

EasyTrans Reagent

(Avoid repeated freeze-thaw cycles)

Description

EasyTrans has been validated to effectively and reproducibly transfect single siRNA or co-transfect DNA/siRNA to variety of mammalian cells with maximal transfection efficiency and minimal cytotoxicity. In addition, because of its high transfection efficiency, no or minimal toxicity and immunogenicity, EasyTrans also is a superior gene delivery tool into many animals *in vivo* including mice, rats, tadpoles and ducks via intravenous, intraventricular, subcutaneous, tracheal and intraperitoneal injections.

Basic information

Product Name	EasyTrans Reagent
Article Number	FK-K0204021
Specification	1.5mL
Storage	Store at +4°C or -20°C
Shelf life	12 months

in vitro transfection

Use the following procedure to transfect mammalian cells in a 6-well format. For other formats, please see table 1.

- Adherent cells:** Cells should be seeded a day prior to transfection in 6-well plates at an appropriate density. Before transfection, cells should be changed with 2 mL fresh 10% FBS medium.
Suspension cells: Just prior to preparing complexes, plate cells at an appropriate density in 2 mL of 10% FBS medium.
- Dilute 4 µg DNA in 250 µL PBS buffer and mix by pipetting up-down.
- Dilute 10 µL **EasyTrans** in 250 µL PBS, mix by pipetting up-down gently and incubate for 5 min at room temperature. Then combine the diluted DNA with diluted DNAHitrans, mix immediately by pipetting up-down and incubate for 20 minutes at room temperature.
- Add the 500 µL of mixture to each well dropwise. Mix gently by rocking the plate back and forth.
- Incubate cells at 37°C in a CO₂ incubator for 4-6 hours and then the medium is replaced by another 2mL fresh medium containing 10% FBS..

in vivo Transfection

- Dilute 10 µg of DNA in 50 µL of sterile PBS solution. Vortex gently and spin down briefly.
- Dilute 5 µL of **EasyTrans** in 50 µL of sterile PBS solution. Vortex gently and incubate for 5 min at room temperature.
- Add the diluted 50 µL of **EasyTrans** to the diluted 50 µL of DNA. Mix immediately by pipetting up-

down immediately and spin down briefly. Incubate 20 min at room temperature.

4. Inject animals. Please see table 2.

Table 1. Scaling Up or Down Transfections

Culture vessel	Surface area per well (cm ²)	Volume of plating medium	DNA in PBS volume	EasyTrans in PBS volume
96-well	0.3	100 µL	0.2 µg in 25 µL	0.5 µL in 25 µL
24-well	2	500 µL	0.8 µg in 50 µL	2.0 µL in 50 µL
12-well	4	1 mL	1.6 µg in 100 µL	4.0 µL in 100 µL
35-well	10	2 mL	4.0 µg in 250 uL	10 µL in 250 µL
6-well	10	2 mL	4.0 µg in 250 uL	10 µL in 250 uL
60-mm	20	5 mL	8.0 µg in 0.5 µL	20 µL in 0.5 mL
10-cm	30	15 mL	24 µg in 1.5 mL	60 µL in 1.5 mL

Table 2. Suggested Amount of DNA and Maximum Injection Volume

Animal	Route of injection	Suggested amount of DNA (µg)	Maximum injection volume (µL)
Adult mouse	Intravenous	25-125	400-600
	Retroorbital	40	200
	Intraperitoneal	100	600
	Heart	50	200
	Lung instillation	20	300
	Subcutaneous tumor	10	100
Nude mouse	Intravenous	50	200
	Subcutaneous tumor	10	100