TransIT-siQUEST® Transfection Reagent

Quick Reference Protocol

Instructions for MIR 2110, 2111, 2114, 2115, 2116
Full protocol, SDS and Certificate of Analysis available at mirusbio.com/2110



SPECIFICATIONS

Storage	Store <i>Trans</i> IT-siQUEST® Reagent tightly capped at 4°C. <i>Before each use</i> , warm to room temperature and vortex gently.	
Product Guarantee	1 year from the date of purchase, when properly stored and handled.	

▶ siRNA TRANSFECTION PROTOCOL



Fill in volumes below based on culture vessel used for transfection (Table 1).

A. Plate cells

- 1. Plate cells in ___ml complete growth medium (per well).
 - For adherent cells: Plate cells at a density of $0.8-3.0 \times 10^5$ cells/ml. For suspension cells: Plate cells at a density of $2.5-5.0 \times 10^5$ cells/ml.
- Culture overnight. Most cell types should be ≥ 80% confluent on day of transfection.

B. Prepare TransIT-siQUEST® Reagent:siRNA complexes

- 1. Warm *Trans*IT-siQUEST® to room temperature and vortex gently.
- 2. Place µl of Opti-MEM® I Reduced-Serum Medium in a sterile tube.
- 3. Add µl *Trans*IT-siQUEST® Reagent. Mix gently by pipetting.
- 4. Add μ of a 10 μ M siRNA stock solution (25 nM final concentration). Mix gently by pipetting.
- 5. Incubate at room temperature for 15-30 minutes.

C. Distribute complexes to cells

- 1. Add *Trans*IT-siQUEST® Reagent:siRNA complex mixture drop-wise to different areas of the well.
- 2. Gently rock plate for even distribution of complexes.
- 3. Incubate 24-72 hours.
- 4. Harvest cells and assay for knockdown of gene expression.

Table 1. Recommended starting conditions

Culture vessel	24-well plate	12-well plate	6-well plate
Surface area	1.9 cm ²	3.8 cm ²	9.6 cm ²
Complete growth medium	0.5 ml	1 ml	2.5 ml
Serum-free medium	50 μΙ	100 μΙ	250 μΙ
TransIT-siQUEST® Reagent	1.5 μΙ	3 μΙ	7.5 µl
siRNA (10 μM stock, 25 nM final)	1.4 μΙ	2.8 μΙ	6.8 µl

▶ Transfection Optimization

Determine the best volume of *Trans*IT-siQUEST* for each cell type. Start with 7.5 µl of *Trans*IT-siQUEST per well of a 6-well plate. For further optimization, vary the amount from 5-10 µl per well to find the optimal volume.

For additional optimization tips, see <u>full protocol</u>. Cell-type-specific recommendations available at **Reagent Agent:** mirusbio.com/ra



Reagent Agent *is an online tool designed to help determine the best solution for nucleic acid delivery based on in-house data, customer feedback and citations.

Learn more at: mirusbio.com/ra

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