

ROSE

Stock culture and production medium for BHK21 suspension cells.

Serum free, animal component free. For maximal virus and recombinant protein production.



BENEFITS

ROSE medium maximizes recombinant protein and virus production of BHK21 suspension cells. If combined with feed media it supports a viable cell concentration up to $3,8 \times 10^7$ /mL.

ROSE is suitable for recombinant protein production in fed-batch process. In batch process ROSE can be used for virus production.

ROSE offers

Simplicity: Ideal from bench to manufacturing scale.

Serum-free and animal component free:

Reduces the risk for animal derived contaminants.

Fully defined: It doesn't contain hydrolysates, thus process variability is reduced.

Antibiotic-free: No risk of antibiotic traces, hidden contamination and endotoxins.

SPECIFICATION

Regulatory	Free of serum, animal component, hydrolysate, antibiotic w/ phenol red w/o L-Glutamine
Available Form	Liquid and powder
Cell Line	BHK21 suspension cells
Storage Cond.	2-8 °C, protect from light
Application	Research and manufacturing

APPLICATION

Sub-Culturing Procedure

- For optimal performance, add L-Glutamine from a 25 g/L stock solution to achieve a final concentration of 3.2 g/L.
- Dispense medium into shake flask and equilibrate in incubator for 2 hours (37 °C, 7% CO₂).
- Inoculate ROSE with 3 x10⁵ viable cells/mL and subculture every 3rd day for best performance.
- Maintain cells in medium at least 3 passages to have full adaptation for optimal performance. Viable cell concentration shall reach at least 60 x10⁵/mL before cell split.

Culture Conditions

- Culture vessel: Shake flask.
- 250 mL total volume, 50 mL volume directly after inoculation.
- Inoculation cell concentration, 3x10⁵ viable cells/mL.
- Incubator settings: 36.5 °C, 7% CO₂, humidified, 125 rpm shaking rate.

PERFORMANCE

Stock Culture Data

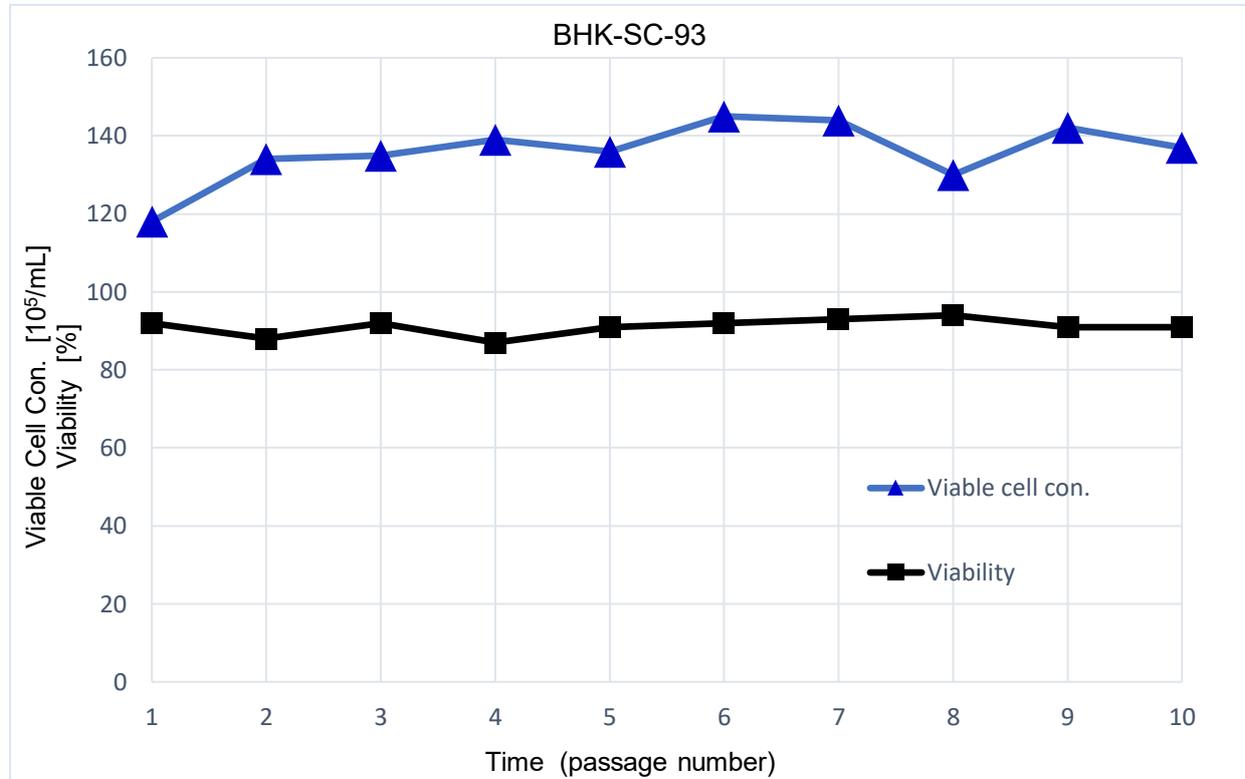


Figure 1: BHK21 suspension cells are cultured in stock culture (shake flask) in ROSE culture medium for 10 passages. Inoculation cell concentration was kept by 3x10⁵/mL. Cells were split every 3rd day.

Fed-Batch Culture Data

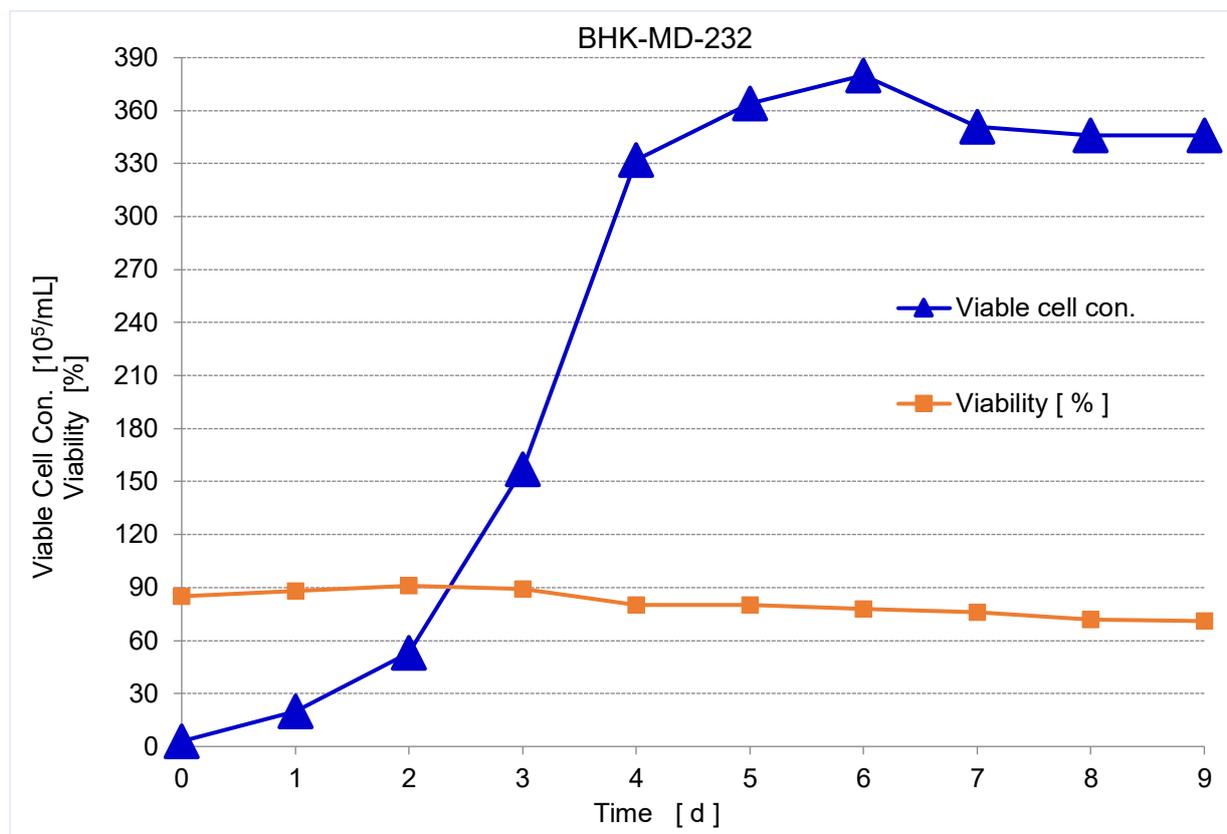


Figure 2: Cell growth performance of BHK21 suspension cells in ROSE medium with combination of feed medium for 9 days as fed-batch experiment.

TCID50

Enterovirus E (VR-248™) was produced with BHK21 cell line and TCID50 test was performed by using different virus concentrations (10^{-1} to 10^{-18}) to determine the ability of the virus to infect cells. Virus was inoculated into a 96-well plate (100 $\mu\text{L}/\text{well}$), incubated at 36 °C, 5% CO_2 and examined under the microscope to observe viral cytopathic effect (CPE). TCID50 value was calculated by using the Spearman-Kärber method.

Entero virus E (ATCC VR-248™)	
Incubation Period: 48 hours	
Medium	TCID50 (/mL)
ROSE	13.60
Commercial Medium	13.00

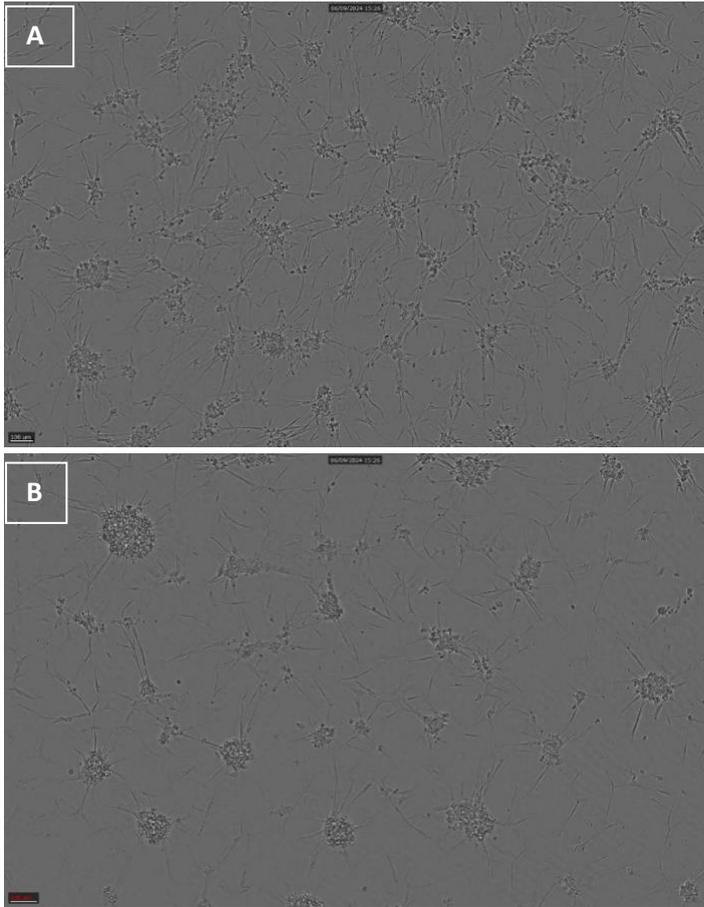


Figure 4: Infectivity test of Enterovirus E. Uninfected control cells (A). Infected cells 2 days after infection (B) in ROSE medium.

MEDIA SUPPLY SECURITY

 Eminence 埃美益	 CAPRICORN SCIENTIFIC
	 MADE IN GERMANY

- Our media are manufactured by partners, Eminence Scientific (China) and Capricorn Scientific (Germany), ensuring a consistent global supply from two strategic locations.
- Produced under GMP standards by Eminence Scientific or Capricorn Scientific, our media comply with EMA and FDA regulations.
- Available in liquid form, in GMP or non-GMP grades, tailored to customer specifications.
- GMP batch sizes reach approximately 2,000 L of liquid media.
- Media are supplied directly by Eminence Scientific or Capricorn Scientific.
- Through our extensive distribution network, we deliver to nearly every country worldwide.
- We invite our valued customers to tour our cutting-edge production facilities in Germany or China.

TECHNICAL SUPPORT

Developer	Contact
 florabio	info@florabio.com.tr

The developer of the culture media and solutions is Florabio A.S. We welcome our valued customers to contact us about any questions you might have in media characteristics or application of medium in your lab. We would be please to share our experience with you.

ORDERING INFORMATION

Name	Application	Formulation	Volume	Catalogue number
ROSE	Culture medium	Liquid	1 L	RSE1-L1
ROSE	Culture medium	Liquid	0.5 L	RSE1-L05
ROSE	Culture medium	Powder	10 L	RSE1-P10

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