

# OPM-BHK SFM3

## Serum-free Cell Culture Medium

— For Vaccine Production

**OPM-BHK SFM3** is a serum-free cell culture medium designed for suspension culture of BHK-21 cells and contains L-Glutamine. This medium supports the production of vaccines such as foot-and-mouth disease (FMD) vaccine, newcastle disease vaccine, bovine ephemeral fever virus vaccine and pseudorabies vaccine, etc.

### Application

OPM-BHK SFM3 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-BHK SFM3 Medium Liquid: 6 months  
OPM-BHK SFM3 Dry Powder: 18 months

### Reconstitution Method for Dry Powder

1. Measure 90% of the final volume WFI or Ultra-pure water at room temperature (25°C to 35°C).
2. Add 18.65 g/L OPM-BHK SFM3 DPM to water, and keep stirring for 20 minutes.
3. Add 2.3 g/L NaHCO<sub>3</sub> to water, and keep stirring for 10 minutes.
4. Add 1N NaOH or 1N HCl slowly to adjust pH to 7.2 .
5. Add WFI or Ultra-pure water to the final volume. Keep stirring for 10 minutes.
6. Sterilize immediately by 0.22 μm membrane filtration to suitable container(s).

### Cell Culture Conditions

37°C, 5~10%CO<sub>2</sub>  
Shaker speed 125-135 rpm.

### Cell Culture Passaging

Seed the BHK21 cells in a fresh medium at (0.5~1.0) x10<sup>6</sup> cells/ml when the cell density reaches (4~6) x 10<sup>6</sup> cells/ml and continue the culture. Dilute directly during seeding without centrifugation.

### Medium Adaptation

#### Direct Medium Adaptation

Cell lines may be adapted directly from serum-free media into OPM-BHK SFM3 cell culture medium.

#### Sequential Medium Adaptation

1. For certain cell lines cultured in presence of serum, sequential adaptation method is recommended.
2. Start the cell adaptation when it is in low passage and log phase.
3. Serum reduction can be performed in the concentration of 10%, 5%, 2.5%, 1%, and 0%. Passage cells at each serum concentration until the cells grow well. Proceed to the next serum concentration.

4. Adaptation is completed when the cells grow well in OPM-BHK SFM3 medium without serum or supplemented with 1% serum.

### **Viral Production**

1. Expand cells to N-1 stage with OPM-BHK SFM3 medium. Seed the cells in the production stage at  $(0.7\text{--}1.0) \times 10^6$  cells/ml when the cell density reaches  $(4\text{--}6) \times 10^6$  cells/ml and continue the culture.
2. Inoculate the virus at a certain MOI (such as 0.01) when the cell density reaches  $(3\text{--}5) \times 10^6$  cells/ml. Add supplements to promote virus proliferation according to the original process.
3. Harvest cells when the cell density is  $<1 \times 10^5$  cells/ml.

## Order Information

## Cell Culture Media

Name	Cat No.	Type	Volume
OPM-BHK SFM3 Medium	V001103-001	Liquid	1000ml
OPM-BHK SFM3 DPM	V001203-050	Dry powder	50L
	V001203-010	Dry powder	10L

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