Optimization
Makes Differences

OPM-ST LSM03

Low-Serum Cell Culture Medium

—— For Vaccine Production

OPM-ST LSM03 is a low serum cell culture medium designed for suspension culture of swine testis (ST) cells and contains L-Glutamine. This medium supports the production of vaccines such as swine fever vaccine, swine transmissible gastroenteritis virus vaccine, porcine epidemic diarrhea vaccine, porcine parvovirus vaccine and pseudorabies virus vaccine, etc.

Application

OPM-ST LSM03 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℃, dark and dry
Ship at Room temperature (Liquid), Blue ice (Dry powder)

Shelf Life

OPM-ST LSM03 Medium Liquid: 6 months
OPM-ST LSM03 Dry Powder: 18 months

Reconstitution Method for Dry Powder

1. Measure out 90% of final required volume of purified water intended for cell culture use, e.g. WFI. Recommended water temperature is 25~35℃ (minimum final volume ≧ 1L).

2. Slowly add dry powder medium at 18.32 g/L and stir for 20 minutes.

3. Add 2.3 g/L NaHCO3 to the solution and continue to stir for 10 minutes.

4. Adjust pH to 7.2 with 1N NaOH or 1N HCl.

5. Add cell culture grade purified water to 100% final volume.

6. Continue to stir for 10 minutes. Sterile filter using a membrane filter with a pore size of 0.22 micron.

Cell Culture Conditions

37℃, 5%CO_2

Cell Recovery

1. Rapidly thaw (<2 min) a vial of frozen cells in a 37 °C water bath.
2. Transfer the entire contents aseptically into a 125 mL shake flask containing 30 mL prewarmed OPM-ST LSM03 cell culture medium.
3. Incubate at 37 °C in a humidified atmosphere of 5%~8% CO_2 in air on a shaker (rotating at 110~130 rpm (amplitude: 50mm).
4. Passage the cells for at least twice until fully recovery. Proceed according normal procedure after the Population Doubling Time stays stable.

Cell Culture Passaging

1. Prewarm OPM-ST LSM03 cell culture medium at 37 ℃ for 20~30min.
2. Proceed if VCD ≥1×10^6/mL & viability ≥90%. Cultures should be passaged during the mid-log phase.
3. Determine the correct volume of cell culture to inoculate a new flask at a starting cell density of 0.5×10^6 cells/mL in prewarmed OPM-ST LSM03 cell culture medium
4. Incubate flasks in a humidified 37 °C incubator with 5%~8% CO_2 on an orbital shaker at 110~150rpm (amplitude: 50mm).
5. Passage cells by repeating the above steps every 2~3 days.

Cryopreservation

1. Harvest the desired quantity of cells in mid-log phase of growth with viability over 90%.
2. Determine VCD to ensure that the final cell density is > 1×10^7/ml.
3. Prepare the freezing medium consisting of 90% OPM-ST LSM03 Cell culture medium and 10% dimethyl sulfoxide (DMSO). Let the freezing medium cool down to 4°C.
4. Harvest cells by centrifugation at 400xg for 5 minutes. Remove the supernatant and resuspend the cell pellet with the cold freezing medium at > 1×10^7/ml.
5. Transfer the suspension to sterile cryo-vials.
6. Place the vials in a cryo-box or a controlled rate freezing apparatus following standard procedures (1°C decrease per minute).
7. For long-term storage, transfer the vials to liquid nitrogen.

Order Information

Cell Culture Media

Name	Cat No.	Type	Volume
OPM-ST LSM03 medium	V005108-001	Liquid	1000ml
OPM-ST LSM03 DPM	V005208-050	Dry powder	50L

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