

# TransIT-HeLaMONSTER® Transfection Kit

## Quick Reference Protocol

Instructions for MIR 2900, 2904, 2905, 2906

Full protocol, SDS and Certificate of Analysis available at [mirusbio.com/2900](http://mirusbio.com/2900)



### SPECIFICATIONS

Storage	Store both <i>TransIT-HeLa</i> Reagent and <i>MONSTER</i> 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/2900](http://mirusbio.com/2900)

### 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. Cells should be ≥80% confluent at the time of transfection.

#### B. Prepare *TransIT-HeLa:MONSTER:DNA* complexes

1. Warm *TransIT-HeLa* and *MONSTER* Reagents 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-HeLa* Reagent. Mix gently by pipetting.
5. Add \_\_\_µl of *MONSTER* Reagent. Mix gently by pipetting.
6. Incubate at room temperature for 15-30 minutes.
7. Add \_\_\_ml of pre-warmed complete growth medium to the complexes in the tube.

#### C. Distribute complexes to cells

1. Remove growth medium from the cells immediately prior to the addition of the complexes.
2. Add growth medium containing *TransIT-HeLa:MONSTER:DNA* complexes (prepared in step B-7) drop-wise to different areas of the well.
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
<i>TransIT-HeLa</i> Reagent	1.5 µl	3 µl	7.5 µl
<i>MONSTER</i> Reagent	1 µl	2 µl	5 µl

### ► Transfection Optimization

Determine the best *TransIT-HeLa:DNA* and *MONSTER:DNA* ratio for each cell type. Start with 3 µl of *TransIT-HeLa* Reagent per 1 µg of DNA. Vary the amount of *TransIT-HeLa* Reagent from 2–4 µl per 1 µg DNA to find the optimal ratio. Vary the amount of *MONSTER* Reagent from 0–5 µl per 1 µg of DNA.

For additional optimization tips, see [full protocol](#).



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