# 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



## **SPECIFICATIONS**

Storage	Store both <i>Trans</i> IT-HeLa Reagent and MONSTER 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. 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 *Trans*IT-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.

#### C. Distribute complexes to cells

- Add TransIT-HeLa Reagent: MONSTER: 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 μΙ	100 μΙ	250 μΙ
DNA (1 μg/μl stock)	0.5 μΙ	1 μΙ	2.5 μΙ
TransIT-HeLa Reagent	1.5 μΙ	3 μΙ	7.5 µl
MONSTER Reagent	1 μΙ	2 μΙ	5 μΙ

## **▶** Transfection Optimization

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

For additional optimization tips, see <u>full protocol</u>.



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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