BPfectin Transfection Reagent

Cat. # TF-1157-11

For Research Use Only

Description

BPfectin Transfection Reagent is a specially designed and synthesized cationic polymer formulation which offers extremely high transfection efficiencies of 293 suspension cells in serum-free CD 293 TGE Medium. It is available separately or as part of the Power 293 Expression System.

BPfectin Transfection Reagent can be used as transfection reagent for DNA delivery to different cell lines including HEK293, CHO-K1, 3T3, A549 and Hela cells. The proprietary formulation of the transfection reagent enable ultra-low cytotoxicity to cells post transfection and compatible with serum. It is suitable for academic research, stable transfection and transient expression production. Detailed transfection protocols on your application may vary and needs to be developed.

Product Features

Support high efficient transfection of mammalian cells in suspension and adherent culture
Ultra low cytotoxicity versus competitive alternatives and conventional cationic polymers
Scalable from culture plate to large scale stirred bioreactor
Ultra stable and long shell life
Chemically define and regulatory friendly

General Specification

Product Classification		Cell Type	Regulatory Statement	Shelf Life
Chemically Defined, Animal Origin-Free		Established Cell Lines	For Research Use Only	12 months
Catalog #	**Name of Product**	**Product Size**	**Storage**	**Shipping**
TF-1157-1.5mL	BPfectin Transfection Reagent	1.5mL	at -20℃	2-8℃
TF-1157-15mL	BPfectin Transfection Reagent	15mL	at -20℃	2-8℃

Usage Protocol:

Table 1:Ratio for transfection complexes formation

Plasmid for Transfection	293 Expression MAX-1	BPfectin	293 Culture
10μg	4μL	30μL	10 million cells

- Before transfection, passage 293 cells with CD 293 TGE Medium for at least 3 round from an adaptation procedure, seeding density greater than 0.5 $\times 10^6$ cells/ml, cell viability >95%. Culture at 150-180 rpm depending on your orbital shaker design and single cell distribution status.
- Seed 293 cells at 0.5 $\times 10^6$ cells/ml and transfer to pre-warmed fresh medium, subsequently grow the cells to 1.5 to 2.2 $\times 10^6$ cells/ml.
- The day before transfection, dilute the culture with fresh medium to 0.8 to 1.0 $\times 10^6$ cells/ml and cell density at transfection should range from 1.5 $\times$ 10^6 to 2.0 $\times$ 10^6 cells/ml, provided the doubling time is 24 h and viability is greater than 95%.
- On the day of transfection, using sterile 150 mM NaCl solution to dilute DNA plasmid and add 293 Expression MAX-1 (Catalog # EXP-711) according to the instruction.
- Add BPfectin (Catalog # TF-1157) at ratio of 3:1 (BPfectin : DNA; volume/weight) to DNA solution mix well with vortex for 3 sec. Note: DNA dosage for transfection is 1 ug per 1 million cells in culture, and volume of DNA-BPfectin complexes is 5% (v/v) of culture. (e.g. 500 μL to 10 mL culture).

- Incubate the complexes at RT for 10 min before transfection.
- Add DNA-BPfectin complexes to cells at 5% volume ratio mix well gently.
- 24 hours post transfection, add Feed X Supplement (Catalog # CF-1116) to culture at 10% volume ratio (e.g. 1 mL to 10mL culture)
- Harvest for purification typically 7 days post transfection or when cell viability drops below 55%.

Transfection Procedure

Timeline	On the day of transfection				24h post transfection
	1	2	3	4	5
Steps	Dilute DNA and 293 Expression MAX-1 with 150 mM NaCl Mix well	Add BPfectin dropwise to DNA Vortex for 3 sec	Incubate at RT for 10 min	Add DNA-BPfectin complexes to cells	Add Feed X Supplement 10% (v/v)
Diagram