

TransIT®-Insect Transfection Reagent

Quick Reference Protocol

Instructions for MIR 6100, 6104, 6105, 6106, 6110
Full protocol, SDS and Certificate of Analysis available at mirusbio.com/6100



SPECIFICATIONS

Storage	Store TransIT®-Insect 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



Full protocol and additional documentation available at mirusbio.com/6100

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 $1.6\text{--}3.2 \times 10^5$ cells/ml.
For suspension cells: Plate cells at a density of $3.2\text{--}4.8 \times 10^5$ cells/ml.
 - 2. Culture overnight. Most cell types should be approximately 80% confluent at the time of transfection.
- B. Prepare TransIT®-Insect Reagent:DNA complexes
- 1. Warm TransIT®-Insect to room temperature and vortex gently.
 - 2. Place ___µl of Grace’s Insect Basal Medium in a sterile tube.
 - 3. Add ___µl plasmid DNA. Mix gently by pipetting.
 - 4. Add ___µl of TransIT®-Insect Reagent. Mix gently by pipetting.
 - 5. Incubate at room temperature for 15-30 minutes.
- C. Distribute complexes to cells
- 1. Add TransIT®-Insect: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 µl	100 µl	250 µl
DNA (1 µg/µl stock)	0.5 µl	1 µl	2.5 µl
TransIT®-Insect Reagent	1 µl	2 µl	5 µl

► Transfection Optimization

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

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

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Rev0 01282022