

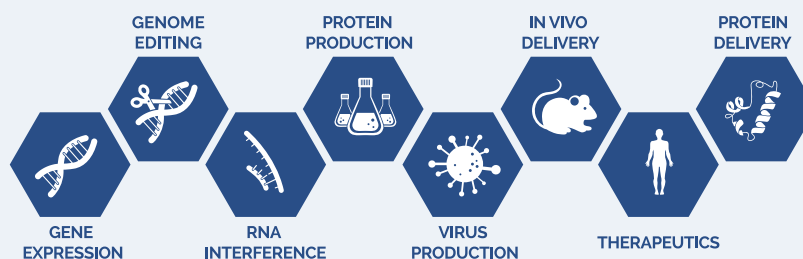


# RESEARCH PRODUCTS

## 2019 • EDITION

Polyplus-transfection® is a biotechnology company that develops innovative solutions for the delivery of nucleic acids in research, bioproduction and therapeutics.

Quality is our top priority and Polyplus-transfection® is ISO 9001-certified since 2002.



# jetOPTIMUS®

## Best-in-class DNA transfection reagent

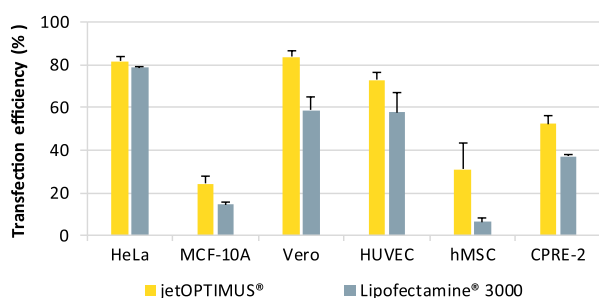
Reach higher gene expression in mammalian cells!

Request  
your free  
sample



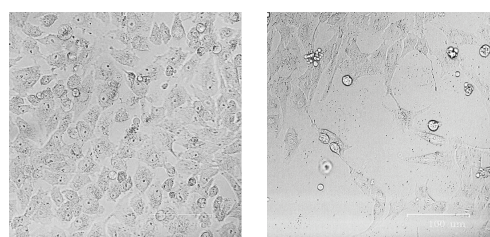
- Highly efficient:**  
reach maximal gene expression in hard-to-transfect cells
- Cost-effective:**  
use minimum reagent volume and DNA quantity
- Biologically relevant:**  
keep an excellent cell viability & morphology
- Time-saving:**  
transfect with an optimized ready-to-use protocol

**Highly efficient:**  
jetOPTIMUS® outperforms its main competitor.



Transfections were performed on several cell lines following standard protocols.

**Biologically relevant:**  
No sign of cell toxicity after transfection.



jetOPTIMUS®

Lipofectamine® 3000

Transfections were performed on Vero cells following standard protocols.

**Cost-effective:** Do more with less!

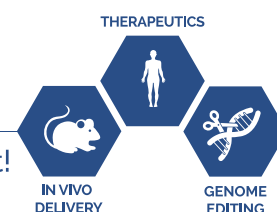
DNA transfection (standard protocol) in 24-well plate			
Reagent	Volume of Reagent per well (µL)	Number of transfections per 1.5 mL vial	Cost per reaction per well
jetOPTIMUS®	0.5	3000	X
Lipofectamine® 3000	0.75 – 1.5	2000-1000	2X to 3X

jetPRIME® - versatile DNA & siRNA transfection reagent is still available.

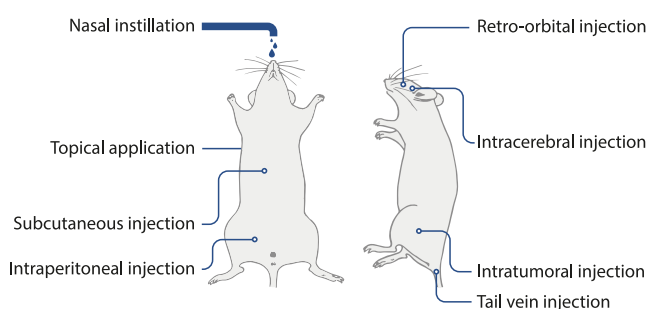
## *in vivo*-jetPEI®

### *in vivo* nucleic acid delivery

Choose an easy and safe delivery method for your *in vivo* proof of concept!



- Deliver any nucleic acid, to any animal model, using any injection route**
- Proven Track record: over 700 publications**
- Very easy to use: just mix and inject**
- Safe: No inflammatory response triggered**
- Protocols tailored for your application by Polyplus delivery experts**
- cGMP grade available for clinical trials**



Examples of delivery routes using *in vivo*-jetPEI® in mice

# jetMESSENGER®

## mRNA transfection reagent for hard-to-transfect cells

Take your gene expression to the next level by switching to mRNA!

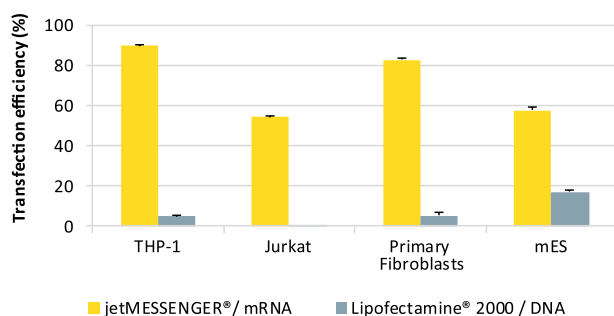
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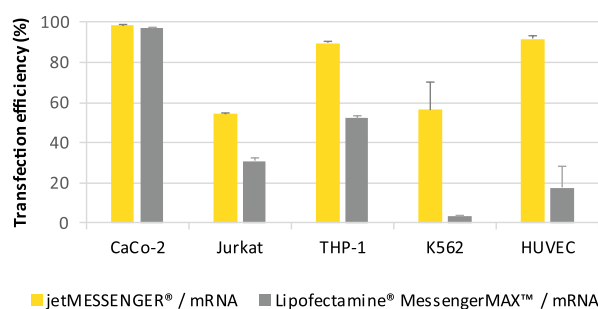
- + **Unmatched transfection efficiency:**  
Outperform DNA transfection by switching to mRNA
- + **Extremely gentle on cells:**  
Maintain a good cell viability
- + **Efficient on a wide variety of hard to transfect cells:**  
Transfect slow dividing, quiescent and primary/stem cells
- + **Perfectly suited for numerous applications:**  
Achieve gene expression, CRISPR gene editing, iPS generation and much more!

### Unmatched transfection efficiency:

jetMESSENGER® outperforms both DNA and mRNA competitors



Transfections were performed on several cell lines following standard protocols.



Transfections were performed on several cell lines following standard protocols.

# INTERFERin®

## siRNA/miRNA transfection reagent

Use less siRNA, reach higher silencing efficiency without off-target effects!

Request  
your free  
sample



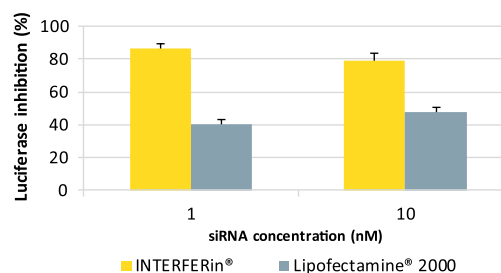
- + **High silencing efficiency:**  
Reach over 90% gene silencing in a wide variety of cells
- + **Gentle mode of action:**  
Maintain an excellent cell viability
- + **Low off-target effects:**  
Use as little as 1 nM siRNA
- + **Easy to use:**  
Rely on optimized protocols compatible with both serum and antibiotics

### Efficient gene silencing



Transfections were performed on CaSki cell line following standard protocols.

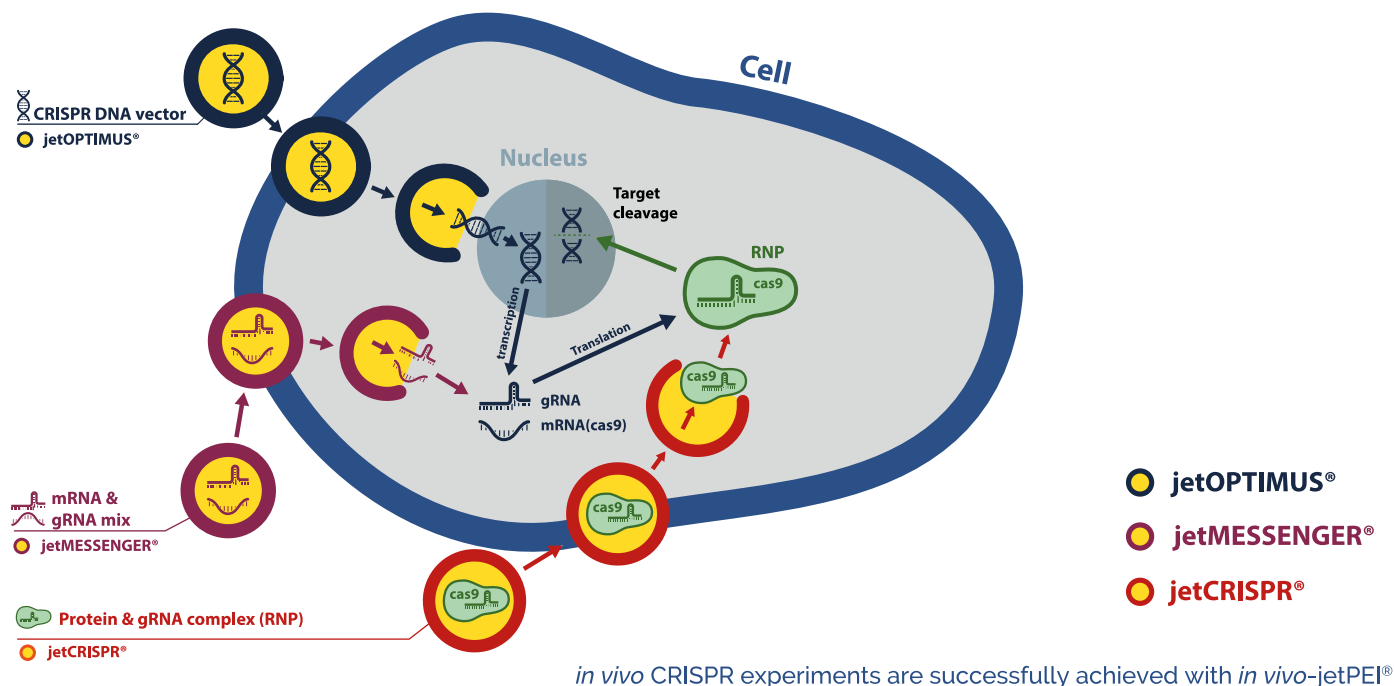
### Great silencing using low siRNA concentration



Transfections were performed on 3LL cells stably expressing luciferase following standard protocols.

# Our solutions for CRISPR Genome editing

Find a transfection reagent for all CRISPR approaches (DNA, RNA or RNP)!



## jetCRISPR®

RNP (Cas9 protein + gRNA) transfection reagent

Combine jetCRISPR® and SpCas9 Nuclease for efficient gene editing!

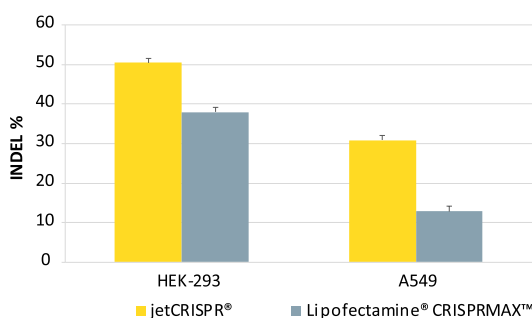
Request  
your free  
sample



- + **High genome editing efficiency using RNP:**  
Deliver both Cas protein (Cas9, Cpf1) and gRNA
- + **Maintained cell viability:**  
Work with healthy cells in a physiological environment

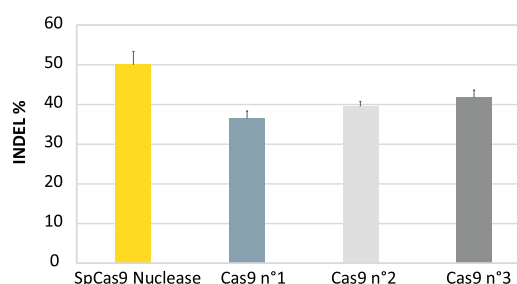
- + **Reduced off-target effect:**  
Use our SpCas9 Nuclease to achieve fast and reliable gene editing
- + **Easy to prepare:**  
Choose between two optimized protocols

### jetCRISPR® outperforms its main competitor



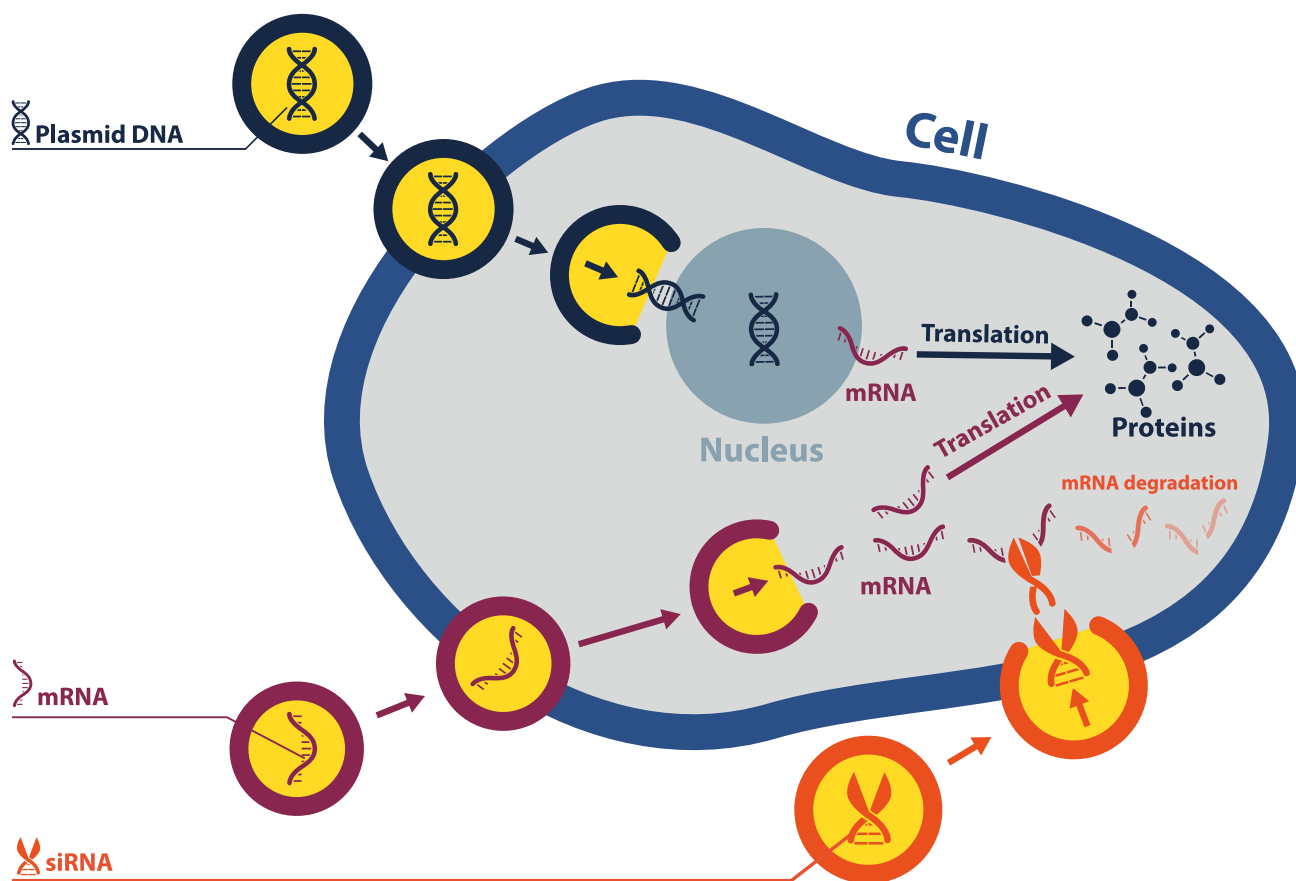
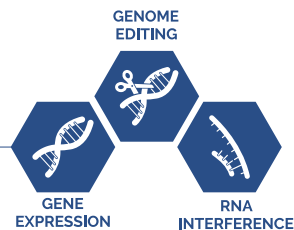
Transfections were performed on A549 and HEK-293 cells following standard protocols.

### Combine both SpCas9 Nuclease and jetCRISPR® for higher efficiency



Transfections were performed on HEK-293 cells following standard protocols.























# RESEARCH PRODUCTS



- **jetOPTIMUS®** - DNA transfection reagent
- **jetMESSENGER®** - mRNA transfection reagent
- **INTERFERin®** - siRNA/miRNA transfection reagent

**Polyplus**  
transfection®



Product		Product Size	Buffer size	Reference number
<b>in vitro transfection</b>				
<b>jetOPTIMUS®</b> Best-in-class DNA Transfection Reagent		0.1 mL	10 mL	117-01
		0.75 mL	2 x 60 mL	117-07
		1.5 mL	4 x 60 mL	117-15
<b>jetPRIME®</b> DNA and/or siRNA Transfection Reagent	   	0.1 mL	5 mL	114-01
		0.75 mL	60 mL	114-07
		1.5 mL	2 x 60 mL	114-15
		5 x 1.5 mL	10 x 60 mL	114-75
<b>jetMESSENGER®</b> mRNA Transfection Reagent For hard-to-transfect cells		0.1 mL	10 mL	150-01
		0.75 mL	60 mL	150-07
		1.5 mL	2 x 60 mL	150-15
<b>INTERFERin®</b> siRNA/miRNA Transfection Reagent		0.1 mL	-	409-01
		1 mL	-	409-10
		5 x 1 mL	-	409-50
<b>jetCRISPR®</b> RNP Transfection Reagent For genome editing	 	0.1 mL	-	502-01
		0.75 mL	-	502-07
<b>SpCasg Nuclease</b> Casg protein for genome editing	 	100 µg	-	722-100
<b>jetPEI®</b> DNA Transfection Reagent For High Throughput Screening		1 mL	50 mL	101-10N
		4 x 1 mL	4 x 50 mL	101-40N
<b>jetPEI®-Hepatocyte</b> DNA Transfection Reagent for hepatocyte cells		0.5 mL	50 mL	102-05N
<b>jetPEI®-Macrophage</b> DNA Transfection Reagent for macrophage cells		0.5 mL	50 mL	103-05N
<b>jetPEI®-HUVEC</b> DNA Transfection Reagent for HUVEC cells		0.5 mL	50 mL	108-05N
<b>PULSin®</b> Protein, Antibody and Peptide Delivery Reagent 200 µL positive control included		0.4 mL	20 mL	501-04
<b>NaCl 150 mM solution</b>		-	50 mL	702-50
<b>in vivo delivery</b>				
<b>in vivo-jetPEI®</b> in vivo nucleic acid Delivery Reagent	  	0.1 mL	10 mL	201-10G
		0.5 mL	2 x 10 mL	201-50G
<b>in vivo-jetPEI®-Gal</b> in vivo nucleic acid Delivery Reagent Galactose-conjugated		0.1 mL	10 mL	202-10G
<b>in vivo-jetPEI®-Man</b> in vivo nucleic acid Delivery Reagent Mannose-conjugated		0.1 mL	10 mL	203-10G
<b>jetSI 10 mM</b> siRNA Delivery Reagent into the Brain		0.5 mL	-	403-05
<b>Glucose Solution</b>		-	10 mL	701-10

Polyplus-transfection® provides solutions for other applications such as Bioproduction (protein & virus production) and Cell and Gene Therapy. Please contact our scientific support for more information.

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