Data Invention Biotech

Lipo2000 transfection reagent

Product number: DIB034-1.5ml DIB034-0.75ml

Product specifications: 1.5ml 0.75ml

Storage: Store at 2-4° C for one year.(Avoid freezing)

product manual:

Data Invention Biotech's unique patented formula Lipo2000 has a transfection efficiency between Lip2000 and Lip3000, with lower toxicity and higher transfection efficiency. It is a new type of cationic liposome transfection reagent.Suitable for transfection of nucleic acids (DNA and RNA) into eukaryotic cells, with low cytotoxicity; high transfection efficiency for various types of cells and culture plates; the presence of serum during transfection does not affect the advantages of transfection efficiency .Scope of application: transfection of adherent cells and suspension cells (mammalian cell lines).

Transfection of plasmid DNA

For most cells, the ratio of DNA (μg) to Lipo2000 (μl) is 1:2~1:3.High cell density during transfection can obtain high transfection efficiency and expression level, and can reduce cytotoxicity.

1. Take a 24-well plate as an example for adherent cells: On the day before transfection, inoculate 0.5 to 2×105 cells with 500 μl of antibiotic-free medium to reach 70-90% confluence the next day.Suspension cells: Before preparing the DNA-Lip2000 complex, inoculate 4-8×105 cells with 500 μl of antibiotic-free medium.
2. For each transfection sample, perform the following operations: a. Add 50 μl Opti-MEM I ReLipced Serum Medium and 0.8 μg DNA to the eppendorf tube and mix gently to make a DNA dilution.b. Add 50 μl Opti-MEMI ReLipced Serum Medium and 2.0 μl Lipo2000 to another eppendorf tube (note that you should mix well before use), mix gently to make a Lip2000 dilution, and let it stand at room temperature for 5 minutes.c. Mix the DNA diluent and Lip2000 diluent, mix gently, and let stand at room temperature for 20 minutes to form a DNA-Lip2000 complex.The DNA-Lip2000 complex can exist stably for 6 hours at room temperature.
3. Add the DNA-Lip2000 complex to the inoculated cells, and gently shake the culture plate back and forth to make the complex evenly dispersed.
4. After culturing for 4-6 hours in a 37° C CO2 incubator, change the medium and continue culturing for 18 to 48 hours.
5. If you want to screen for stable cell lines, inoculate the cells in a fresh medium at a ratio of 1:10 or higher 24 hours after transfection, and add selective medium for screening the next day.Optimization of plasmid DNA transfection In order to achieve the highest transfection efficiency and reduce the effect of cytotoxicity, the ratio of DNA to Lip2000 and cell density can be optimized. Generally, DNA (μg) is optimized in the range of 1:0.5~1:5 And Lip2000 (μl) ratio.

The amount of media, nucleic acid and Lipo2000 for transfection in different cell culture plates

Cell culture plate	Area per hole	Medium amount		DNA transfection		siRNA	
		The amount of plating medium	The amount of diluted medium				
96-well	0.3cm^2	100ul	2*25ul	0.2ug	0.5ul	5pmol	0.25ul
24-well	2cm^2	500ul	2*50ul	0.8ug	2ul	20pmol	1.0ul
12-well	4cm^2	1ml	2*100ul	1.6ug	4ul	40pmol	2.0ul
6-well	10cm^2	2ml	2*250ul	4ug	10ul	100pmol	5ul
60-mm	20cm^2	5ml	2*0.5ml	8ug	20ul	200pmol	10ul
10-cm	60cm^2	15ml	2*1.5ml	24ug	60ul	600pmol	30ul

Transfection efficiency of common cells (for reference only, the transfection efficiency will vary with different experimental conditions)

Cell type	HEK293	HCT116	WRL-68	HepG2	NH/3T3	THP-1	Hela	MCF-7	293T	TS cell	HO1980	A549
Transfection	>80%	>80%	~80%	~80%	~80%	>50%	>80%	>80%	>80%	>60%	>60%	>80%

Cell type	MEF	Chok1	Hep3B	C2C12	Neuro-2a	HUVEC	MDCK	Hep2C	WHI	B50	Calu1	L929
Transfection	>50%	>50%	>80%	>80%	>70%	>80%	>80%	>80%	>80%	>70%	>70%	>70%

Product parameter

Name	Lipo2000 transfection reagent
CAT#	029-1.5mL
CAS#	N/A
Storage#	4℃ dry and avoid light
Shelf Life#	12 months
Ex(nm)#	N/A
Em(nm)#	N/A
MW#	N/A
Solvent#	N/A