

FUJIFILM
Value from Innovation



Transfection reagent
ScreenFect™



for Genetic **Research**

Manufacturer : FUJIFILM Wako Pure Chemical Corporation

Product Range

ScreenFect™ **A**

ScreenFect™ **A plus**

ScreenFect™ **mRNA**

ScreenFect™ **siRNA**

ScreenFect™ **UP-293**

SFA P-**reagent**

ScreenFect™ **Dilution Buffer**

 **ScreenFect™A**

ScreenFect™A is a transfection reagent consisting of a new cationic liposome screened*1 by click chemistry. It can be used with various eukaryote-derived cells and can be added directly to mediums containing antibiotics or serum. DNA and siRNA can be transfected into general experimental cell strains (HeLa, HepG2, MDCK, Cos-7, etc.), stem cells (mouse ES cells, etc.), blood cells (macrophages, THP-1, RAW264, 7, etc.), microglia, primary (initial subculture) cells, and Insect cell. Medium replacement after transfection is not required due to low cytotoxicity. The constituent reagents do not contain any poisonous or deleterious substance.

High transfection efficiency and low cytotoxicity

Can be used for both DNA and siRNA

No need to exchange medium and can be used in the presence of serum

*1 Biomaterials. 2012 Nov; 33(32):8160-6. 2012

Product Cat No.		Pack Size
293-73201	–	0.2mL
299-73203	–	1mL
297-73204	–	1mLx5

DNA transfection

DNA transfection (/well)					
Plate size	Surface area	Medium volume	Total volume SF-DNA complex	DNA / Dilution Buffer	Transfection Reagent / Dilution Buffer
96 wells	0.3 cm ²	100 µL	10 µL	~100 ng / 5 µL	0.25 or 0.3 µL / 5 µL
24 wells	2 cm ²	500 µL	50 µL	~500 ng / 25 µL	1.25 or 1.5 µL / 25 µL
12 wells	4 cm ²	1,000 µL	100 µL	~1,000 ng / 50 µL	2.5 or 3.0 µL / 50 µL
6 wells	10 cm ²	2,000 µL	250 µL	~2,500 ng / 125 µL	6.25 or 7.5 µL / 125 µL

siRNA transfection

siRNA transfection (/well)					
Plate size	Surface area	Medium volume	Total volume SF-siRNA complex	siRNA / Dilution Buffer	Transfection Reagent / Dilution Buffer
96 wells	0.3 cm ²	100 µL	10 µL	2~3 pmol / 5 µL	0.1~0.3 µL / 5 µL
24 wells	2 cm ²	500 µL	50 µL	10~20 pmol / 25 µL	0.5~1.5 µL / 25 µL
12 wells	4 cm ²	1,000 µL	100 µL	20~40 pmol / 50 µL	1.0~3.0 µL / 50 µL
6 wells	10 cm ²	2,000 µL	250 µL	20~60 pmol / 125 µL	3.5~7.5 µL / 125 µL



ScreenFect™ A plus

ScreenFect™ A plus is a transfection reagent composed of a new cationic liposome screened*1 by click chemistry. It can be used with various eukaryote-derived cells and can be directly added to medium containing antibodies or serum. DNA and siRNA can be transfected into general experimental cell strains (HeLa, HepG2, MECK, etc.), stem cells (mouse ES cells, etc.), blood cells (macrophages, THP-1, RAW264.7, etc.), microglia, primary (initial subculture) cells, and insect cells. Medium replacement after transfection is not required due to low cytotoxicity. The constituent reagents do not contain any poisonous or deleterious substance.

Broad Range Transfection

One-step Transfection

High Transfection Efficiency and Low Toxicity

Low Running Cost

*1: Biomaterials. Nov., 33 (32): 8160-6. 2012

Product Cat No.	Pack Size
293-77101	0.2mL
299-77103	1mL

List of Cells transfected by ScreenFect™ A or A plus

1	143BTK	32	HeLa S3	63	Nk92
2	786-O	33	HEp-2	64	OLHNI-2
3	A2058	34	HepG2	65	Mouse overy cell
4	A375	35	hiPSC	66	Pc12
5	A549	36	Hk2	67	Plat-E
6	B16	37	HKC	68	PLC8024
7	B16F10	38	HI7704	69	Primary Fibroblast
8	Ba/F3-CH1	39	HuH-7	70	RAW264.7
9	BEAS-2B	40	HUVEC	71	SH-SY5Y
10	BEL-7402	41	Ins-1	72	SK-Hep1
11	Bt549	42	L428	73	SKOV3
12	C2C12	43	LLC-MK2	74	T98G
13	Cell line from killifish	44	Lo2	75	TE-13
14	CHO-K1	45	LoVo	76	THP-1
15	COS-7	46	MC3T3	77	U-251 MG
16	DB lymphoma	47	MC3T3-E1	78	U2OS
17	DC 2.4	48	MCF-10	79	U937
18	Du145	49	MCF-10A	80	Vero
19	E14	50	MCF-7	81	Drosophira ovary somatic cell
20	Endothelium cell	51	MDCK	82	Ht1080
21	EPC(carp)	52	MEF	83	Rh7777
22	GP2-293	53	mES	84	HaCaT
23	H9C2	54	mHSC		
24	HCT116	55	Microglia		
25	HEK293	56	MLEC		
26	HEK293 TN	57	MS-1		
27	HEK293A	58	MDC		
28	HEK293F	59	NB1RGB		
29	HEK293FT	60	NCI-H1703		
30	HEK293T	61	Ne3		
31	HeLa	62	NIH 3T3		

ScreenFect™ mRNA

ScreenFect™ mRNA is a transfection reagent consisting of a new cationic liposome by click chemistry screening system*1. ScreenFect™ mRNA is suitable for transfection into eukaryotic cells (HeLa, HEK293, MDF cells, etc.) without the replacement of culture medium after transfection because it is not included hazard compounds. ScreenFect™ mRNA is used for mRNA transfection procedures.

Direct transfection of mRNA

Long RNA transfection

Establish iPS cell line without virus vector

*1: Biomaterials, Nov.; 33(32): 8160-76, 2012.

Product Cat No.		Pack Size
293-75901	–	0.2mL
299-75903	–	1mL

ScreenFect™ siRNA

ScreenFect™ siRNA is a transfection reagent for siRNA consisting of a new cationic liposome screened*1 by click chemistry. ScreenFect™ siRNA is compatible with serum and the transfection operation can be carried out simply because of its low cytotoxicity. The constituent reagents contain no poisonous or deleterious substances.

High knockdown efficiency and low cytotoxicity

siRNA transfection optimization buffer included

No need to exchange medium and can be used in the presence of serum

*1: Biomaterials. 2012 Nov; 33(32):8160-6.

Product Cat No.		Pack Size
299-75001	–	0.2mL
295-75003	–	1mL

ScreenFect™ UP-293

ScreenFect™ UP-293 is a transfection reagent kit which is highly efficient for production of antibodies and proteins in Expi293F™ or FreeStyle™ 293-F cells. ScreenFect™ UP-293 Booster, which is added to transfected cells, enhances remarkably protein expression level in cells.

Low-priced

High yield protein expression

Just change your transfection reagent

Product Cat No.	Pack Size
290-80203	– 1L, for
294-80201	– 100mL, for

Kit component

Kit components for 100mL (294-80201)

ScreenFect™ UP-293 Transfection Reagent	200µL
ScreenFect™ UP-293 Dilution Buffer	6.7mL
ScreenFect™ UP-293 Booste	500µL

Kit components for 1L (290-80203)

ScreenFect™ UP-293 Transfection Reagent	2 x 1 mL
ScreenFect™ UP-293 Dilution Buffer	67 mL
ScreenFect™ UP-293 Booste	5 mL

Materials required

Expression Systems	Expi293™ Expression System	FreeStyle™ 293 Expression System
Cells	Expi293F™ Cells	FreeStyle™ 293-F Cells
Medium	Expi293F™ Expression Medium	FreeStyle™ 293 Expression Medium
Buffer	Not require*	Opti-MEM™ I Reduced Serum Medium

*Use ScreenFect™ UP-293 Dilution Buffer provided with this kit.

⊗ SFA P - Reagent

SFA P-reagent enhances transfection efficiency and expression level in each transfected cells by using ScreenFect™ together when plasmid DNA and mRNA are transfected. Additionally, cytotoxicity also decreases remarkably by adding SFA P-reagent.

SFA P-reagent will resolve the following problems.

Transfection efficiency is low.

Expression level of transfection gene must be increased.

High cytotoxicity has been a serious problem.

Quite easy to use.

SFA P-reagent: DNA/mRNA = 2μL : 1μg

Mix the reagent with DNA solvent under the ration indicated above.

Enhances transfection efficiency

Increases the expression level of transfected gene

Decreases cytotoxicity

Saves the amount of plasmid DNA (Ex. : Half (50%) of current condition)

Product Cat No.		Pack Size
191-18331	-	100uL
197-18333	-	500uL

⊗ ScreenFect™ Dilution Buffer

ScreenFect™ Dilution Buffer

Appearance	Colorless clear liquid
pH	pH : 4.8 - 5.2 (20 degrees C)
