

## SuperFectin<sup>™</sup> II In Vitro DNA Transfection Reagent

Cat NO.	2102-001	Size:	0.1mL
	2102-003		0.1mL * 3
	2102-010		1.0mL
	2102-030		1.0mL * 3

Vesion II May 2012

### Introduction:

SuperFectin<sup>™</sup> DNA transfection Reagent is a powerful transfection reagent. SuperFectin<sup>™</sup> is formulated by unique chemistry, ensures effective and reproducible transfection with invisible toxicity. SuperFectin<sup>™</sup> II DNA transfection Reagent is enhanced version with addition of an enhancer and was confirmed to be more powerful in delivering DNA to various of cell lines as well as primary cells.

### Important Guidelines for Transfection:

- The following standard protocol is for transfecting mammalian cells. To request protocol for lentivirus production and insect cells transfection, please contact your supplier.
- We strongly suggest using "General Protocol" first. If the "General Protocol" can't give satisfactory result (e.g., less than 10%), try the "Advanced Protocol".
- ♦ For high efficiency and lower toxicity, transfect cells at high density. We highly recommended 70~80% confluency.
- ♦ SuperFectin™ reagent is NOT interfered by serum and antibiotics. To lower cytotoxicity, transfect cells in presence of serum (10%) and antibiotics.
- ♦ We recommend the SuperFectin<sup>TM</sup>II (µL): DNA (µg) ratio of 3:1 as a starting point which usually gives satisfactory transfection efficiency with invisible cytotoxicity for different cell types.
- ♦ To ensure the formation of SuperFectin<sup>™</sup> II /DNA complex, we recommend using serum-free DMEM (High Glucose) to dilute DNA and SuperFectin<sup>™</sup> II Reagent instead of Opti-MEM.

Storage: SuperFectin™ in Vitro DNA Transfection Reagent is stable for up to 12 months at +4° C after receipt.
Manufactured: In USA

This product is for research use only. Not for use in diagnostic procedures.

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# A General Protocol for Transfecting Mammalian Cells



## Table 1. Recommended Amounts for Different Culture Vessel Formats

Culture Dish	Culture Medium(mL)	Diluent Volume(µL)	Plasmid DNA(µg)	Superfectin <sup>™</sup> IIReagent(µL)
24-well plate	0.5	2 x 25	0.5	1.5
12-well plate	0.75	2 x 38	0.75	2.25
6-well plate	1.0	2 x 50	1	3.0
60mm dish	2.8	2 x 100	2.5	7.5
100mm dish	5.0	2 x 250	5	15
T75 flask	8.0	2 x 400	14	27~54
250mL flask	18	2 x 800	35	75~150

## An Advanced Protocol for Transfecting Hard-to-Transfect Cells



Culture Dish	Surface Area(cm <sup>2</sup> )	Optimal Cell Number
96-well plate	0.3	0.3 x10 <sup>6</sup>
24-well plate	1.9	0.2 x10 <sup>6</sup>
12-well plate	3.5	0.4 x10 <sup>6</sup>
6-well plate	9.6	1.0 x10 <sup>6</sup>
60mm dish	21	2.7x10 <sup>6</sup>
100mm dish	58	7.3 x10 <sup>6</sup>
T75 flask	75	9.6 x10 <sup>6</sup>

Table 2. A Guideline for Optimal Cell Number Per Well in Different Culture Formats

Table 3. Recommended Amounts for Different Culture Vessel Formats

Culture Dish	Transfection Complex Volume(mL)	Plasmid DNA(µg)	Superfectin <sup>™</sup> IIReagent(µL)
96-well plate	0.02	0.2	0.8
24-well plate	0.10	1	4
6-well plate	0.2	2	8
60mm dish	0.5	5	20
100mm dish	1.0	8	32
T75 flask	1.5	36	144
250mL flask	2.5	100	400