TransIT®-BrCa Transfection Reagent

Quick Reference Protocol

Instructions for MIR 5500, 5504, 5505, 5506, 5510
Full protocol, SDS and Certificate of Analysis available at mirusbio.com/5500



SPECIFICATIONS

Storage	Store <i>Trans</i> IT®-BrCa Transfection Reagent tightly capped at -20°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.	

▶ PLASMID DNA 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).
- 2. Culture overnight. Most cell types should be 60-80% confluent on day of transfection. *For MCF-7 cells*: The recommended cell density at transfection is 40-60%.

B. Prepare TransIT®-BrCa Reagent: DNA complexes

- 1. Warm TransIT®-BrCa Reagent to room temperature and vortex gently.
- 2. Place ____µl of OptiMEM® I Reduced-Serum Medium in a sterile tube.
- 3. Add µl plasmid DNA. Mix gently by pipetting.
- 4. Add µl of *Trans*IT®-BrCa Reagent. Mix gently by pipetting.
- 5. Incubate at room temperature for 15-30 minutes.

C. Distribute complexes to cells

- 1. Add TransIT®-BrCa:DNA 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 as required.

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
DNA (1 μg/μl stock)	0.5 μΙ	1 μΙ	2.5 μΙ
TransIT®-BrCa Reagent	1 μΙ	2 μΙ	5 μΙ

▶ Transfection Optimization

Determine the best *Trans*IT*-BrCa Reagent:DNA ratio for each cell type. Start with 2 µl of *Trans*IT*-BrCa Reagent per 1 µg of DNA. Vary the concentration of *Trans*IT*-BrCa Reagent from 1.5-4 µl per 1 µg DNA to find the optimal ratio.

For additional optimization tips, see <u>full protocol</u>. Cell-type-specific recommendations available on **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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