## **Transfection Reagent**



Cat. #: AMS.P901 (1 ml); AMS.901S (0.1 ml)

Storage: 4°C Shelf life: 6 months

**Product Description** (This product is for research use only)

Our Transfection Reagent is a **unique nanoparticles** reagent 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 (cm²)	Cell Number	<b>Medium</b> (mL)	DNA (μg)	Transfection Reagent (μL)	DMEM (μL)
96-Well	0.2	1.4 x 10 <sup>4</sup>	0.13	0.1	0.3	10
48-Well	1	7.5 x 10 <sup>4</sup>	0.25	0.25	0.75	20
24 Well	2	1.5 x 10 <sup>5</sup>	0.50	0.5	1.5	50
12-Well	4	3.0 x 10 <sup>5</sup>	1.0	1	3	100
6 Well /35 mm	10	9.0 x 10 <sup>5</sup>	2.0	2.5	7.55	200
60 mm / T25	25	2.5 x 10 <sup>6</sup>	5.0	6-8	15-24	300
100 mm / T75	75	5.0 x 10 <sup>6</sup>	10	15 20	35 45	500
150 mm /T150	150	15 x 10 <sup>6</sup>	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  $^{\sim}$  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 Transfection reagent volume up to 4  $\mu$ l per  $\mu$ g of DNA.

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**Protocol** (example of transfecting HEK293 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 Transfection Reagent

50 μL DMEM (serum-free, High Glucose)

Gently pipet up and down to mix well

- 5. Incubate at room temperature (20–25°C) for 3 min.
- 6. Transfer the mixture in tube 2 into tube 1. Then Vortex tube 1 for 10 seconds.
- 7. Incubate tube 1 for **15 minutes** at **room temperature**.
- 8. After incubation, add the incubated mixture **drop-wise** to the cells, and homogenize by **gently** swirling the plate.
- 9. Put the cells back to cell incubator.
- 10. Check transfection efficiency 24 to 48 hours post transfection.

Customer also buy:

-- The end -

DNA Extraction / PCR	Cat.#	Feature	
1-Drop PCR Mix (squeeze 1 drop do PCR, no pipetting)	W2599-5	squeeze bottle makes PCR easier	
Plasmid Miniprep	W0500-50	40 % below market price	
Endotoxin-Free Plasmid Maxiprep	W2104 10	40 % below market price	
Plasmid 96 Miniprep (4 x 96 rxn)	W0506 496	50 % below market price	
2x Gold Master Mix (with dyes, hot start, HiFi)	W0655-5	25 % below market price	

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