

# TransIT-TKO® Transfection Reagent

## Quick Reference Protocol

Instructions for MIR 2150, 2154, 2155, 2156

Full protocol, SDS and Certificate of Analysis available at [mirusbio.com/2150](http://mirusbio.com/2150)



### SPECIFICATIONS

Storage	Store TransIT-TKO® Reagent tightly capped at 4°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.

### ► siRNA TRANSFECTION PROTOCOL



Full protocol and additional documentation available at [mirusbio.com/2150](http://mirusbio.com/2150)

### 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 0.8—3.0 x 10<sup>5</sup> cells/ml.  
**For suspension cells:** Plate cells at a density of 2.5—5.0 x 10<sup>5</sup> cells/ml.
2. Culture overnight. Most cell types should be ≥80% confluent on day of transfection.

#### B. Prepare TransIT-TKO® Reagent:siRNA complexes

1. Warm TransIT-TKO® to room temperature and vortex gently.
2. Place \_\_\_ μl of OptiMEM® I Reduced-Serum Medium in a sterile tube.
3. Add \_\_\_ μl TransIT-TKO® Reagent. Mix gently by pipetting.
4. Add \_\_\_ μl of a 10 μM siRNA stock solution (25 nM final concentration). Mix gently by pipetting.
5. Incubate at room temperature for 15-30 minutes.

#### C. Distribute complexes to cells

1. Add TransIT-TKO® Reagent:siRNA 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 for knockdown of gene expression.

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
TransIT-TKO® Reagent	2.5 μl	5 μl	10 μl
siRNA (10 μM stock, 25 nM final)	1.4 μl	2.8 μl	6.8 μl

### ► Transfection Optimization

Determine the best volume of TransIT-TKO® for each cell type. Start with 10 μl of TransIT-TKO® per well of a 6-well plate. For further optimization, vary the amount from 8-12 μl per well to find the optimal volume.

For more tips and instructions for co-transfection, see [full protocol](#). Cell-type-specific recommendations available at: [Reagent Agent: mirusbio.com/ra](http://Reagent Agent: 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](http://mirusbio.com/ra)

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