL	7.5 µL
siRNA (10 µM)	0.1 µL (1 pmol)	0.5 µL (5 pmol)	1.5 µL (25 pmol)

4. Take a new EP tube, mix the premixes from steps 2 and 3 at a 1:1 ratio, pipette gently to homogenize, and incubate at room temperature for 5 minutes:

Culture Vessel	96-Well	24-Well	6-Well
Diluted siRNA	5 µL	25 µL	125 µL
Diluted GeticoFect RNAiPlus	5 µL	25 µL	125 µL

5. Add the incubated mixture to cells in the following volumes:

Culture Vessel	96-Well	24-Well	6-Well
siRNA-GeticoFect RNAiPlus Complex	10 µL	50 µL	250 µL
siRNA Dosage per Well	1 pmol	5 pmol	25 pmol
GeticoFect RNAiER Dosage per Well	0.3 µL	1.5 µL	7.5 µL
GeticoFect RNAiPlus Dosage per Well	0.3 µL	1.5 µL	7.5 µL

6. Incubate transfected cells at 37°C for 1–3 days, then analyze transfection efficiency and cell status under a microscope.

Appendix: Configuration Table for Common Experimental Systems (Transfection reagent dosage is linearly correlated with medium volume; adjust reagent and RNAi dosages according to the table and actual medium volume)

Culture Vessel Type	Relative Surface Area	Seeding Medium Volume	Dilution Medium (Reverse Transfection)	Dilution Medium (Forward Transfection)	RNAi (pmol)	RNAi (nM)	GeticoFect RNAiPlus
96-Well	0.2	100 µL	20 µL	2×10 µL	0.12–6	1–50	0.1–0.3 µL
48-Well	0.4	200 µL	40 µL	2×20 µL	0.24–12	1–50	0.2–0.6 µL
24-Well	1	500 µL	100 µL	2×50 µL	0.6–30	1–50	0.5–1.5 µL
6-Well	5	2.5 mL	500 µL	2×250 µL	3–150	1–50	2.5–7.5 µL
60 mm	10	5 mL	1 mL	2×500 µL	6–300	1–50	5–15 µL
100 mm	30	10 mL	2 mL	2×1 mL	12–600	1–50	15–35 µL