



The Transfection Experts

Latest Trends in Transfection: RNA Induced Pluripotent Stem Cells, 3D-Culture Systems and More
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Novel technologies for transfecting nucleic acids are warranted due to emerging developments in cell biology including stem cell research, 3D-culture systems, high-throughput screening and increased large-scale mammalian protein production. RNA induced pluripotent stem cells (RiPSCs) have come to the forefront of stem cell research due to the efficient reprogramming and differentiation of stem cells via mRNA. Development of 3D-culture systems requires transfection methods to transport nucleic acids within these physiologically relevant conditions. Cancer research and pharmaceutical discovery use siRNA and miRNA high-throughput screens requiring effective methods for delivering these libraries. Furthermore, biotherapeutic success has increased demand for protein production which can be addressed through optimized transfection conditions. We will discuss recent advances in transfection and present nucleic acid delivery solutions to address these new challenges.