



GeticoFect mRNA Transfection Reagent Instruction Manual

Ordering Information

Product Name	Product No.	Specification	Storage
GeticoFect mRNA Transfection Reagent	130301	0.75 mL	4°C
GeticoFect mRNA Transfection Reagent	130302	1.5 mL	4°C
GeticoFect mRNA Transfection Reagent	130303	15 mL	4°C

Product Description

GeticoFect mRNA Transfection Reagent is a novel nano-transfection reagent specially developed for mRNA transfection. It exhibits high transfection efficiency in neurons and a wide range of primary cells, thereby improving application outcomes and enabling more biologically relevant research. This newly optimized nano-particle technology allows for one-step transfection of the maximum possible amount of mRNA.

For common cell types, GeticoFect mRNA reagent offers higher efficiency and lower usage compared to other reagents, thus bringing better cost-performance to customers. The 1.5 mL specification product is sufficient to complete up to 1500 transfection reactions (in 24-well plates).

Shipping and Storage

Shipped with ice packs, stored at 2–8°C. Do not freeze.

Transfection Procedure

Note 1: The usage amount of the transfection reagent is affected by cell types and experimental conditions. It is recommended to set gradients for optimization when using it for the first time.

Note 2: This product is specially optimized for use in serum-containing and serum-free media. The medium



does not need to be changed before transfection; the transfection reagent and sample can be directly mixed and added to the culture medium. For some difficult-to-transfect cells, it is recommended to replace them with serum-free medium before transfection and then switch back to complete medium or add serum after 4–6 hours of transfection.

1. Inoculate cells to 70–90% confluency. Perform transfection according to the following cell counts:

Culture Dish Type	96-Well	24-Well	6-Well
Cell Number	1–4×10 ⁴	0.5–2×10 ⁵	0.25–1×10 ⁶

2. Take a new EP tube, dilute GeticoFect mRNA transfection reagent with Opti-MEM medium according to the table below, make two replicates, mix thoroughly, and incubate at room temperature for 10 minutes.

Culture Dish Type	96-Well	24-Well	6-Well
Opti-MEM Medium	5 μL	25 μL	125 μL
GeticoFect mRNA	0.15 μL or 0.3 μL	0.75 μL or 1.5 μL	3.75 μL or 7.5 μL

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

Culture Dish Type	96-Well	24-Well	6-Well
Opti-MEM Medium	5 μL	25 μL	125 μL
mRNA (0.5–5 μg/μL)	0.1 μg	0.5 μg	2.5 μg

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



Culture Dish Type	96-Well	24-Well	6-Well
Diluted mRNA	5 μ L	25 μ L	125 μ L
Diluted GeticoFect mRNA	5 μ L	25 μ L	125 μ L

5. Add the mixture incubated in the above step to the cells according to the following volumes.

Culture Dish Type	96-Well	24-Well	6-Well
mRNA-GeticoFect mRNA Complex	10 μ L	50 μ L	250 μ L
mRNA Dosage per Well	100 ng	500 ng	2500 ng
GeticoFect mRNA Dosage per Well	0.15 μ L or 0.3 μ L	0.75 μ L or 1.5 μ L	3.75 μ L or 7.5 μ L

6. Incubate the transfected cells at 37°C for 1–2 days, and analyze the transfection efficiency and cell status using a microscope.