Transfection:
A Science and an Art.

Optimized Reagents for Efficient Transfection

EMD Millipore is a division of Merck KGaA, Darmstadt, Germany

Transfection: A Science and an Art

Successful delivery of nucleic acids and protein in eukaryotic cells requires a transfection protocol that maximizes transfection efficiency, minimizes cytotoxicity, and results in the desired level of gene expression or silencing. EMD Millipore recognizes that there is not a one-size-fits-all solution to your transfection needs. We provide the breadth of transfection reagents necessary to give you the freedom to design the perfect experiment.

Our reagents provide superior alternatives to a wide variety of other DNA transfer techniques including calcium phosphate coprecipitation, electroporation, microinjection, biolistic particle delivery, and complex formation with DEAE-dextran. Simplified protocols, including no media changes for most reagents and cell types, have been optimized, allowing more time for research.

Visit the transfection resource website, www.emdbiosciences.com/transfection, for a complete list of cell types and information to make your transfections easier. We have added the transfection conditions (cell types, culture conditions, volume of transfection reagent and amount of DNA) from the growing list of publications citing our transfection reagents.

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01 Transfection Reagent Selection Guide

The right transfection reagent that will give you the results you need to move research forward is the one that delivers the highest transfection efficiency with minimal cytotoxicity.

Refer to this selection guide to find the reagents that match your specific applications and cell types.

Looking for...

High efficiency for a broad range of cells?

GeneJuice® Transfection Reagent Page 6

Cell types	Material to be delivered	Applications
Established cell lines Common cell culture	Plasmid DNA	• Gene expression • Gene knockdown (in cotransfection)

Optimum efficiency for difficult-to-transfect cells?

NanoJuice® Transfection Kit Page 7

Cell types	Material to be delivered	Applications
Primary cells Difficult-to-transfect cells	Plasmid DNA	• Gene expression

Protein production in suspension HEK293 cells?

293-Free™ Transfection Reagent Page 8

Cell types	Material to be delivered	Applications
Suspension HEK293	Plasmid DNA	• Gene expression

Protein production in suspension CHO cells?

NovaCHOice™ Transfection Kit Page 9

Cell types	Material to be delivered	Applications
Suspension Chinese Hamster Ovary (CHO) cells	Plasmid DNA	• Gene expression

Insect cells?

Insect GeneJuice® Transfection Reagent Page 10

Cell types	Material to be delivered	Applications
Insect cells	• Linearized virus DNA • Plasmid DNA	• Gene expression

siRNA Transfection?

RiboJuice™ siRNA Transfection Reagent Page 10

Cell types	Material to be delivered	Applications
Most cell types*	Synthetic oligonucleotides	• Gene knockdown

Protein or peptide transfection?

ProteoJuice™ Protein Transfection Reagent Page 10

Cell types	Material to be delivered	Applications
Most cell types*	Proteins, peptides	• Functional studies • Delivering bioactive or inhibitory proteins • Screening peptide libraries • Studying subcellular location and turnover • Transient complementation of suppressed gene expression

*Reagent has been optimized for most cell types. For the more sensitive cell types, protocol optimization is recommended.

02 Transfection Reagents

GENEJUICE TRANSFECTION REAGENT

High-efficiency transfection for a wide variety of mammalian cells for superior performance with significant cost savings.

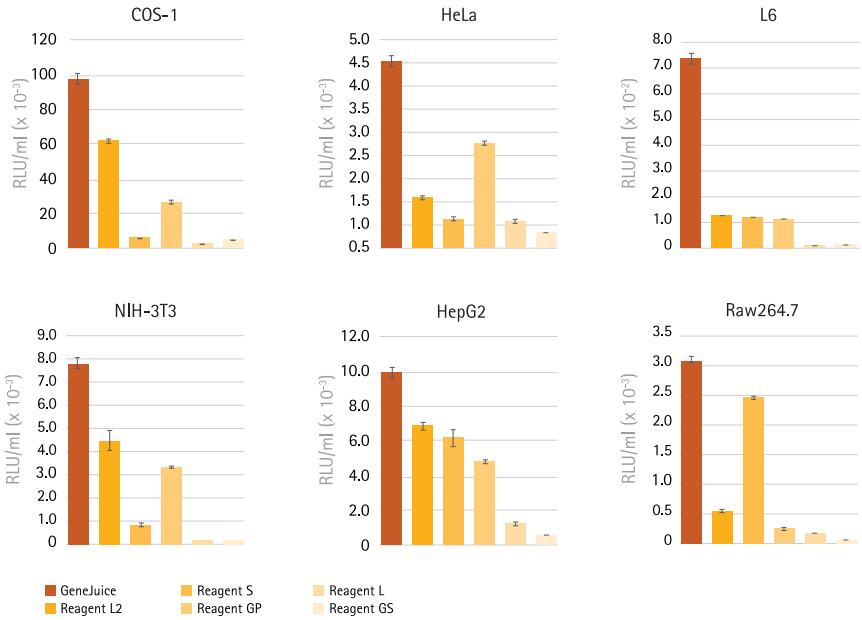
Feature	Benefit
Highly efficient DNA transfer for both stable and transient transfections	One reagent, one tube for a wide variety of cell types and applications
Minimal cellular toxicity	Leads to higher protein expression levels
Compatible with both serum-containing and serum-free media	Simplifies protocol by eliminating media changes
Ideal for high-throughput transfection in a multiwell plate format	Flexibility to accommodate your experimental setup

ORDERING INFORMATION

Product	Size	Catalogue No.
GeneJuice Transfection Reagent	0.3 mL	70967-5
	1 mL	70967-3
	5x1 mL	70967-6
	10x1 mL	70967-4

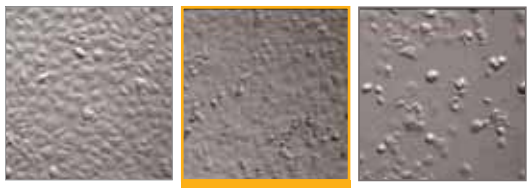
The 1-mL size provides enough reagent to perform up to 500 transfections in standard 35-mm plates. GeneJuice Tranfection Reagent is supplied as a ready-to-use sterile solution.

Order products from www.emdbiosciences.com



GeneJuice Transfection Reagent provides higher transfection efficiency than commonly used competitor reagents. Cell lines were plated at 3 x 10^4 cells per well in 24-well plates the day prior to gene delivery. Transfections and media changes were performed according to the manufacturers' optimized protocols. For transfection, 0.5 µg of low endotoxin purified pTriEx™-4 Fluc plasmid DNA was complexed with the relevant reagent and introduced into each well. After 48 h, cells were extracted with Reportasol™ Extraction Buffer and Fluc activity was assayed. Data are represented as relative light units per milliliter of extract (RLU/mL). All values reflect an average of four replicate cultures with standard errors.

GeneJuice Transfection Reagent is less cytotoxic than lipid-based transfection reagents. Three replicate COS-7 cultures were left untreated, transfected with a popular cationic lipid-based transfection reagent, or transfected with GeneJuice Transfection Reagent according to recommended protocols. Cellular damage is manifested as rounding up and detachment from the plate surface. The photographs were taken 48 h post transfection.



No transfection | **GeneJuice Reagent** | Reagent L2

NANOJUICE TRANSFECTION KIT

Efficient transfection of difficult-to-transfect mammalian cell types. Contains NanoJuice Core Transfection Reagent and NanoJuice Transfection Booster.

Feature	Benefit
Flexible, two-component system enables optimization and fine-tuning for each cell type	A single transfection kit specially designed to provide maximum transfection efficiency and minimum cytotoxicity for a variety of difficult-to-transfect cell types
Derived from non-animal sources	Move faster from research to development
Compatible with both serum-containing and serum-free media	Simplifies protocol by eliminating media changes
Suitable for both stable and transient transfections	One kit for a variety of applications
Cutting-edge nanotechnology of Priostar® dendrimers along with a proven polycationic liposome formulation	Unique formulation gives results not obtained with other transfection reagents

ORDERING INFORMATION

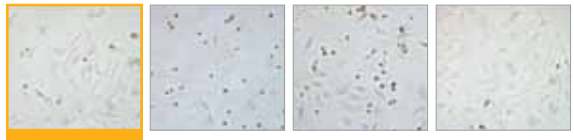
Product	Size	Catalogue No.
NanoJuice Transfection Kit	240 rxn	71902-3
	2400 rxn	71902-4
NanoJuice Core Transfection Reagent	1 mL	71900-3
NanoJuice Transfection Booster	1 mL	71901-3

For a complete list of cell lines successfully transfected with the NanoJuice Transfection Kit and information to make your transfection easier, visit www.emdbiosciences.com/Transfection.

Order products from www.emdbiosciences.com

NanoJuice Transfection Kit enables greater transfection efficiency for difficult cell types than with commonly used competitor reagents. Cell lines were plated in 24-well plates 18-24 h prior to transfection, such that cells were 80% confluent at time of transfection. Transfections were performed according to the manufacturers' optimized protocols. For transfection, 0.25 µg of low endotoxin-purified pTriEx-6 Rluc plasmid DNA was complexed with the relevant reagent and introduced into each well. After 24-48 h, the cells were extracted with Reportasol Extraction Buffer and Rluc activity was assayed. Data are represented as relative light units per well (RLU/well). All values reflect an average of four replicate cultures with standard errors.

NanoJuice Transfection Kit is less cytotoxic than competitor reagents. Three replicate Saos-2 cultures were either left untreated, transfected with commonly used competitor's reagents, or transfected with NanoJuice Transfection Kit according to recommended protocols. Photographs were taken 48 h post-transfection.



02 Transfection Reagents

293-FREE TRANSFECTION REAGENT

Efficient and affordable transfection of HEK293 suspension cultures with uncompromised quality.

Feature	Benefit
Excellent transfection efficiency for HEK293 suspension cultures	Maximize protein expression levels
Derived from non-animal sources	Move faster from research to development
Compatible with both serum-containing and serum-free media	Simplifies protocol by eliminating media changes
Minimal cellular toxicity	Leads to higher protein expression levels

ORDERING INFORMATION

Product	Size	Catalogue No.
293-Free Transfection Reagent	1 mL	72181-3
	5x1 mL	72181-4
	10x1 mL	72181-5

For Bulk and Custom options,
please contact Technical Services at:
1-800-628-8470
bioscienceshelp@emdchemicals.com

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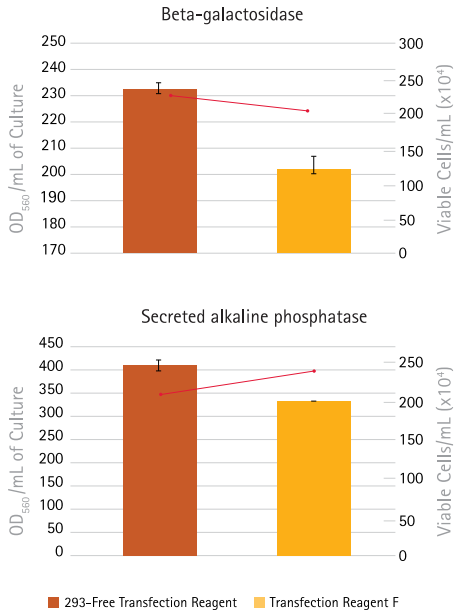
293-Free Transfection Reagent provides high transfection efficiencies (bars) and cell viability (red lines). 20 mL of 1 × 10^6 cell/mL FreeStyle™ 293-F cells in 125 mL disposable Erlenmeyer flasks were transfected according to the manufacturer's recommended protocol for each transfection reagent. At 72 h post-transfection, cultures were harvested and assayed for reporter gene activity.



NovaCHOice TRANSFECTION KIT NEW

Maximum transfection efficiency for suspension CHO cells, ideal for producing recombinant, native protein in mammalian cells.

Feature	Benefit
Superior transfection efficiency in suspension CHO systems	Ideal reagent for mammalian protein production
Derived from non-animal sources	Move faster from research to development
Minimal cellular toxicity	Increased host cell viability and higher protein expression levels
Compatible with both serum-containing and serum-free media	Simplifies protocol by eliminating media changes

ORDERING INFORMATION

Product	Size	Catalogue No.
1 mL NovaCHOice Transfection Kit includes:	1 kit	72622-3
NovaCHOice Transfection Reagent	1 mL	
NovaCHOice Booster Reagent	1 mL	
10 ml NovaCHOice Transfection Kit includes:	1 kit	72622-4
NovaCHOice Transfection Reagent	10 mL	
NovaCHOice Booster Reagent	10 mL	

For Bulk and Custom options,
please contact Technical Services at:
1-800-628-8470
bioscienceshelp@emdchemicals.com

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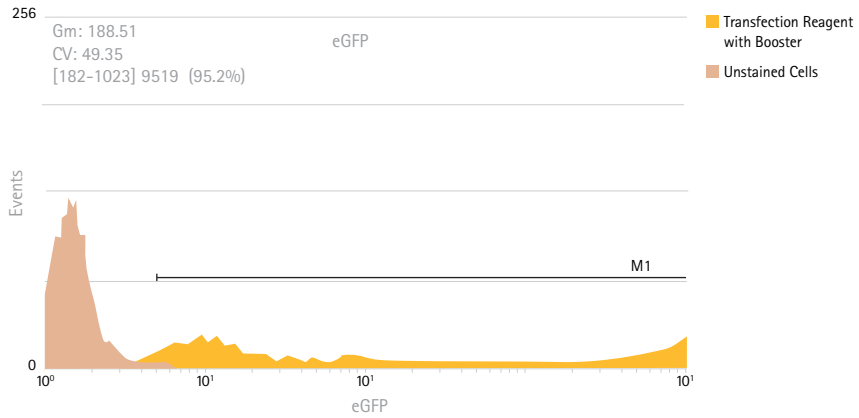
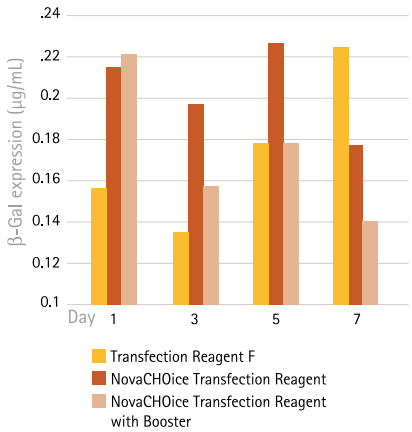


Unsurpassed transfection efficiency and protein expression with the NovaCHOice Transfection Kit. Histogram of GFP-transfected CHO-S cells 48 hours after transfection using NovaCHOice Transfection Reagent with Booster compared to unstained cells. CHO-S cells were transfected in 30 mL volumes in 125 mL Erlenmeyer flasks. Results show 95% GFP expression with the NovaCHOice Transfection Kit.



Detect protein expression earlier when you transfect with NovaCHOice Transfection Kit. ß-Galatosidase expression data in CHO-S cells at 1, 3, 5 and 7 days post transfection using NovaCHOice Transfection Kit and a competing reagent according to manufacturer's protocol. Results show that higher protein expression was detected on Day 1 in cells transfected with NovaCHOice Transfection Kit than in those transfected with transfection reagent F.

02 Transfection Reagents

INSECT GENEJUICE TRANSFECTION REAGENT

High-efficiency insect cell transfection, optimized for SF9 cells and ideal for baculovirus production and large-scale protein expression in suspension-culture transfection of Sf9 insect cells when using with pIEx™ and pIEx/Bac™ vectors.

Feature	Benefit
Suitable for both stable and transient transfections with plasmid DNA as well as cotransfection for recombinant baculovirus production	One reagent for a variety of applications
Minimal cellular toxicity	Leads to higher protein expression levels
Compatible with both serum-containing and serum-free media	Simplifies protocol by eliminating media changes

ORDERING INFORMATION

Product	Size	Catalogue No.
Insect GeneJuice Transfection Reagent	0.3 mL	71259-3
	1 mL	71259-4
	10x1 mL	71259-5

PROTEOJUICE PROTEIN TRANSFECTION REAGENT

Efficient delivery of intact, functional proteins and peptides into mammalian cells; ideal for functional studies, peptide library screening, studying subcellular localication and turnover, and transient complementation of suppressed gene expression.

Feature	Benefit
Efficient delivery of large proteins (~150 kDa), multimeric protein complexes (~500 kDa), small proteins (~11 kDa), and peptides.	One reagent for a variety of applications
Minimal cellular toxicity	Measure effects of the protein, not the transfection reagent
Live cells can be examined less than two hours after delivery	Fast experimental results
Forms a non-covalent complex with protein that protects against degradation	Ensures delivery of intact protein

ORDERING INFORMATION

Product	Size	Catalogue No.
ProteoJuice Transfection Reagent	0.125 mL	71281-3
	4 x 0.125 mL	71281-4

RIBOJUICE SIRNA TRANSFECTION REAGENT

Efficient delivery of siRNA for targeted gene suppression.

Feature	Benefit
Suitable for both stable and transient transfections with plasmid DNA as well as cotransfection for recombinant baculovirus production	One reagent for a variety of applications
Minimal cellular toxicity	Leads to higher protein expression levels
Compatible with both serum-containing and serum-free media	Simplifies protocol by eliminating media changes

ORDERING INFORMATION

Product	Size	Catalogue No.
RiboJuice siRNA Transfection Reagent	0.3 mL	71115-3
	1 mL	71115-4

Order products from www.emdbiosciences.com

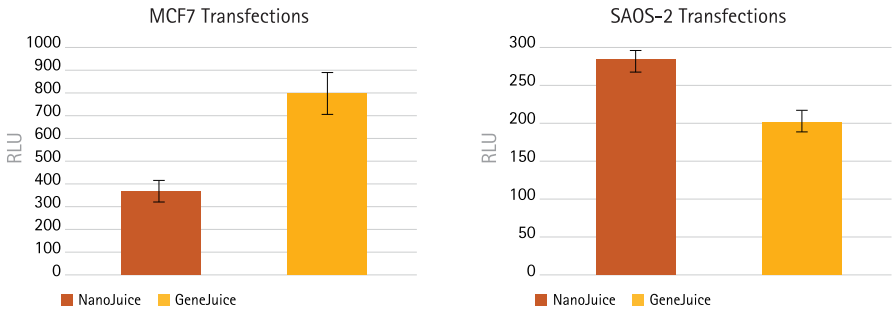
03 Frequently Asked Questions Nucleic Acid Transfection

Why do you offer NanoJuice and GeneJuice Transfection Reagents? What's the difference? Which one should I use?

GeneJuice Transfection Reagent is a proprietary formulation composed of histone, a nontoxic cellular protein, and a small amount of a novel polyamine. The histone and the polyamine promote the entry of DNA through the negatively charged cell membrane. DNA entry is thought to be followed by endocytosis and endonucleosis. The highly cationic polyamine also promotes endosomal escape of the GeneJuice-DNA complex.

The NanoJuice Transfection Kit is ideal for difficult-to-transfect cell types. It is comprised of two separate reagents developed to work synergistically: Priostar dendrimers and a polycationic liposomal formulation. The positively charged dendrimers interact with and compact negatively charged nucleic acids. The liposomal formulation facilitates uptake of the positively charged dendrimer-DNA complex via endocytosis. By combining these two reagents at different ratios, transfection can be fine-tuned for each cell type.

GeneJuice is a traditional transfection reagent that works well for a wide range of cell lines (see www.emdbiosciences.com/Transfection for a list of references where independent research labs successfully transfected their cells, as well as conditions used for various cell lines). However, for some difficult to transfect cell types such as primary cells, the flexible format of the NanoJuice Transfection Kit enables you to vary ratios of Core Transfection Reagent and Booster to obtain the best possible results. Since either GeneJuice or NanoJuice may end up providing the best results for a particular cell line, it can be helpful to have both reagents available in the lab. EMD Millipore offers trial sizes of each reagent, please contact your local EMD Millipore Account Manager for more information.



Differing transfection efficiencies exhibited by NanoJuice and GeneJuice reagents with respect to cell type. Cells were plated in 24-well plates 18-24 h prior to transfection, such that the cells were 80% confluent at the time of transfection. For transfection, 0.25 µg pTriEx-6 RLuc plasmid DNA was complexed with the relevant reagent and introduced into each well. After 24–48 h, the cells were extracted with Reportasol Extraction Buffer and RLuc activity was assayed. All values reflect an average of four replicate cultures with standard errors.

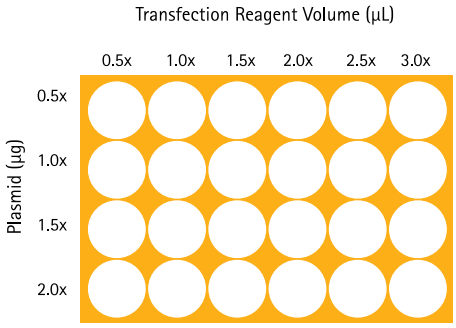
How important is the cell density/confluency and cell passage number at the time of transfection?

Transfection of nucleic acids requires cells to be actively dividing. Therefore, the optimum cell density for transfection is generally between 50-80% confluency for adherent cells and 1.0–2.0 × 10^6 cells/mL for suspension cells. Avoid using extensively passaged cells; use a fresh vial of cells if a sudden drop in transfection efficiency is noticed. If necessary, determine the optimum cell density and passage number range for every new cell line, and keep these parameters constant for all experiments to ensure reproducibility.

03 Frequently Asked Questions
Nucleic Acid Transfection

Why do I need to perform optimization? How should I go about doing it?

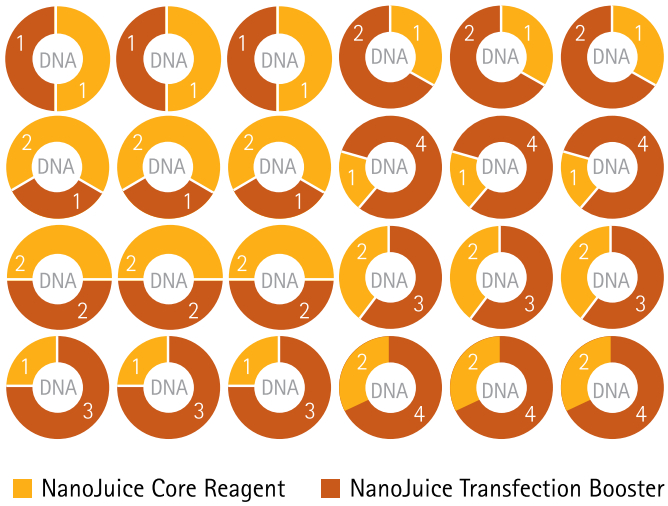
Each cell type behaves differently, by carrying out an optimization, the best transfection condition for your particular cell type can be determined. In other words, you can avoid putting too much transfection reagent on your cells, which may cause unnecessary toxicity issue and waste of precious transfection reagent. Optimization is suggested for every new combination of cell type and plasmid. The most important parameters are cell density and ratio of transfection reagent to DNA.



Start with the volume of the selected transfection reagent (1x) and plasmid amount (1x) as recommended in the User Protocol. If those conditions do not yield the desired results, an optimization experiment can be performed. In a 24-well plate, plate the same amount of cells in each well. Set up a gradient across the plate and add the appropriate volume of transfection reagent (0.5x, 1x, 1.5x, 2x, 2.5x and 3x). Set up a gradient down the plate and add the appropriate amount of plasmid (0.5x, 1x, 1.5x and 2x). With a reporter gene in the plasmid, the optimal condition can be easily determined.

The NanoJuice Transfection Kit provides flexibility to fine-tune transfection conditions for efficient DNA delivery. The kit consists of two components: the NanoJuice Core Transfection Reagent and the NanoJuice Transfection Booster.

A simple trial experiment designed for a single 24-well plate uses eight different ratios of the two reagents in triplicate (see diagram below). Select the best core reagent/transfection booster ratio to carry out further transfections.



The ratios listed on the plate are given as a reagent: DNA ratio (µL / µg) where the amount of DNA is kept constant.

What is the recommended reagent for transfecting primary cells?

We recommend our NanoJuice Transfection Kit which was specifically developed for the transfection of primary cells and difficult-to-transfect cell types. GeneJuice Transfection Reagent has also been used to successfully transfect some primary cells. For a list of literature citations reporting use of GeneJuice Reagent with primary cells, please visit, www.emdbiosciences.com/transfection.

What is the size limit for plasmid DNA?

Large plasmids in the range of 12–15 kb can be transfected. We have cloned and expressed inserts encoding large proteins (including ß-gal) without difficulty in mammalian cell lines.

Is the quality of DNA important for good transfection?

Yes, it is essential that the DNA to be transfected is of high quality and free of endotoxins. Plasmid DNA preparations should include an endotoxin removal step.

How long should I leave the transfection reagent on the cells? Do I need to change medium at any time after transfection?

Since our nucleic acid transfection reagents are compatible with serum-containing media, medium change after transfection is not necessary. The majority of cell types can be incubated with the transfection mix for 24–72 h without any media change, and then harvested for the desired downstream application. If media change is necessary due to the toxicity of the protein being expressed, the transfection mixture can be removed after 2–8 h of incubation and replaced with complete growth medium.

Can I use the product in the presence of serum?

Yes. Our nucleic acid transfection reagents are effective for transfecting cells in media with or without serum. While cells can be incubated in media containing serum, it is absolutely critical that serum is NOT present during formation of the transfection reagent/DNA complex. For most applications, we recommend adding the transfection reagent/DNA complex (formed in serum-free media) to cells grown in complete growth media. For certain cell lines and experimental conditions, serum starvation of cells might be required. Since serum provides growth factors and nutrients, transfection efficiencies achieved with growth in serum-containing media are typically better than those in serum–free media.

Can the DNA transfection reagents be used for co-transfecting plasmids?

Yes. Multiple plasmids can be transfected into the cell at the same time. The key is to maintain the optimal ratio of total DNA (all plasmids). See the User Protocols for more information on the ratio of reagent to DNA.

Will antibiotics interfere with transfection?

We do not recommend including antibiotics during the formation of the transfection reagent/DNA complex. Increased cell permeability during transfection causes high antibiotic influx, resulting in cell death. Some antibiotics (such as kanamycin) are cationic and can therefore interfere with transfection. Antibiotics such as penicillin and streptomycin can be present in the complete growth media (with serum) which is used to grow the cells. If you are generating stable transfectants, add selection antibiotics (e.g., G 418 or hygromycin) 48–72 h after transfection.

How do I scale my transfection protocol when working with different culture volumes?

For most standard culture formats, guidelines are provided in the User Protocol. If you are using different culture volumes, vary the amounts of DNA, transfection reagent, cells, and culture media in proportion to the relative surface area while keeping the transfection reagent: DNA ratio constant.

04 Related Products: Cell Culture Tools for Efficient Transfection

MILLICELL® HIGH YIELD CELL CULTURE FLASKS

Traditionally, transfection is performed using several single-layer T-flasks or Petri dishes. Harvesting cells from multiple culture vessels is a repetitive, slow process that consumes valuable incubator space. The Millicell HY (high yield) multilayer flask makes DNA transfer and recombinant protein production faster and easier than traditional methods.

Depend on Millicell HY cell culture flasks for uniform, consistent cell growth, which enables the amazingly high cell yields provided by these unique flasks. When choosing a multilayer cell culture flask to save space, time and – most importantly – grow healthy cells, trust in EMD Millipore to deliver a flask that outperforms the rest.

ORDERING INFORMATION

Product	Catalogue No.
Millicell HY Culture Flask 3 layer, T600, sterile	PFHYS0616
Millicell HY Culture Flask 5 layer, T1000, sterile	PFHYS1008

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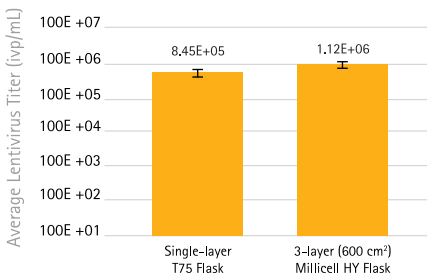
Feature	Benefit
Consistent, quality growth environment across all layers	Better cell proliferation and yields than other multilayer flasks
Unique, ergonomic design	Easy cell passaging and recovery
No leaking or spillover between layers	Reduced risk of contamination
Multilayer format	Saves you: • Incubator space • Time spent passaging cells • Cost of reagents

Flask	Surface Area	% of Theoretical yield *	Flasks required **	Volume of medium required	The Millicell Benefit
Millicell 3 Layer	600 cm^2	97%	1	150 mL	• Less Media • Fewer Flasks • Save Incubator Space • Time Savings
Brand N T75	75 cm^2	100%	8	169 mL	
Brand N 3 Layer	500 cm^2	79%	1.5	189 mL	
Millicell 5 Layer	1000 cm^2	90.5%	n/a	300 mL	• Less Media • Healthier cells • Cost Savings
Brand C 10 Layer	1720 cm^2	55%	n/a	560 mL	

* per unit surface area **for equivalent yield to 3-layer HY Flask



Efficient transfection and gene expression, shown by successful virus production in Millicell HY multilayer flasks. Data represent the average titer from four single-layer flasks and two Millicell HY flasks, and error bars represent standard deviation. GFP-lentivirus was produced in both a traditional single-layer T-75 flask and a 600 cm^2 Millicell HY flask by transfecting HEK293A cells with a plasmid mix. Infectious lentivirus was collected on the third day. Fractions were serially diluted and mixed with 10,000 HEK 293A cells per well in 96-well plates. After 3 days, cells were fixed and analyzed by fluorescence microscopy. The total input of infectious particles (Ivp) was calculated using the formula: Input in Ivp = (# fluorescent cells) x (dilution factor) x (input volume in mL) ÷ (assay volume in mL).

STERILE FILTRATION

Eliminating contaminants from your cell growth media and additives is absolutely crucial to preserving the integrity and accuracy of your cell cultures. EMD Millipore's comprehensive line of sterile filtration tools have been specifically designed to address these needs and to ensure the reproducibility of your transfections.

Vacuum-Driven Sterile Filters

Stericup® filter devices combine a filter unit with a receiver flask and cap for processing and storage. Steritop® bottle-top filter units can be used on bottles with 33 mm or 45 mm openings.

Description	Membrane/Application	Pore Size (µm)	Funnel Capacity (mL)	Receiver Bottle	Catalogue No.
Stericup-GP Filter Units	Millipore Express PLUS (PES) / fast filtration of tissue culture media and buffers	0.22	500	500 mL	SCGPU05RE
Steritop-GP Filter Units	Millipore Express PLUS (PES) /filtration of highvalue biomolecules, lowest proteinbinding	0.22	500	33 mm thread	SCGPS05RE
				45 mm thread	CGPT05RE

Pressure-Driven Sterile Filters

Millex® syringe filters are sterilized and individually wrapped.

Description	Pore Size (µm)	Process Volume (mL)	Holdup Volume	Sterilization Method	Qty/Pk	Catalogue No.
Millipore Express PLUS (PES) Membrane, 33 mm Syringe Filter	0.22	200	<100 µL	Radiosterilized	50	SLGP033RS
	0.22	200	<100 µL	Radiosterilized	250	SLGP033RB
	0.22	200	<100 µL	Radiosterilized	1000	SLGP033RK

Sterile filtration tools are available from www.millipore.com

Related Products: Cell Culture Media and Reagents

Antibiotics

Description	Size	Catalogue No.
G 418 Sulfate, Cell Culture-Tested	250 mg 500 mg 1g 5 g 25 g	345810
G 418 Sulfate, Sterile-Filtered Acqueous Solution, Cell Culture-Tested	10 mL 20 mL 50 mL	345812
Hygromycin B, *Streptomyces* sp., Sterile-Filtered Solution in 25 mM, HEPES, Cell Culture-Tested	5 mL 20 mL 50 mL	40053
Neomycin Sulfate	25 g	4801
Neomycin Sulfate, γ-Irradiated, Tissue Culture Grade	20 mL	480100
Streptomycin Sulfate, *Streptomyces* sp.	100 g	5711

Available from www.emdbiosciences.com

Media and Reagents

Description	Catalogue No.
Consistent, quality growth environment across all layers	DF-041-B
EmbryoMax® DMEM/F12, with L-Glutamine, without HEPES	DF-042-B
Dulbecco's Modified Eagle's Media 1X, With 4,500 mg/L Glucose and L-Glutamine	SLM-121-B
EmbryoMax 1X Dulbecco's Phosphate Buffered Saline w/o Ca++ & Mg++	BSS-1006-A
EmbryoMax ES Cell Qualified Fetal Bovine Serum	ES-009-B
Accutase™ Enzymatic Cell Detachment Solution	SCR005

Available from www.millipore.com

Extraction Reagents

Description	Size	Catalogue No.
CytoBuster™ Protein Extraction Reagent	50 mL 250 mL	71009-3 71009-4
PhosphoSafe™ Extraction Reagent	25 mL 125 mL	71296-3 71296-4
Reportasol Extraction Buffer	25 mL 125 mL	70909-3 70909-4

Available from www.emdbiosciences.com

CONTACT US

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In Europe, please call Customer Service:

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For other countries across Europe and the world, please call:

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For Technical Service, please visit www.millipore.com/techservice.

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