# SVIFCTSA3

# Product Datasheet

jetPRIME<sup>®</sup>

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

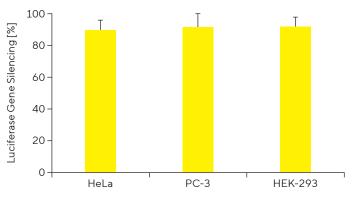
# **Technical Specifications**

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

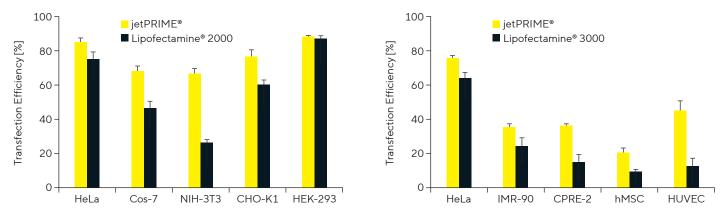


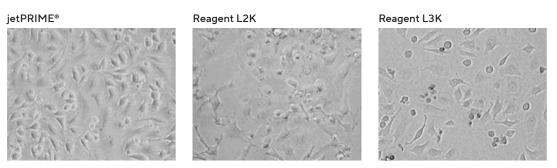
Figure 2: Comparative Transfection Efficiency of jetPRIME® Versus Its Main Competitors

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 <sup>®</sup> associated Buffer	60 mL Bottle	20100003

Bulk quantities are available upon request.

#### Germany

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#### **For further information, visit**

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