

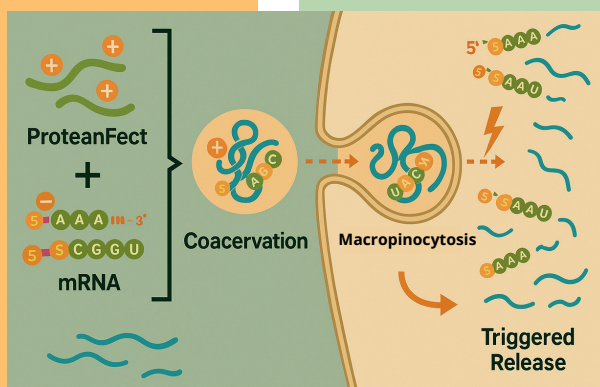
ProteanFect™ TuffCell Transfection Kit

Your Solution for Tough-to-Transfect Cells

A non-viral, non-liposomal, **coacervate-based** nucleic acid delivery platform based on mammalian endogenous protein, offering a novel solution for efficient gene delivery.

What is coacervate?

A **coacervate** is a type of droplet-like structure formed when charged polymers (such as proteins, peptides, or nucleic acids) spontaneously separate from solution into a dense, liquid-rich phase, surrounded by a more dilute outer phase. This phenomenon is called liquid-liquid phase separation (LLPS).



What is ProteanFect™?

A groundbreaking nucleic acid delivery system that leverages coacervate technology to achieve efficient gene delivery through non-viral, non-electroporation, and non-liposomal approaches.

How ProteanFect™ Works

ProteanFect form nanoparticles that rapidly deliver gene cargo into cells, enabling efficient gene expression and safe degradation after delivery.



Solution for **Tough-to-Transfect Cells**



Gentle transfection on Cells



Versatility of Cargo Type

Highlight of successfully transfected cells

Cell Lines	Cargo Type
Human primary T cells	mRNA, siRNA
Human primary NK cells	mRNA, siRNA
Human primary CD34+ hematopoietic stem cells	mRNA, siRNA
iPSCs (induced pluripotent stem cells)	pDNA, mRNA, siRNA
Mouse primary T cells	mRNA, siRNA
Mouse primary neurons	pDNA, mRNA, siRNA
Jurkat T (human T lymphoblastic leukemia cells)	pDNA, mRNA, siRNA
K562 (human chronic myeloid leukemia)	pDNA, mRNA, siRNA

Key Performance Highlights in Cell Lines

Figure 1. ProteanFect achieves high transfection efficiency with pDNA/mRNA in Jurkat T cells

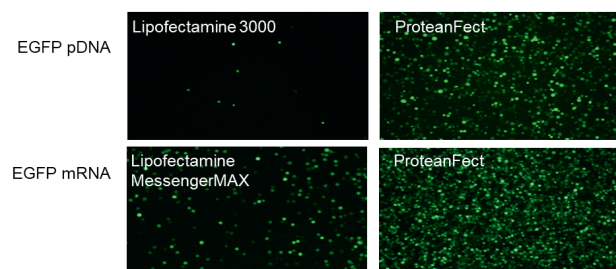
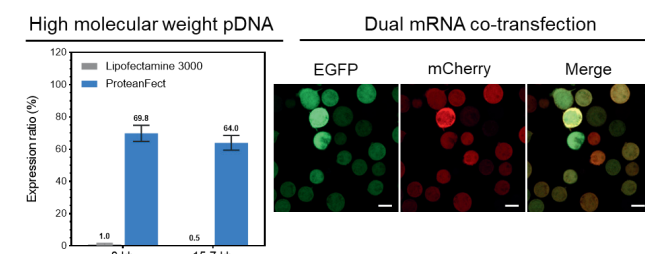


Figure 2. ProteanFect achieves high transfection efficiency of high molecular weight nucleic acids or co-transfection of multiple nucleic acids in Jurkat T cells



Key Performance Highlights in Primary Cells

Figure 1. ProteanFect achieves high transfection efficiency with mRNA in human primary T cells while maintaining an excellent safety profile

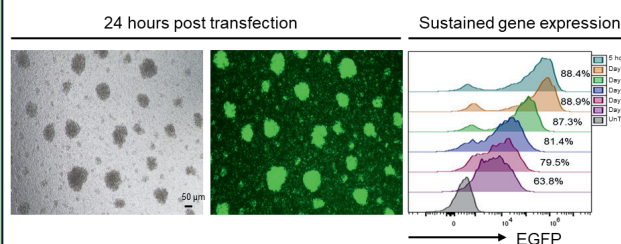
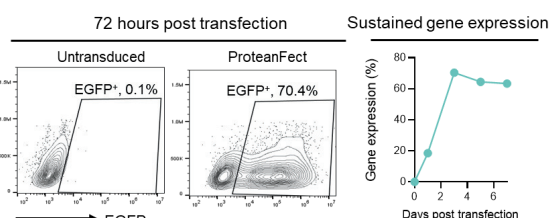


Figure 2. ProteanFect achieves high transfection efficiency with mRNA in NK cells



SKU	Name	Description
TT300007S	ProteanFect TuffCell Transfection Kit - 0.02 mL	A non-viral, non-electroporation, non-liposomal transfection kit using engineered mammalian proteins, tailored for high-efficiency delivery into a wide range of primary cells and difficult to transfect cell lines such as immune cells, stem cells, and neuronal cells.
TT300007M	ProteanFect TuffCell Transfection Kit - 0.1 mL	
TT300007L	ProteanFect TuffCell Transfection Kit - 1.0 mL	
TT300008S	ProteanFect TuffCell Mouse Immunocyte Transfection Kit - 0.02 mL	A non-viral, non-electroporation, non-liposomal transfection kit using engineered mammalian proteins, tailored for high-efficiency delivery in mouse primary immune cells
TT300008M	ProteanFect TuffCell Mouse Immunocyte Transfection Kit - 0.1 mL	
TT300008L	ProteanFect TuffCell Mouse Immunocyte Transfection Kit - 1.0 mL	

ProTeaFect™ — Nature's Coacervate, Science's Power: **Effortless Gene Delivery into the Hardest Cells**

OriGene Headquarters

9620 Medical Center Dr Rockville, MD 20850
+1-301-340-3188
custsupport@origene.com
techsupport@origene.com
sales@origene.com

OriGene EU

Schillerstraße 5
32052 Herford, Germany
+49-5221-346060-0
info-de@origene.com
www.origene.com

