

# MetaCell® BHK SF01

## User Manual

### Product Description

MetaCell® BHK SF01 medium is a serum-free cell culture medium, optimized for the high-density suspension culture of BHK21 cells and efficient propagation of viruses e.g. Foot and Mouth Disease virus (FMDV). This medium does not contain any animal derived component.

This product is intended for research or further manufacturing but not for human or therapeutic use.

Product Name	Cat No.	Size	Storage	Shelf Life	Application
MetaCell® BHK SF01	P3103-X100	100L	2-8°C, protected from light	12 months	Growth & maintenance of BHK21 suspension cell culture for viral vaccine production, e.g. Foot and Mouth Disease virus
	P3103-X500	500L			

### General media preparation instructions

Powdered media are hygroscopic and should be protected from moisture. The entire contents of each package should be used immediately after opening. Preparing a concentrated solution of medium is not recommended as precipitates may form.

### Media preparation instructions for 10 L liquid of MetaCell® BHK SF01 medium

During the media preparation, sodium bicarbonate needs to be added following the instructions below.

1. Measure out 9.5 L of cell culture grade or ultra-pure water, by weight, into a 10 L carboy or equivalent.
2. Slowly add 209.82 g of MetaCell® BHK SF01 medium powder to the water.
3. Allow to dissolve by gentle stirring (300 rpm) for 15 minutes.
4. Add sodium bicarbonate (20 g/10 L) and stir until dissolved (~15 minutes).
5. Measure the pH and adjust the medium using 2 M sodium hydroxide to a pH of 7.1–7.2.
6. Fill up to 10 L final volume using cell culture grade or ultra-pure water.
7. Sterilize by membrane filtration (0.22 µm, PES).
8. Measure the final pH and osmolality (pH = 7.2-7.4; osmolality = 340±15 mOsmol/kg).
9. Store at 2–8 °C. Protect from light.

### Media preparation instructions for 3000 L liquid of MetaCell® BHK SF01 medium

For the media preparation, sodium bicarbonate needs to be added following the instructions below.

1. Measure out 2850 L of cell culture grade or ultra-pure water, by weight, into a suitable container.
2. Slowly add 62.946 kg of MetaCell® BHK SF01 medium powder to the water.

3. Allow to dissolve by gentle stirring until completely dissolved.
4. Add sodium bicarbonate (6.000kg/3000 L) and stir until dissolved.
5. Measure the pH and adjust the medium using 2 M sodium hydroxide to a pH of 7.1–7.2
6. Fill up to 3000 L final volume using cell culture grade or ultra-pure water.
7. Sterilize by membrane filtration (0.22  $\mu$ m, PES).
8. Measure the final pH and osmolality (pH = 7.2-7.4; osmolality =  $340\pm 15$  mOsmol/kg).
9. Store at 2–8 °C. Protect from light.