

# OPM-CHO PFF05

High Performance Protein-free feed

— For Biomanufacturing

**OPM-CHO PFF05** is a high performance, protein-free feed which is designed for high density suspension culture of Chinese Hamster Ovary (CHO) cell lines (e.g. CHO-K1, CHO-DG44, CHO-S). It is free of any animal-origin components, and contains no, proteins, or components of unknown composition. This feed supports high level expression of recombinant proteins and therapeutic antibodies. In conjunction with OPM's basal media and highly concentrated feeds, higher growth & viability, and higher expression level of the target molecule can be achieved.

## Application

OPM-CHO PFF05 is intended for large scale manufacturing of therapeutic biomolecules, as well as for research purposes, but not for human or any therapeutic use.

## Storage & Transportation

Store at 2~8°C, dark and dry  
Ship at Room temperature (Liquid), Blue ice (Dry powder)

## Shelf Life

OPM-CHO PFF05 Liquid: 12 months  
OPM-CHO PFF05 Powder: 24 months

## Reconstitution Method for Dry Powder

1. Measure out 80% of final required volume of purified water intended for cell culture use, e.g. WFI. Recommended water temperature is 25~35°C (minimum final volume  $\geq$  1L).
2. Add 20mL/L 5N NaOH.
3. Slowly add dry powder Part A at 86.25 g/L and stir for 20 minutes.
4. Adjust pH to 8.9-9.0 with 5N NaOH, and stir for 5~10 minutes until completely dissolved.
5. Adjust pH to 7.6 with 5N HCl.
6. Slowly add dry powder Part B at 15 g/L, and continue to stir for 20 minutes until completely dissolved.
7. Add cell culture grade purified water to 100% final volume, and continue to stir for 10 minutes.
8. Sterile filter using a membrane filter with a pore size of 0.22 micron. Store at 2~8°C, protect from light.

## Quality Specifications

Specifications	OPM-CHO PFF05 Medium	OPM-CHO PFF05 DPM
Appearance	Brown-red clear liquid	Part A: off-white or light yellow powder Part B: Khaki powder
pH	7.0~7.7	7.0~7.7
Osmolality (mOsm/kg)	950~1150	950~1150
Solubility	---	Good by following the reconstitution instructions
Endotoxin (EU/mL)	<10	<10
Sterility test	Negative	---



### Cell Culture Conditions

37°C, 80% humidity, 5~8%CO<sub>2</sub>

Shaker speed 110-150 rpm (amplitude: 50mm).

### Recommended Feeding Strategy

Time line	Instruction	Feeding Strategy
Day 1	Seed cells into OPM's basal media at a density of $0.5 \times 10^6$ ~ $1.5 \times 10^6$ viable cells/mL.	—
Day 2-4	Add OPM-CHO PFF05 feed and the highly concentrated feed when the cell density has reached $4.0 \times 10^6$ ~ $6.0 \times 10^6$ cells/mL.	<b>OPM-CHO PFF05:</b> 3~6% of initial culture volume; <b>Highly Concentrated Feed:</b> 0.3%~0.6% of initial culture volume;
Day 4-14/16	Add OPM-CHO PFF05 feed and the highly concentrated feed every other day until the end of the culture.	<b>OPM-CHO PFF05:</b> 3~6% of initial culture volume; <b>Highly Concentrated Feed:</b> 0.3%~0.6% of initial culture volume;

## Order Information

### High Performance Feeds

Name	Cat No.	Type	Volume
OPM-CHO PFF05	F81279-001	Liquid	1000mL
OPM-CHO PFF05 DPM	F91279-010	Dry powder	10L

### Cell Culture Media

Name	Cat No.	Type	Volume
VegaCHO™ Medium	P121662	Liquid	1000mL
VegaCHO™ DPM	P106390	Dry powder	10L/50L/100L
AltairCHO™ Medium	C673017	Liquid	1000mL
AltairCHO™ DPM	C670226	Dry powder	10L / 50L / 100L

### Highly Concentrated Feeds

Name	Cat No.	Type	Volume
CDFS36	C217836	Liquid	500mL / 1000mL
CDFS36 DPM	C672069	Dry powder	1L / 2L / 5L / 10L / 50L / 100L

### Cell Culture Supplements

Name	Cat No.	Type	Volume
OPM GAL+V2 Galatosylation enhancer	S81912	Liquid	100mL / 1000mL
OPM-ACA Anti-clumping agent	S0907001	Liquid	100mL / 500mL / 1000mL