Culture smarter, innovate faster

# Boost Your Transient Transfection Expression with OPM-293 Platform

From transfection to titer: HEK293-ready media, feeds, and reagents delivering robust transients, higher recombinant protein yields, and reliable membrane protein results.

## Why OPM-293 Platform?

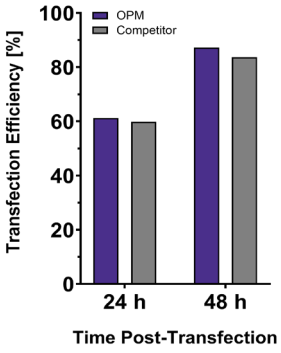
- >1 g/L protein in high-density HEK293 cultures
- Chemically defined for robust, reproducible results
- GMP-ready for seamless transition from R&D to GMP
- Consistent quality with RSD <5% lot-to-lot

| Products | Grade | Available Sizes |
|---|---|---|
| CarpTrans™ Transfection Reagent | Research & GMP grade available | • Liquid: 1 / 5 / 50 mL<br>• Powder: 100 mg / 1 g/ 50 g |
| 293F Hi-Exp™ Medium | Research grade | • Liquid: 1000 mL |
| OPM-293 CD05 Medium | GMP grade | • Liquid: 1000 mL |
| 293F Hi-Exp™ Feed | Research grade | • Liquid: 100 / 1000 mL |
| OPM-293 ProFeed | GMP grade | • Liquid: 100 / 1000 mL |
| Corevo™ 293 Basal Media Series:<br>• Corevo 293 Flux<br>• Corevo 293 Deep<br>• Corevo 293 Quick | Research & GMP grade available | • Liquid: 1000 mL |
| Harvest™ 293F Expression System (Plus) Kit | Research grade | Kit consists of:<br>• 1 x CarpTrans Transfection Reagent (5 mL)<br>• 1 x 293F Hi-Exp Medium (1000 mL)<br>• 1 x 293F Hi-Exp Feed (100 mL) |

# CarpTrans Transfection Reagent

- High transfection efficiency – maximize protein and antibody yields
- Broad compatibility – HEK293, CHO, and other mammalian lines

## Transfection in Suspension Culture (Expi293)



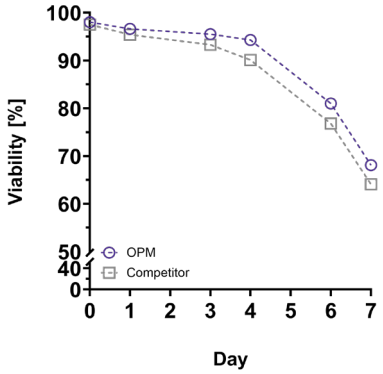
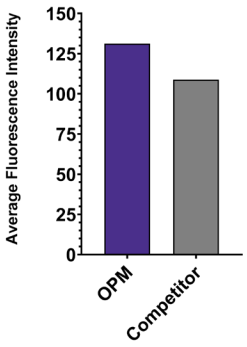




**Figure.** Expi293 cells were cultured to a density of 3x10$^6$ cells/mL and transfected using CarpTrans or a leading competitor transfection reagent. **(Left)** Transfection efficiency was measured at 24 hr and 48 hr post-transfection. **(Right)** Cell viability measurements pre- (day 0) and post-transfection.

## Transfection Efficiency of Adherent Cells (HEK293T)



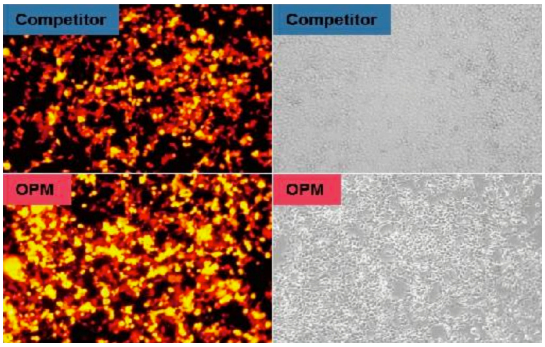
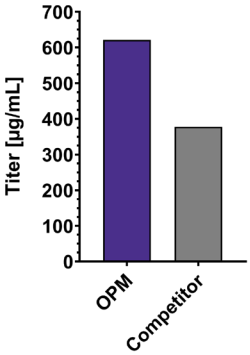




**Figure.** HEK293T cells were cultured to cover 80% of the plate and transfected using CarpTrans or the same competitor transfection reagent as above. **(Left)** The average fluorescence intensity of mCherry detected at 48 hr post-transfection. **(Right)** Fluorescence and brightfield micrographs of cells at 48 hr post-transfection.

## Protein Expression After Transfection (mAb)



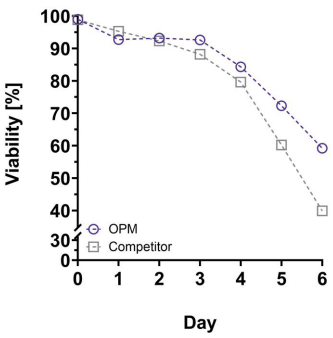




**Figure.** Expi293F cells were cultured to a density of 3x10$^6$ cells/mL and transfected using CarpTrans or the same competitor transfection reagent as above to express a monoclonal antibody (mAb). **(Left)** mAb titer was measured at day 6 post-transfection. **(Right)** Cell viability measurements pre- (day 0) and post-transfection.

# Basal Media and Feeds for HEK293 Cultures

- Smooth transition from discovery to GMP
  - **Research-grade:** 293F Hi-exp Media and Feed
  - **GMP-grade:** OPM-293 CD05 Media and ProFeed
- Flexible packaging in dry powder or liquid formats
- Dual-site manufacturing ensures stable supply:
  - Up to 2000 kg/lot (DPM)
  - Up to 2000 L/lot (liquid)

## Improved Titer for Three Different Monoclonal Antibodies

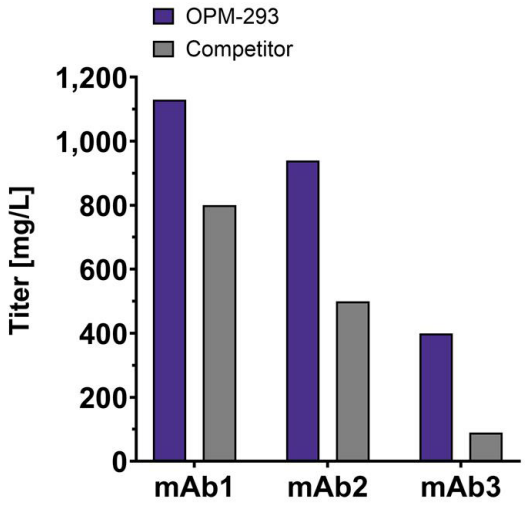



**Figure.** Cells were cultured in OPM-293 CD05 (GMP) media or a leading competitor's media and transfected with one of three plasmids encoding for different monoclonal antibodies (mAb1, mAb2, mAb3). Titers were measured, demonstrating that the OPM-293 platform consistently outperformed the competitor, achieving significantly higher titers for all three mAbs.

## Comparison of Monoclonal Antibody Titers Across Three Lots

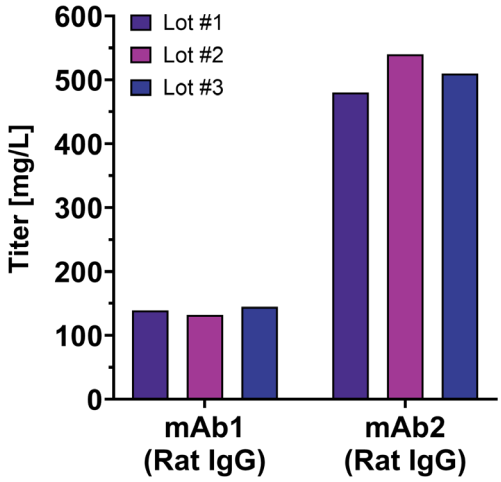



**Figure.** Titer measurements for two different monoclonal antibodies (mAb1 and mAb2, both rat IgG) demonstrate consistent expression levels for each across three independent lots of OPM-293 CD05 (GMP) media.

# Media Selection Guide

Select the optimal media and feed for your target protein:

| | Desired Protein Type to be Expressed | | | | |
|---|---|---|---|---|---|
| |  **Secreted Protein** |  **Intracellular** | |  **Membrane-Bound** | |
| | | Single Unit | Complex* | Single Unit* | Complex* |
| **Basal Medium** | • 293F Hi-exp<br>• OPM-293 CD05 | • 293F Hi-exp<br>• OPM-293 CD05 | • Corevo 293 Flux<br>• Corevo 293 Deep | • 293F Hi-exp<br>• OPM-293 CD05<br>• Corevo 293 Flux<br>• Corevo 293 Deep | • Corevo 293 Flux<br>• Corevo 293 Deep |
| **Feed** | • 293F Hi-exp Feed<br>• OPM-293 ProFeed | | | | |

*Please inquire for more technical support

**Explore our high-performance cell culture media today. Learn more at opmbio.com.**



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