

Super Plus SFM, PWD

without sodium bicarbonate

Product Information Sheet

Product Introduction

Super Plus SFM culture medium is designed to reduce or completely eliminate the supply of serum for cell culture. Most cell lines could be cultivated with their existed basal medium with reduced serum supply together with the Super Plus SFM. More than 90% serum could be reduced without affecting the cell growth performance. The product can reduce the culture variance due to the quality and consistency problems in serum and also reduce the cost from serum.

Preparation of Culture Medium

1. Measure out 5% less D.I. water than desired final volume.
2. Add M199, alpha MEM or other suitable basal medium powder to 15 to 30 C (room temperature) D.I. water with gentle stirring.
3. Stir until dissolved.
4. Then, add Super Plus SFM Powder 1.51 g/L under stir condition.
5. Stir until dissolved. **Do not over agitate.** 5 to 10 minutes' stirring should be sufficient.
6. Add 0.55 g of L-glutamine per liter of medium. Stir until dissolved.
7. Add NaHCO_3 per liter of medium according to original basal medium recipe. Stir until dissolved.
8. Adjust pH of medium to 0.2-0.3 below desired final working pH: use of 1N HCL is recommended.
9. Dilute to a desired volume with D.I. water.
10. Sterilize immediately by 0.22 μm membrane filtration. **Low protein binding membrane such as Polyether-sulfone (PES), or PVDF is required** for the medium preparation. Filter with 0.45 μm pre-filter is preferred.
11. Add 1% or sufficient serum that enables the cell growth compatible with existed culture medium, e.g. M199/5% serum.

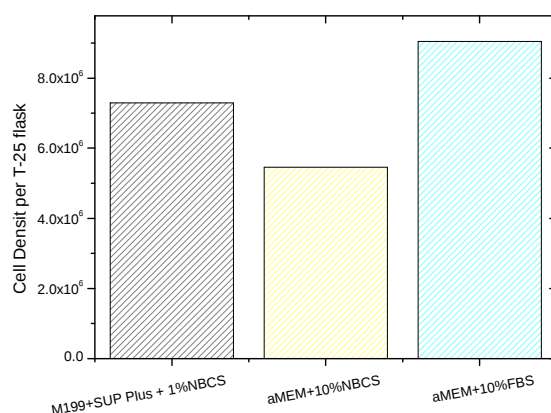
Culture

1. Culture with the same protocol as existed culture method. No adaptation procedure is required.

Reference Data

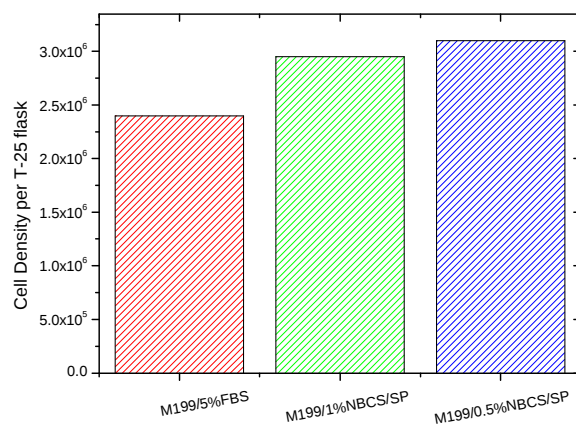
Experiments were performed by testing the performance of Super Plus of serum-reducing capability on BHK-21, VERO and MDCK cells. A fixed amount of cells were inoculated in a T-25 flask and culture for 3 days. Cells were then harvest and count. Results are illustrated as below.

1. BHK-21 Cells



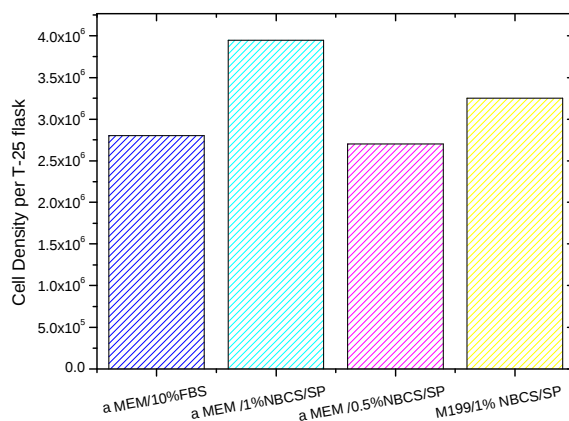
The cell growth by supplying with Super Plus in alpha-MEM basal medium can replace 90% New born calf serum or 90% Fetal calf serum for BHK-21 cell culture.

2. VERO Cells



The cell growth by supplying with Super Plus in M199 basal medium can replace 80~90% New born calf serum or Fetal calf serum for VERO cell culture.

3. MDCK Cells



The cell growth by supplying with Super Plus in M199 basal medium can replace 90~95% Fetal calf serum for MDCK cell culture.

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