

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](https://mirusbio.com/5500)



SPECIFICATIONS

Storage	Store TransIT®-BrCa Transfection Reagent tightly capped at -20°C. <b>Before each use</b> , 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



Full protocol and additional documentation available at [mirusbio.com/5500](https://mirusbio.com/5500)

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 TransIT®-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 <sup>2</sup>	3.8 cm <sup>2</sup>	9.6 cm <sup>2</sup>
Complete growth medium	0.5 ml	1 ml	2.5 ml
Serum-free medium	50 µl	100 µl	250 µl
DNA (1 µg/µl stock)	0.5 µl	1 µl	2.5 µl
TransIT®-BrCa Reagent	1 µl	2 µl	5 µl

► Transfection Optimization

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

For additional optimization tips, see [full protocol](#).  
Cell-type-specific recommendations available on [Reagent Agent \(mirusbio.com/ra\)](#).



**Reagent Agent®**

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](https://mirusbio.com/ra)

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Rev0 01282022