

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 . Before each use , 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 $\mu\text{g}/\mu\text{l}$ 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](http://mirusbio.com/ra). Cell-type-specific recommendations available at [Reagent Agent mirusbio.com/ra](http://mirusbio.com/ra)

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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://www.mirusbio.com/ra)

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