Optimization
Makes Differences

StarVero™

Serum-free Cell Culture Medium

—— For Vaccine Production

StarVero™ is a serum-free cell culture medium designed for adherent culture of Vero cells. This medium supports the production of human vaccines such as COVID-19 vaccine, polio vaccine, smallpox vaccine, rabies vaccine, Japanese B encephalitis vaccine, rotavirus vaccine, enterovirus Type 71 vaccine and oncolytic virus, and the production of veterinary vaccines such as porcine diarrhea virus vaccine and small ruminant vaccine, etc.

Application

StarVero™ 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

StarVero™ Medium Liquid: 12 months
StarVero™ Dry Powder: 24 months

Cell Culture Conditions

36°C~38°C，5~8%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 shake flask containing 15 mL mL prewarmed StarVero™ cell culture medium without antibiotics.

3. Incubate at 37 °C in a humidified a™osphere of 5%~8% CO_2 in air.

4. Passage cells when the confluency reaches 80–100%.

Cell Culture Passaging

1. Aspirate medium from cell monolayer and rinse the flask three times with prewarmed DPBS without Ca^{2+} or Mg^{2+}.

2. Add 5 mL 0.25% Trypsin-EDTA to the flask and incubate until cells have detached (~2–5 minutes at room temperature).

3. Add prewarmed 9 mL StarVero™ medium to stop the dissociation reaction.

Note: If using 0.25% Trypsin-EDTA, addition of 500 μg/mL Soybean Trypsin Inhibitor is required.

4. Centrifuge cell suspension at 100 ×g for 5 minutes and discard the supernatant.

5. Resuspend the cell pellet in 10mL StarVero™ medium.

6. Seed flasks at 1~5 × 10^4 viable cells/cm^2.

7. Incubate cells in a humidified 37 °C incubator with 5~8% CO_2 until the confluency reaches 80–100%.

Cryopreservation

1. Harvest the desired quantity of cells in log phase of growth with viability over 90%. Save the

conditioned medium to prepare freezing medium.

2. Determine VCD to ensure that the final cell density is 1~5×10^6 cells/ mL.

3. Harvest cells when the confluency reaches 80%.

4. Prepare the freezing medium consisting of 92.5% StarVero™ (50:50 ratio of fresh to conditioned media) +7.5% DMSO, and let the freezing medium cool down to 4℃.

5. Harvest cells and centrifuge at 100 × g for 5–10 minutes. Resuspend the cell pellet in the pre-determined volume of 4°C freezing medium.

6. Dispense aliquots of this suspension into cryo-vials ((1.5~2 mL per vial).

7. Place the vials in a cryo-box or a controlled rate freezing apparatus following standard procedures (1°C decrease per minute).

8. For long-term storage, transfer the vials to liquid nitrogen.

Order Information

Cell Culture Media

Name	Cat No.	Type	Volume
StarVero™ DPM	C230397	Dry powder	50L/100L
StarVero™ Medium	C230335	Liquid	1000mL

Shanghai OPM Biosciences Co., Ltd.

OPM Headquarter: Building #28, 908 Ziping Road, Pudong, Shanghai, China

+86 021-6818 2622
service@opmbiosciences.com
www.opmbio.com