

# Human IgG1 Expression Control

## Quick Reference Protocol

Instructions for MIR 6250

SDS and Certificate of Analysis available at [mirusbio.com/6250](http://mirusbio.com/6250)



### SPECIFICATIONS

Storage	Store Human IgG1 Expression Control at $-20^{\circ}\text{C}$ .
Product Guarantee	1 year from the date of purchase, when properly stored and handled.
Concentration	100 $\mu\text{g}$ at 1 mg/ml, sterile filtered in DI water

#### ► Human IgG1 Expression Control Transfection

SDS and Certificate of Analysis available at [mirusbio.com/6250](http://mirusbio.com/6250)

The Human IgG1 Expression Control contains a mixture of codon-optimized, CMV-driven plasmids that express the heavy and light chains of human IgG1, a secreted antibody. This product incorporates DNA2.0 IP-Free® vector technology and is provided as a 1 mg/ml transfection-grade plasmid mixture sufficient for transfecting up to 100 ml of suspension CHO or HEK 293 cells in culture. Antibody titers of at least 50 mg/L are obtained from clarified supernatants Day 6 post-transfection when using the Human IgG1 Expression Control with the CHOgro™ Expression System (MIR 6260) and assayed with the ZeptoMetrix Human IgG ELISA kit (Cat.No. 0801182).

#### Fill in volumes below based on total culture volume (Table 1).

##### A. Maintenance of cells

1. Split cells 18–24 hours prior to transfection to obtain a next day density of  $4\text{--}10 \times 10^6$  cells/ml.
2. Culture cells overnight.

##### B. Prepare *TransIT-PRO*® Reagent:Human IgG1 Expression Control DNA complex

1. Seed cells at a density of  $2 \times 10^6$  cells/ml immediately before transfection.
2. Warm *TransIT-PRO*® Reagent to room temperature and vortex gently.
3. Place \_\_\_ ml of serum-free complex formation medium (e.g. Opti-MEM® or OptiPRO™ for suspension 293 cells and CHOgro™ Complex Formation Solution for suspension CHO cells) in a sterile tube.
4. Add \_\_\_  $\mu\text{g}$  Human IgG1 Expression Control. Mix gently by pipetting.
5. Add \_\_\_  $\mu\text{l}$  of *TransIT-PRO*® Reagent. Mix gently by pipetting.
6. Incubate at room temperature for 5-15 minutes.

##### C. Distribute complexes to cells

1. Add *TransIT-PRO*®:Human IgG1 Expression Control complexes to cultured cells.
2. Incubate cells for 2-6 days at  $37^{\circ}\text{C}$  in 8%  $\text{CO}_2$ .
3. Harvest supernatant and assay as required.

**Table 1.** Volume scaling worksheet for DNA transfections with *TransIT-PRO*® Transfection Reagent.

Starting conditions per milliliter of complete growth medium				
	Per 1 ml		Total culture volume	Reagent quantities
Serum-free complex formation medium	0.1 ml	×	_____ ml	= _____ ml
Human IgG1 Expression Control (1 $\mu\text{g}/\mu\text{l}$ stock)	1 $\mu\text{l}$	×	_____ ml	= _____ $\mu\text{l}$
<i>TransIT-PRO</i> ® Reagent	1 $\mu\text{l}$	×	_____ ml	= _____ $\mu\text{l}$

## For Research and Development Use Only

Mirus Bio LLC

[www.mirusbio.com](http://www.mirusbio.com) | [techsupport@mirusbio.com](mailto:techsupport@mirusbio.com) | Toll Free (U.S.): 844.MIRUBIO | Direct: +1.608.441.2852

## ▶ NOTES

©1996-2018 All rights reserved. Mirus Bio LLC. All trademarks are the property of their respective owners.

For terms and conditions, visit [www.mirusbio.com](http://www.mirusbio.com)

Rev.A 1216

---

**Mirus Bio LLC**

[www.mirusbio.com](http://www.mirusbio.com) | [techsupport@mirusbio.com](mailto:techsupport@mirusbio.com) | Toll Free (U.S.): 844.MIRUBIO | Direct: +1.608.441.2852