



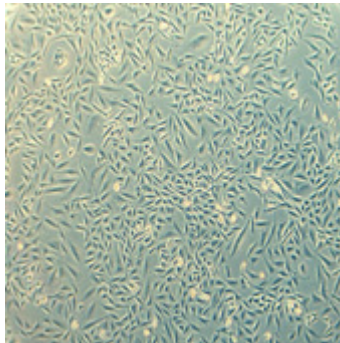
***TransIT*®-mRNA Transfection Kit**

A high efficiency, low toxicity, large RNA transfection reagent for mammalian cells

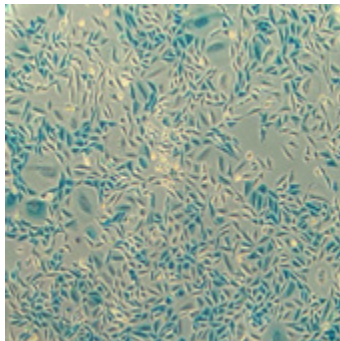
- **Low Cellular Toxicity**—Maintain cell density and reduce experimental biases.
- **High Efficiency Delivery**—Achieve RNA delivery in a large population of cells to ensure experimental success.
- **Serum Compatible**—Perform transfections in the presence of serum which eliminates the need for a media change and maintains cellular health.
- **Deliver Various Sizes of RNA**—Ideal for specialized applications, such as viral production and protein expression from mRNA.

Cell lines successfully transfected at Mirus Bio:

A549, CHO-K1, COS-7, HEK 293, HeLa, HepG2, NIH 3T3, and Vero cell lines.



A. Mock Transfection Control



B. *lacZ* mRNA Transfection

Figure 1. The *TransIT*-mRNA Transfection Kit Efficiently Delivers *lacZ* mRNA to CHO-K1 Cells. Using the *TransIT*-mRNA Transfection Kit, CHO-K1 cells were mock transfected (A) or transfected with a capped and polyadenylated *lacZ* encoding mRNA (B). Approximately 18 hrs post-transfection the cells were stained using Mirus Bio's Beta-gal Staining Kit to identify the *lacZ* transfected cells.

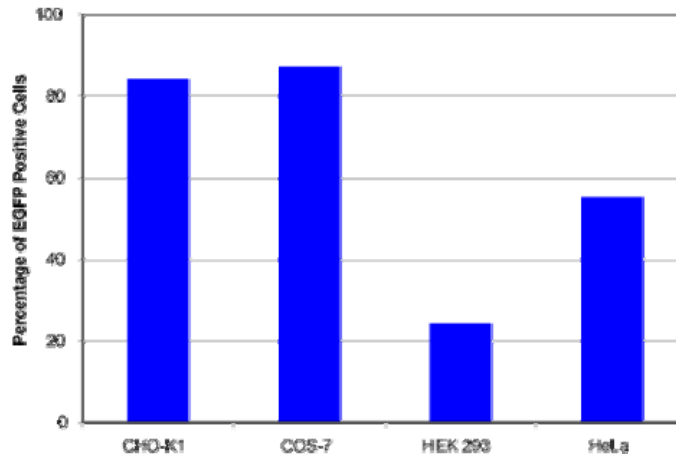


Figure 2. The *TransIT*-mRNA Transfection Kit Efficiently Delivers mRNA to a Variety of Cell Lines. Using the *TransIT*-mRNA Transfection Kit, cells were transfected with a capped and polyadenylated EGFP encoding mRNA. Approximately 18 hrs post-transfection the cells were analyzed by flow cytometry to identify the EGFP expressing cells.

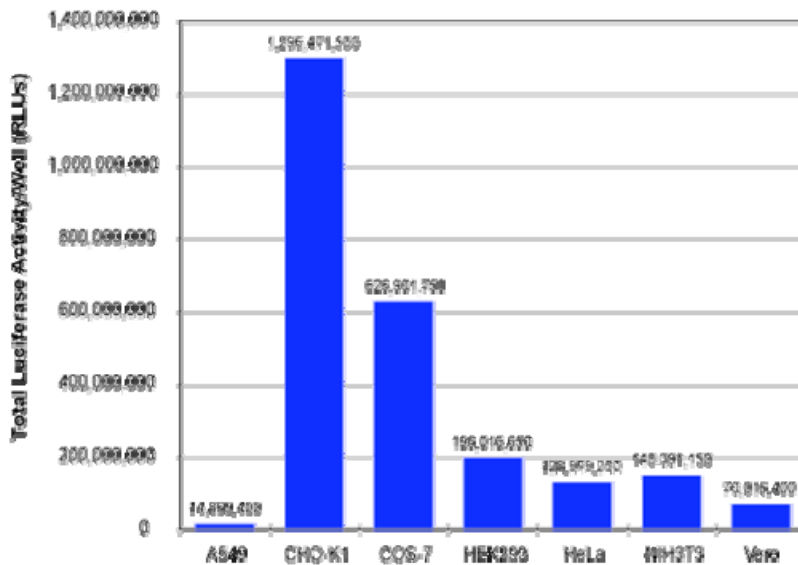


Figure 3. High Level Luciferase Expression after Delivery of a Luciferase mRNA using the *TransIT*-mRNA Transfection Kit. Cells in 12-well plates were transfected with a capped and polyadenylated mRNA encoding luciferase using the *TransIT*-mRNA Transfection Kit. Approximately 18 hrs post-transfection the cells were harvested and the total luciferase activity per well was determined.

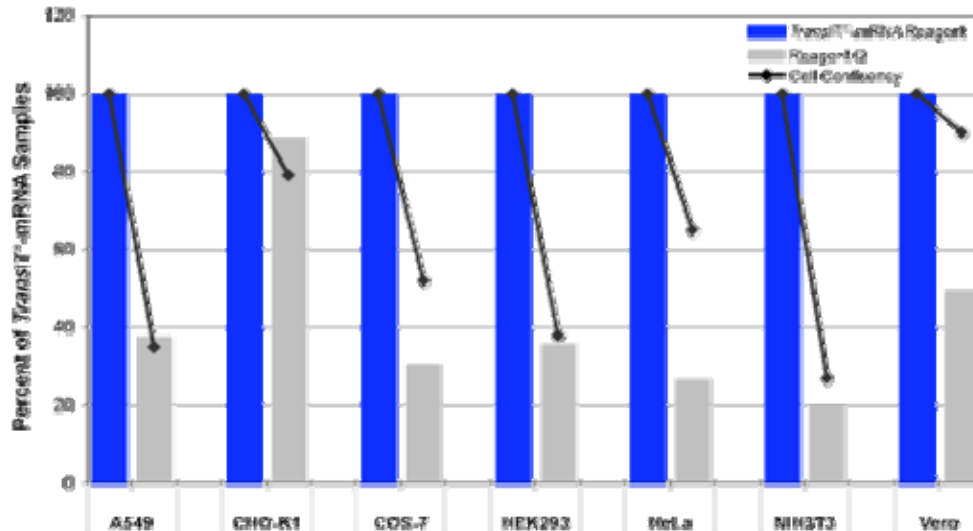


Figure 4. Achieve Superior mRNA Delivery Performance with the *TransIT*-mRNA Transfection Kit.

The indicated cell lines were transfected at approximately 80% confluency with a capped and polyadenylated mRNA encoding firefly luciferase using either the *TransIT*-mRNA Transfection Kit or Competitor Reagent Q. Approximately 18 hours post-transfection, the cells were harvested, lysed and the amount of luciferase activity present in each well was determined. The results were normalized to the activity of the *TransIT*-mRNA Kit transfected samples (set as 100%). The black diamonds illustrate the average percent cell confluency compared to the *TransIT*-mRNA transfected wells for each cell line demonstrating the toxicity of Reagent Q. In each experiment, the cells transfected with the *TransIT*-mRNA Transfection Kit were approximately 100% confluent at the time of harvest.