

## **CHOgro® Expression Medium**

### Quick Reference Protocol

Instructions for MIR 6200, 6202

SDS and Certificate of Analysis available at [mirusbio.com/6200](http://mirusbio.com/6200)



## **SPECIFICATIONS**

<b>Storage</b>	Store CHOgro® Expression Medium at 4°C, protected from light.
<b>Product Guarantee</b>	As indicated on product label, when properly stored and handled.

CHOgro® Expression Medium is a chemically defined, hydrolysate-free and animal-origin-free medium manufactured using cGMP-compliant processes in an ISO-compliant facility. CHOgro® Medium is formulated to support high efficiency transfection and provide high density cell growth. In addition, many suspension CHO cells (e.g. Freestyle™ CHO-S and ExpiCHO-S™) can easily grow in CHOgro® Medium with minimal adaptation. CHOgro® Expression Medium is supplied in 1000 ml bottle (MIR 6200) or 10 L polybag (MIR 6202) formats and is also a component within the CHOgro® Expression System (MIR 6260) and CHOgro® High Yield Expression System (MIR 6270).

## **Media Preparation**

Prior to use, CHOgro® Expression Medium requires the following supplementation:

<b>Media Supplements</b>	<b>Per 1000 ml</b>
L-Glutamine (200mM stock solution, MIR 6240)	20 ml
Poloxamer 188 Solution (10% stock solution, MIR 6230)	30 ml

*NOTE: Store supplemented media at 4°C, protected from light.*

## **Adaptation of suspension CHO cells to CHOgro® Expression Medium**

### **From Cryopreserved Cell Stock**

When bringing suspension CHO cells out of cryopreservation, use supplemented CHOgro® Expression Medium to dilute cells immediately post-thaw, typically to a density of 0.5 - 1 x 10<sup>6</sup> cells/ml. Incubate cells in a shake flask at an appropriate rpm (e.g. 125 rpm for a 1.9 cm orbital throw) at 37°C in 8% CO<sub>2</sub>. Monitor cell growth and viability daily. When viability reaches ≥ 98% and the cells are doubling every ≤ 24 hours, the cells are fully adapted.

### **From Ongoing Culture**

If cells are cultured in an alternate media formulation, cells must be adapted to CHOgro® Expression Medium prior to transfection. For adaptation, seed cells at a density of 3-5 x 10<sup>5</sup> cells/ml in a mix of 75% current media and 25% complete CHOgro® Medium for 2-4 passages or until the cells are doubling normally and viability is >95%. Increase the ratio of complete CHOgro® Media in 25% increments and monitor cell health and viability as described above. Cells are fully adapted when viability reaches ≥98% and cells are doubling every ≤ 24 hours in 100% CHOgro® Medium. Continue to culture cells in a shake flask at an appropriate rpm (e.g. 125 rpm for 1.9 cm orbital throw) at 37°C, 8% CO<sub>2</sub> and monitor cell growth and viability frequently.

### **Maintenance of suspension CHO cells in CHOgro® Expression Medium**

For best results, subculture CHO suspension cells to a density of 1-3 x 10<sup>6</sup> cells/ml. DO NOT allow cells to grow to a density higher than 1 x 10<sup>7</sup> cells/ml or passage to a density lower than 2.5 x 10<sup>5</sup> cells/ml during continuous culture. Subculture every 1-4 days to maintain the desired cell density. Monitor cell density and viability frequently (i.e. daily if possible).

## **For Research Use and Further Manufacturing; Not for Administration into Humans**

*CHOgro® Expression Medium is sterile-filtered, animal-origin-free, and manufactured under cGMP conditions in an ISO-compliant facility.*

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## 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](https://www.mirusbio.com/ra)



SDS and Certificate of Analysis available at [mirusbio.com/6200](https://www.mirusbio.com/6200)

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