SVIFCTSA3

Product Datasheet

jetPRIME[®]

Versatile DNA | siRNA Transfection Reagent





Product Information

jetPRIME® is a polyvalent transfection reagent that ensures effective and reproducible DNA and siRNA transfection in several adherent cell lines. This versatile reagent is also perfect for co-transfection of DNA and siRNA. Transfection with jetPRIME® requires only low amounts of nucleic acid, hence resulting in very low cytotoxicity.

jetPRIME® is suited for different applications, such as plasmid transfection, gene silencing, co-transfection of different nucleic acids, and CRISPR/Cas9-mediated gene knock-out.

Benefits

- ${\scriptstyle \bullet}$ ${\it Versatile:}$ One reagent for DNA and siRNA transfection
- Timesaving: Easy-to-use transfection reagent
- Gentle on cells: Low cytotoxicity
- **Cost-effective:** Requires less DNA and less reagent for efficient transfection

Introduction

Relevant Applications

- Plasmid transfection
- Genome editing
- siRNA transfection
- Co-delivery of different nucleic acids

Relevant Process Steps

- Upstream Process
- Transfection

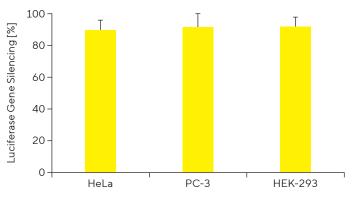
Technical Specifications

Molecule delivered	sDNA, siRNA, DNA & siRNA (co-transfection)	
Cell Types	Adherent cells	
Number of transfections	1.5 mL of jetPRIME® transfection reagent is sufficient to perform up to 1500 transfections in 24-well plate 375 transfections in 6-well plates	
Storage	Store jetPRIME® at 5 °C \pm 3°C. Expiry date is indicated in the certificate of analysis and on the product	
Provided with	jetPRIME® buffer	

Capabilities

• One Reagent for DNA and | or siRNA Transfection jetPRIME® is a polyvalent transfection reagent well suited for DNA and siRNA delivery. jetPRIME® is also ideal for DNA | siRNA co-transfection, ensuring high DNA Transfection and efficient gene silencing in a variety of cell lines with exceptionally low toxicity.

Figure 1: Exogenous Luciferase Silencing in Several Cell Lines After DNA and siRNA Cotransfection Using jetPRIME®



Note. Experiments were performed with 400 ng p4CMV-Luc and 10 nM of luciferase siRNA per well in 6-well plates.

High Transfection Efficiency in a Wide Variety of Adherent Cell Lines

jetPRIME® is an easy-to-use transfection reagent for day-to-day experiments that leads to efficient and reliable scientific results. It leads to outstanding high percentage of transfected adherent cell lines of various origins as well as primary cells

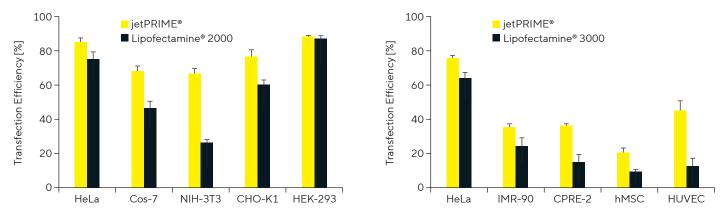


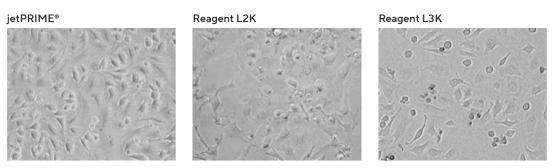
Figure 2: Comparative Transfection Efficiency of jetPRIME® Versus Its Main Competitors

Note. Transfection efficiency was assessed by FACS analysis in various cell lines 24 hours after transfection in 24-well plates. Conditions were used according to the manufacturer's recommendation.

Extremely Gentle on Cells

Transfection with jetPRIME® requires low amounts of reagent and nucleic acids, leading to increased cell viability while keeping high transfection efficiency.

Figure 3: Cells Transfected With jetPRIME® Are Healthy, While Major Cytotoxicity Is Observed With Competitors: Cell Viability 24 Hours After Transfection



Note. Phase contrast microscopy HeLa Cells 24 hours after transfections performed according to the manufacturer's recommendations for each reagent.

Requires Less DNA and Less Reagent

Transfection with jetPRIME® requires a small amount of reagent and DNA | siRNA, making its use very cost-effective.

Reagent	Volume of reagent per well	Amount of DNA per well	Number of transfection per 1.5 mL vial
jetPRIME®	2-4 µL	1-2 µg	375-750
Lipofectamine® 2000	5-12.5 μL	2.5 µg	120-300
Lipofectamine® 3000	3.75-7.5 μL	2.5 µg	200-400

 Table 1: Conditions for Transfection Given per 6-Well Plates According to Manufacturer's Recommendations

Ordering Information

Item	Description	Package Volume Quantity Size	Order Number
jetPRIME® 0.1 mL	Versatile DNA siRNA transfection reagent provided with associated Buffer -	0.1 mL Vial (+5 mL Buffer Bottle)	101000027
jetPRIME® 0.75 mL		0.75 mL Vial (+ 60 mL Buffer Bottle)	101000015
jetPRIME® 1.5 mL		1.5 mL Vial (+2x60 mL Buffer Bottle)	101000046
jetPRIME® 5x1.5 mL		5x1.5 mL Vial (+10x60 mL Buffer Bottle)	101000001
jetPRIME® buffer 60 mL	jetPRIME [®] associated Buffer	60 mL Bottle	20100003

Bulk quantities are available upon request.

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