ScreenFect™A *plus* Quick Protocol

ScreenFect™A *plus* Transfection Protocol

The optimal condition for successful transfection varies. Start any new transfection by testing the recommended two concentrations of ScreenFect™A *plus* Reagent to determine an optimum amount.

1-Step method (Reverse transfection method)

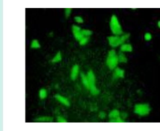
Timeline	Steps
Day 0	
1 — Reagent, Dilution Buffer	**Dilute ScreenFect™A *plus* Reagent※1 in Dilution Buffer, and then mix well** **※1 Vortex the reagent before use**
1 — Plasmid DNA, Dilution Buffer	**Dilute DNA in Dilution Buffer, and then mix well**
2 — DNA-lipid complex	**Add diluted DNA to diluted ScreenFect™A *plus* Reagent, and then incubate for 5 minutes ～ at room temperature※2** **※2 Incubation is available until the step 4 has been completed**
3 — Cultured cells	**Prepare required cells for transfection**
4 — Cell suspension	**Detach cells and prepare the cell suspension, and then transfer the required numbers of cell suspension to cell culture plate**
5 — DNA-lipid complex	**Add DNA-lipid complex from step 2 to well of cell culture plate from step 4**
Day 1～	
6	**Visualize/analyze transfected cells**

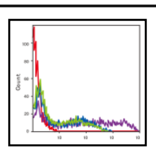
Procedure Details

Component	96-well		24-well		12-well		6-well	
Dilution Buffer for ScreenFect™A *plus*	5 µL		25 µL		50 µL		125 µL	
DNA : Transfection Reagent ratio	1 : 3	1 : 4	1 : 3	1 : 4	1 : 3	1 : 4	1 : 3	1 : 4
ScreenFect™A *plus* Transfection Reagent	0.15 µL	0.2 µL	0.75 µL	1.0 µL	1.5 µL	2.0 µL	3.75µL	5.0 µL
Dilution Buffer for ScreenFect™A *plus*	5 µL		25 µL		50 µL		125 µL	
DNA (0.1-2.5 µg / µL)	50 ng		250 ng		500 ng		1250 ng	
Diluted DNA	5 µL		25 µL		50 µL		125 µL	
Diluted ScreenFect™A *plus* Transfection Reagent	5 µL		25 µL		50 µL		125 µL	
Adherent cells or suspension cells	1.0-4.0 × 10^4		0.5-2.0 × 10^5		1.0-4.0 × 10^5		0.25-1.0 × 10^6	

Cell Detachment (Trypsin or *Accutase*®)

Final composition〔per well〕	96-well	24-well	12-well	6-well
DNA-lipid complex	10 µL	50 µL	100 µL	250 µL
DNA amount	50 ng	250 ng	500 ng	1250 ng
ScreenFect™A *plus* Transfection Reagent used	0.15 or 0.2 µL	0.75 or 1.0 µL	1.5 or 2.0 µL	3.75 or 5.0 µL
Medium volume	100 µL	500 µL	1000 µL	2000 µL





Incubate cells for 1 day ～ at 37℃. Then, analyze transfected cells.

For support, please visit the http://screenfect.jp

Screen*Fect*™A *plus* Quick Protocol

Screen*Fect*™A *plus* Transfection Protocol

The optimal condition for successful transfection varies. Start any new transfection by testing the recommended two concentrations of Screen*Fect*™A *plus* Reagent to determine an optimum amount.

2-Step method (Forward transfection method)

Timeline	Steps
1 Day 0 — Pre-Cultured cells	**Seed cells to be 70-90% confluent at transfection**
2 Day 1 — Reagent, Dilution Buffer	**Dilute Screen*Fect*™A *plus* Reagent※1 in Dilution Buffer, and then mix well** **※1 Vortex the reagent before use**
2 Day 1 — Plasmid DNA, Dilution Buffer	**Dilute DNA in Dilution Buffer, and then mix well**
3 Day 1 — DNA-lipid complex	**Add diluted DNA to diluted Screen*Fect*™A *plus* Reagent, and then incubate for 5 minutes ～ at room temperature※2** **※2 Incubation is available until the step 4 has been completed**
4 Day 1 — DNA-lipid complex	**Add DNA-lipid complex from step 3 to well of cell culture plate from step 1**
5 Day 2～	**Visualize/analyze transfected cells**

Procedure Details

Component	96-well		24-well		12-well		6-well	
Adherent cells or suspension cells	$1.0\text{-}4.0 \times 10^4$		$0.5\text{-}2.0 \times 10^5$		$1.0\text{-}4.0 \times 10^5$		$0.25\text{-}1.0 \times 10^6$	
Seed cells to be 70-90% confluent at transfection. The medium replacement may improve a transfection efficiency in a 2-Step method.								
Dilution Buffer for Screen*Fect*™A *plus*	5 µL		25 µL		50 µL		125 µL	
DNA : Transfection Reagent ratio	1 : 3	1 : 4	1 : 3	1 : 4	1 : 3	1 : 4	1 : 3	1 : 4
Screen*Fect*™A *plus* Transfection Reagent	0.15 µL	0.2 µL	0.75 µL	1.0 µL	1.5 µL	2.0 µL	3.75 µL	5.0 µL
Dilution Buffer for Screen*Fect*™A *plus*	5 µL		25 µL		50 µL		125 µL	
DNA (0.1-2.5 µg / µL)	50 ng		250 ng		500 ng		1250 ng	
Diluted DNA	5 µL		25 µL		50 µL		125 µL	
Diluted Screen*Fect*™A *plus* Transfection Reagent	5 µL		25 µL		50 µL		125 µL	

Final composition〔per well〕	96-well	24-well	12-well	6-well
DNA-lipid complex	10 µL	50 µL	100 µL	250 µL
DNA amount	50 ng	250 ng	500 ng	1250 ng
Screen*Fect*™A *plus* Transfection Reagent used	0.15 or 0.2 µL	0.75 or 1.0 µL	1.5 or 2.0 µL	3.75 or 5.0 µL
Medium volume	100 µL	500 µL	1000 µL	2000 µL

Incubate cells for 1 day ～ at 37℃. Then, analyze transfected cells.

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