101Transfection Kit

Cat. #: P901

Storage: 4°C. **Shelf life:** 6 months

Product Size: 1 mL 101Transfection Reagent

Product Description (This product is for research use only)

101Transfection Reagent is a **unique nanoparticles** that delivers more DNA and siRNA to cells than other lipid-based transfection kits.

- ✓ **No media changes** needed
- ✓ **Antibiotics and serum compatible** – no need to remove
- ✓ **One-step** incubation - 15 minutes
- ✓ Work on **most cell types**

Reagent required not provided in this kit: serum-free DMEM with High Glucose

Positive control: human embryonic kidney 293T cells

Table 1. Suggested Reaction Matrix

Culture Dish	Area (cm^2)	Cell Number	Medium (mL)	DNA (µg)	101Transfection Reagent (µL)	DMEM (µL)
96-Well	0.2	1.4×10^4	0.1	0.1	0.3	10
48-Well	1	9.5×10^4	0.25	0.25	0.75	20
24-Well	2	1.9×10^5	0.5	0.5	1.5	50
12-Well	4	3.8×10^5	1.0	1	3	100
6-Well /35 mm	10	9.5×10^5	2.0	2.5	7.55	200
60 mm / T25	25	2.1×10^6	5.0	6-8	15-24	300
100 mm / T75	75	5.5×10^6	10	15-20	35-45	500
150 mm /T150	150	15×10^6	20	25-30	60-80	1000

Note:
For different cell type, the seeding cell density may vary. Customer should test the seeding condition to ensure the 70 ~ 80% confluency at the time of transfection. The transfection efficiency also depend on the cell type. For difficult-to-be-transfected cells, customer can try to increase the 101Transfection reagent volume up to 4 µl per µg of DNA.

Protocol (example of transfecting 293T cells in **one well of 24-well plate**. Refer to Table 1 for other plates or dishes)

Notice: Transfect cells at 70-80% confluency to achieve high transfection efficiency and low toxicity.

1. **Plating:** seed the cells **18 to 24 hours** prior to transfection in 24-well plate, at the density that allow the cells reaches 70~80% confluency at the time of transfection.
2. **Change medium: 2 hours before** transfection, remove culture medium and add **0.5 mL fresh** complete culture medium. (No need to use serum-free / antibiotics-free medium.)
3. In tube 1 add: 0.5 µg DNA
   50 µl DMEM (serum-free, High Glucose)
   Pipet up and down to mix well
4. In tube 2 Add: 1.5 µl 101Transfection Reagent
   50 µl DMEM (serum-free, High Glucose)
   Gently pipet up and down to mix well
5. Add tube 2 into tube 1. **Vortex** for **10 seconds**.
6. Incubate for **15 minutes** at **room temperature**.
7. Add the incubated mixture **drop-wise** to the cells, and homogenize by **gently swirling** the plate.
8. Return the cells to incubator.
9. Check transfection efficiency 24 to 48 hours post transfection.

-- The end --