TransIT®-CHO Transfection Kit

Quick Reference Protocol

Instructions for MIR 2170, 2174, 2175, 2176
Full protocol, SDS and Certificate of Analysis available at mirusbio.com/2170



SPECIFICATIONS

| Storage | Store both <i>Trans</i> IT®-CHO Reagent and CHO Mojo 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/2170*

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®-CHO:CHO Mojo:DNA complexes

- 1. Warm TransIT®-CHO and CHO Mojo 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®-CHO Reagent. Mix gently by pipetting.
- 5. Add µl of CHO Mojo Reagent. Mix gently by pipetting.
- 6. Incubate at room temperature for 15-30 minutes.

C. Distribute complexes to cells

- 1. Add *Trans*IT®-CHO:CHO Mojo: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 μΙ | 100 μΙ | 250 μΙ | |
| DNA (1 μg/μl stock) | 0.5 μΙ | 1 μΙ | 2.5 μΙ | |
| TransIT®-CHO Reagent | 1.5 μΙ | 3 μΙ | 7.5 µl | |
| CHO Mojo Reagent | 0.25 μΙ | 0.5 μΙ | 1.25 μΙ | |

▶ Transfection Optimization

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

For additional optimization tips, see full protocol.



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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