

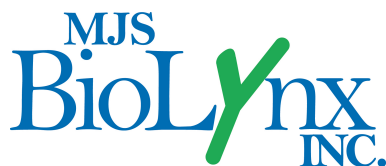
See the Unseen®



**FuGENE® Transfection**



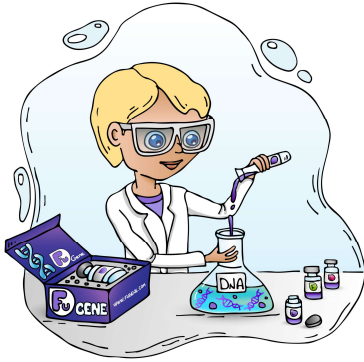
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# FuGENE® Transfection



## About Us

FuGENE® Transfection, founded in Madison, Wisconsin in 1996, is a market-leading innovator of nucleic acid delivery solutions. For over 25 years our transfection products have been successfully utilized, published, and trusted by thousands of researchers worldwide. FuGENE® seeks to empower researchers and clinicians to uncover new biomedical discovery to See the Unseen®.

## Our Mission & Vision

The FuGENE® mission is to inspire healing discoveries and empower our customers to solve the world's most challenging problems. By understanding the challenges facing scientists at the forefront of discovery, FuGENE® is working to identify and empower best-in-class solutions for our customers.



## Our Brand:

FuGENE® Transfection is owned by Fugent LLC of Madison Wisconsin. For the entirety of our 25 years of business we have manufactured our reagents locally and sustainably in our Madison area facilities. FuGENE® Transfection reagents can be purchased directly from us at Fugent LLC, or through our current worldwide distributor Promega Corporation. Previous distributors of FuGENE® include Roche, and BM.



# Products and Services



## DNA Transfection:

Explore our market-leading DNA transfection reagents for delivery of DNA into eukaryotic and insect cells. Our reagents, FuGENE® 6 and FuGENE® HD combine high-efficiency transfection with extremely low toxicity to your cells. With simple, easy-to-use protocols, you save valuable laboratory time and resources. Whether it's for life science research, protein/antibody production, virus production, or for groundbreaking therapeutic needs, FuGENE® has you covered.

## RNA Transfection

Explore our newest RNA transfection reagent for high-efficiency delivery of siRNAs into eukaryotic cells. FuGENE® SI leverages our proprietary chemistry to provide superior transfection which yields maximum gene knockdown with extremely low cell toxicity. Whether it's the delivery of siRNA, miRNA or similar short RNA molecules, FuGENE® has you covered.



## Custom Products & Services:

FuGENE® knows how truly important the work of our customers is to society. We also recognize how unique each researcher, project, and application can be. This is why we have created our flexible custom products and services offering. Whether it's a custom fill volume of existing FuGENE® product lines, a completely new reagent or component for your specific applications, or a complete cell transfection workflow. FuGENE® has you covered.

## Pharmaceutical Collaborations:

FuGENE® is committed to developing and manufacturing reagents under strict regulatory & quality systems. We understand the rigor that goes into selecting a partner for the development of therapeutics and diagnostics. This is why we are exploring cGMP capabilities to fully realize the potential of the FuGENE® product lines in clinical applications. Schedule a consultation today.



# DNA Transfection



## High Efficiency and Gentle DNA Transfection

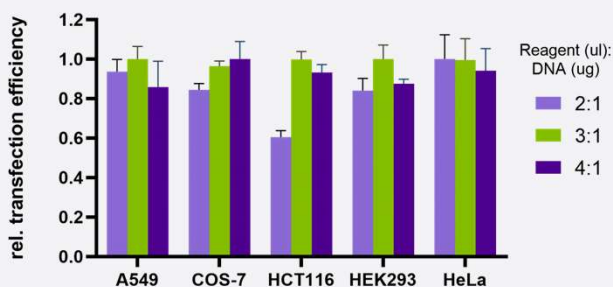
Delivery of DNA into eukaryotic and insect cells requires a proven reagent that results in robust gene expression of the delivered construct with minimal-to-no cytotoxicity. Understanding that each cell and experiment is unique, we offer both FuGENE® 6 and FuGENE® HD to meet the differing needs of today's researchers. Whether it's routine cost-effective transfections or sensitive, difficult-to-transfect, primary or stem cells, there's a FuGENE® DNA transfection reagent blend for you.



### FuGENE® 6 DNA Transfection Reagent

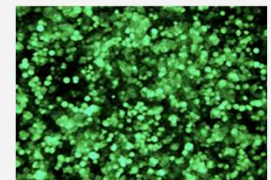
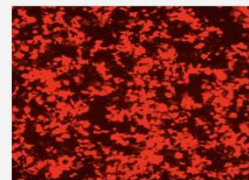
- Reliable Transfection for Common Cells Lines
- Extremely Low cytotoxicity
- Simple and Easy-To-Use Protocol with Minimal Optimization
- Cost Effective For Budget Conscious Labs

Optimization of FuGENE 6 to DNA Ratio



### FuGENE® HD DNA Transfection Reagent

- Enhanced Transfection for challenging cell lines
- Protein and Virus Production
- Primary Cells, Stem Cells, and Difficult To Transfect Cells
- Simple Protocol, Minimal Optimization



A.) HEK-293T Viral Production cells transfected with FuGENE® HD and RFP expressing plasmid. B.) Cos7 cells transfected with FuGENE® HD and GFP expressing plasmid

Catalog #	Size	Description
F6-1000	1 mL	FuGENE® 6 1mL
F6-5000	5 mL (1mL x 5)	FuGENE® 6 5mL

Catalog #	Size	Description
HD-1000	1 mL	FuGENE® HD 1mL
HD-5000	5 mL (1mL x 5)	FuGENE® HD 5mL

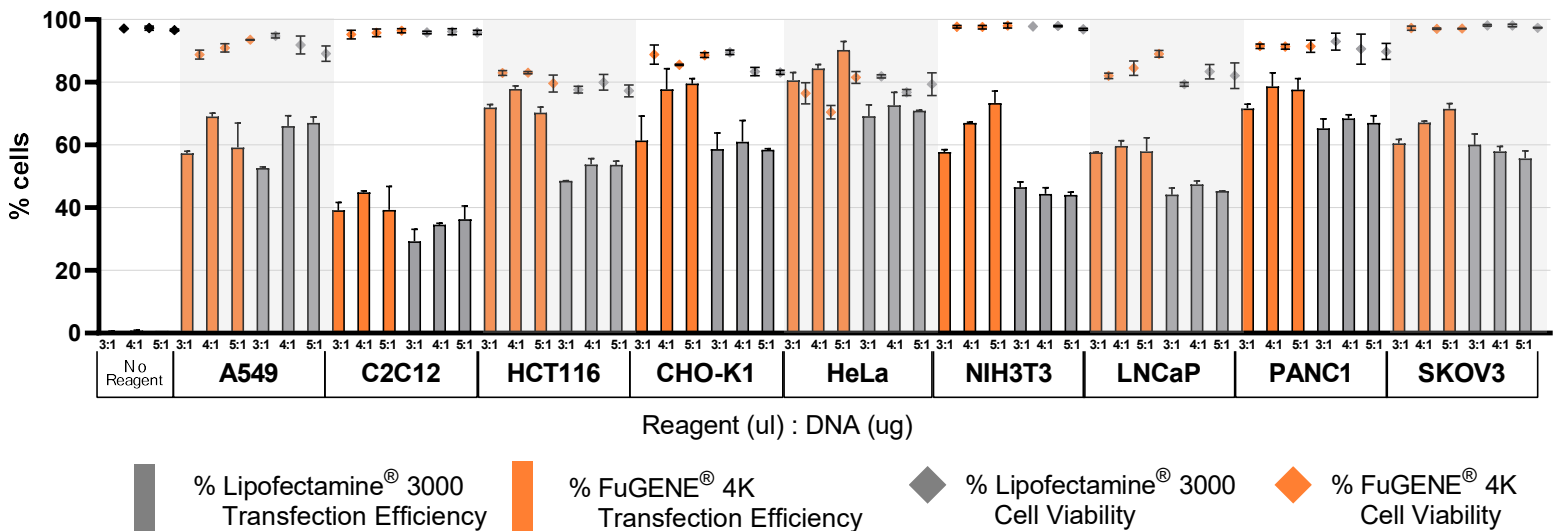
# DNA Transfection



## FuGENE® 4K DNA Transfection Reagent

FuGENE® 4K is our newest and most advanced, 100% synthetic, multi-component transfection reagent for improved delivery of DNA into challenging and routine mammalian cells. The novel discovery of FuGENE® 4K allows researchers to further improve their transfection efficiencies and cell viabilities over FuGENE® 6 and HD and leading competitor reagents. The improved blend allows users to obtain never-before-seen efficiencies from reagent based transfection systems.

## FuGENE® 4K vs. Lipofectamine® 3000



A549, C2C12, HCT116, CHO-K1, HeLa, NIH3T3, LNCaP, PANC1 & SKOV3 cell lines were seeded in 96-well plates according to user guides and subsequently transfected with FuGENE® 4K or Lipofectamine® 3000 (registered trademark of Thermo Fisher Scientific) and a GFP expressing plasmid at the following transfection reagent to DNA ratios (3:1, 4:1 & 5:1). Cells were then analyzed via flow cytometry 48 hours post-transfection to measure % GFP expressing cells and % total cell viability (via propidium iodide dye). The graphs above show the superior performance of FuGENE® 4K vs. Lipofectamine® 3000.

## FuGENE® 4K DNA Transfection Reagent

- Most advanced lipid and polymer transfection technology
- Maximizes transfection efficiencies in a broad range of mammalian cells
- Extremely gentle on cells, with minimal-to-no cytotoxicity
- Easy and quick protocol with minimal optimization required



Catalog #	Size	Description
4K-1000	1 mL	FuGENE® 4K 1mL
4K-5000	5 mL (1mL x 5)	FuGENE® 4K 5mL

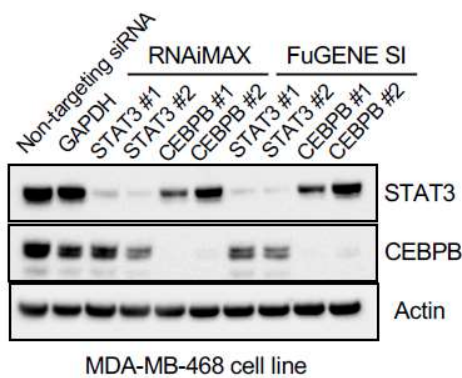
# RNA Transfection



## RNA Transfection:

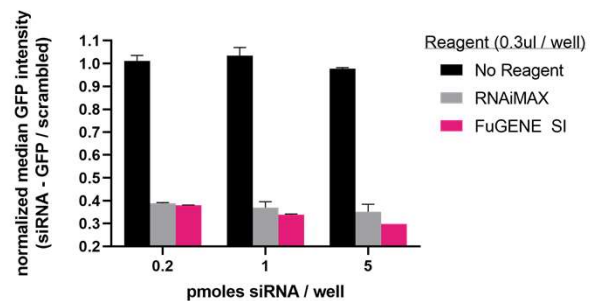
Explore our newest RNA transfection reagent, FuGENE® SI, for high-efficiency delivery of siRNAs and other short RNAs into routine & difficult-to-transfect eukaryotic cells. FuGENE® SI leverages our proprietary multi-component chemistry to provide superior delivery, which yields maximum gene knockdown while maintaining extremely low cell toxicity. Whether it's the delivery of siRNA or similar short RNA molecules, FuGENE® SI has you covered.

## Superior Knockdown Performance, Extremely Gentle on Cells



Human MDA-MB-468 cells were transfected in 6-well plates with 40 pmol of indicated targeting siRNA and negative/positive controls (Silencer Select®, Life Technologies) with either 7.5ul of FuGENE® SI or 7.5ul of RNAiMax® (Life Technologies) per well. 72 hours after transfection the cells were collected and analyzed via western blot for expression of target genes STAT3 and CEBPB. Results demonstrates that FuGENE SI yields robust knockdown of target genes and performs better or comparable to RNAiMax®.

### Comparison of siRNA Knockdown Efficiency: FuGENE SI vs. RNAiMAX in GFP-HEK293 cells



HEK293-GFP cells were seeded in 96-well plates transfected with 0.2, 1.0, or 5 pmols of GFP targeting siRNA or negative control (Horizon Discovery/siGENOME®), along with 0.3ul of Transfection Reagent FuGENE® SI or 0.3ul of Lipofectamine® RNAiMax (Life Technologies Corporation). Cells were then analyzed via flow cytometry 48 hours post-transfection to measure % knockdown of GFP & total cell viability. Graphs above show the superior knockdown performance of FuGENE® SI vs. Lipofectamine® RNAiMax in HEK293 and NIH3T3 cells.

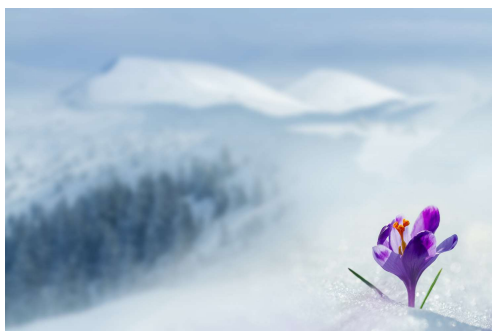
### FuGENE® SI siRNA Transfection Reagent

- Delivery of siRNAs, miRNAs and Similar Short RNA Molecules
- Superior Knockdown Efficiency with Lower Amounts of siRNA
- Less Toxicity than Competitor Reagents
- Simple Protocol, Minimal Optimization



Catalog #	Size	Description
SI-1000	1.0 mL	FuGENE® SI 1 mL
SI-5000	5.0 mL (1mL x 5)	FuGENE® SI 5 mL

# Custom Products & Services



## Specialized Solutions Tailored for You

FUGENE® understands how truly important the work of our customers is to society. We also recognize how unique each researcher, project and application can be. This is why we have created our flexible custom products and services offerings. Whether it's a custom fill volume of existing FuGENE® products, or a completely new reagent or component, our expert PhD-level scientists are available when you need them.

### Custom Volume and/or Vial Dispense

- Available for any current FuGENE® product line
- Choose custom volume, vial, and label
- Customizable quality control options

### Custom Reagent Development

- Leverage FuGENE® expertise and proprietary compound libraries to have us develop a specialized reagent for your specific applications
- Screening of customer provided cell line and target, optimization, and protocol transfer

### Synthesis of Polymers, Lipids and Nucleic Acids

- Analytical biochemistry experts with 60 years of combined experience in synthesis of polymers, lipids, and nucleic acids
- Flexible capabilities, schedule a consultation today with our PhD scientists

### Cell Line Development

- Transfection of Customer Provided Cell Lines
- Cell Line Creation
- Protocol and Material Transfer

## What to Expect:

- Expert Scientific Consultation
- Flexible Capabilities
- Weekly Communication
- Access to Raw Data
- Reliable Results
- Meeting Agreed Timelines

To inquire about our Custom Products and Services please email us at: [contact@fugene.com](mailto:contact@fugene.com)

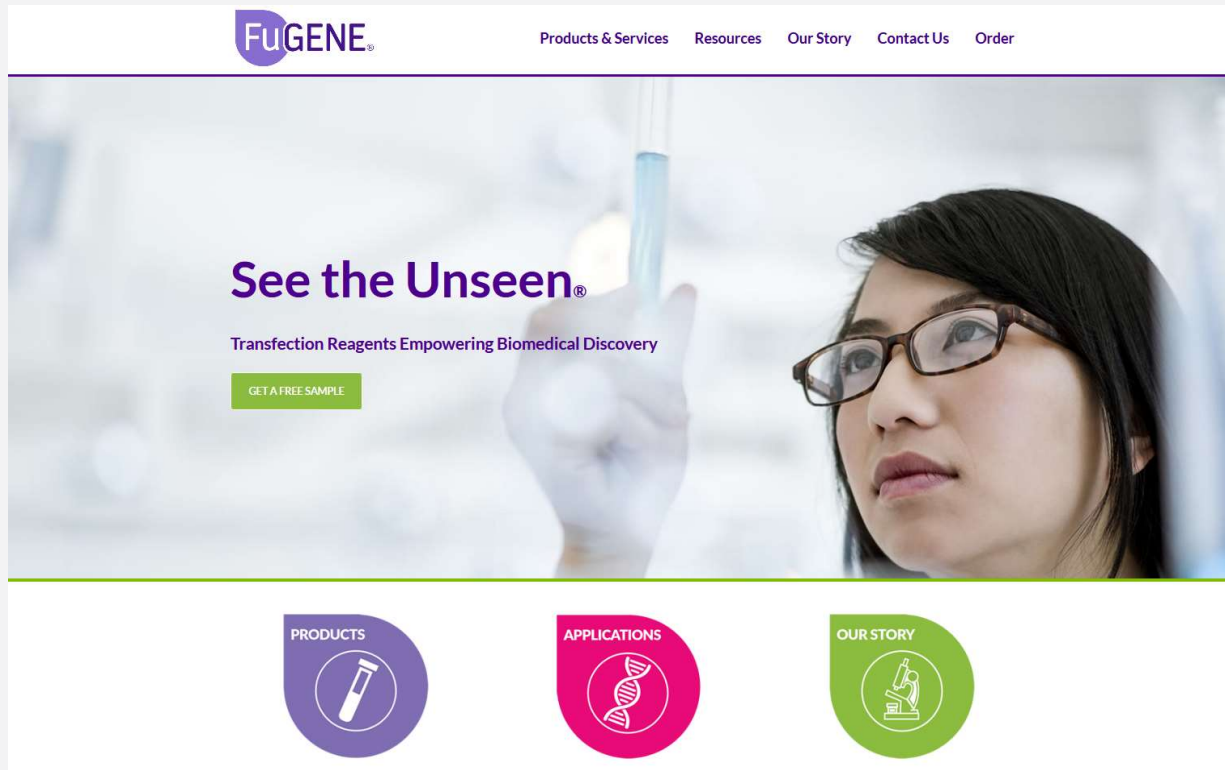
# Partnerships & Collaborations:



## Empowering Discovery through Collaboration & Partnership

FUGENE® has a commitment to helping researchers and clinicians advance the understanding of life science and medicine. With that, we are actively pursuing and developing collaborations with scientists and organizations spanning academia, medical research, biotechnology, pharmaceutical and industrial applications. If you are interested in discussing a potential partnership or collaboration, please reach out to us at: [contact@fugene.com](mailto:contact@fugene.com)

## Visit Our New Website at: [www.fugene.com](http://www.fugene.com)



### Website Features

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- Contact Form
- Citation and Publication Database
- Product & Company Information
- Key Applications





## Our Location

FuGENE® Transfection (Fugent LLC) is strategically located in the suburbs of Madison, Wisconsin, home of a world-class research university and diverse biomanufacturing national hub.



### Legal Disclaimers:

FuGENE® products are sold with a Limited Use Label License (LULL). You shall use this product in accordance with all applicable laws, rules, and regulations. You may not attempt to reverse engineer.

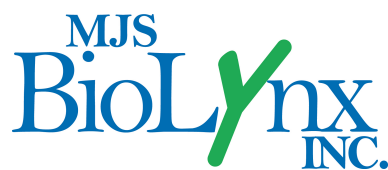
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