



EIV12025E

ExCell Bio

OptiVibro[®] CHO Serum-free Perfusion Medium CP01

For Research and Manufacturing Use

Not Intended for Diagnostic and Therapeutic Use

User Manual

Catalog Number

CE000-N071

CE000-N072

CE000-N073

CE000-N074

CE000-N075



| PRODUCT DESCRIPTION

OptiVibro® CHO Serum-free Perfusion Medium CP01 is a chemically-defined medium without any animal-derived components. It is suitable for N-1 perfusion culture and steady-state perfusion culture of various CHO cell lines, including CHO-K1, CHOZN, and CHO-S. This medium can maintain high cell density growth and high protein expression.

| SPECIFICATION, STORAGE AND TRANSPORTATION

REQUIREMENT

Product Name	Cat. #	Specification	Storage	Transportation	Shelf Life
OptiVibro® CHO Serum-free Perfusion Medium CP01	CE000-N071	1000 mL Liquid	2-8°C Protect From Light.	< 25°C Protect From Light.	12 months
OptiVibro® CHO Serum-free Perfusion Medium CP01(Powder)	CE000-N072	1 L Powder	2-8°C Dark and dry.	< 10°C Protect From Light.	24 months
	CE000-N073	10 L Powder			
	CE000-N074	50 L Powder			
	CE000-N075	100 L Powder			

| HANDLING RECOMMENDATIONS

1. Please make sure to store the cell culture medium in a light-protected environment, avoid fluorescent lamps or other lamplight exposure, and better to use colored packaging bags in the refrigerator or warehouse.
2. During the transportation of the product, it should be kept away from light. This is to prevent the product from being affected by the irradiation of fluorescent lamps or other light sources, which may lead to discoloration.
3. During the transportation of the product to the clean area, it is essential to carry out a cleaning process. The cleaning method may involve disinfectant wiping, and not utilize UV irradiation.

Note: When passing through transfer windows equipped with UV lamp, remember to proactively turn off the UV lamp inside the transfer window.

| INSTRUCTION FOR USE

Medium preparation

1. Measure 80% of the final volume WFI or distilled water in a clean vessel.
2. Slowly add 29.48g/L OptiVibro® CHO Serum-free Perfusion Medium CP01 powder to the water, mix for 30 minutes.
3. Add 2.2g/L NaHCO₃ and mix for 10-15 minutes.
4. Adjust the pH to 7.00-7.40, then QS to final volume and continue mixing for 5 minutes.
5. Measure and record the final pH and osmolality. pH should be 7.00 to 7.40. Osmolality should be 330 to 360 mOsm/kg.
6. Sterilize immediately by 0.22µm membrane filtration. Store the reconstituted medium protected from light at 2°C to 8°C until use.

Cultivation Suggestions

OptiVibro® CHO Serum-free Perfusion Medium CP01 is mainly used in the perfusion culture process. During the initial stage of seed cell subculture and expansion, the original cell culture medium can be used, or 0.8× diluted OptiVibro® CHO Serum-free Perfusion Medium CP01 can be used for seed cell culture. Most stable cell lines can be directly switched from the original culture medium to OptiVibro® CHO Serum-free Perfusion Medium CP01 for perfusion culture.

1. Steady-state perfusion (Recommended steady-state cell density: 50-70×10⁶ cells/mL, 0.5-3VVD).
2. N-1 perfusion culture (Recommended target cell density: 50-70×10⁶ cells/mL).
3. Other perfusion processes such as concentrated fed-batch, intensified fed-batch, hybrid processes, can be tested according to customer requirements.

Note: For optimal cell culture performance, it is recommended to use in combination with our CHO Serum-free Medium.

| DISCLAIMER

1. Use the product according to the manual instructions. Deviations from these instructions are at the user's risk, and our company will not be responsible for any resulting product performance deviations.
2. This product is for scientific research and commercial production only and is not intended for clinical diagnosis or treatment. Users assume all risks for unauthorized use, and our company shall not be responsible for any consequences.