

HELIANTHUS

Culture medium for VERO adherent cells.

A defined, serum free, animal component free medium, developed for virus production with VERO adherent cells.



BENEFITS

HELIANTHUS maximizes virus production of VERO adherent cells. HELIANTHUS is a ready-to-use basal medium.

HELIANTHUS requires adaptation from other serum-free media.

HELIANTHUS 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. It contains recombinant proteins.

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

SPECIFICATION

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

APPLICATION

Sub-Culturing Procedure

HELIANTHUS was developed for optimal proliferation of VERO adherent cells in serum free medium. For optimal performance, add L-Glutamine from a 25 g/L stock solution to achieve a final concentration of 0.2 g/L. Sub-culture the cells when the cells reach a confluency of 80-95 %, avoid 100 % confluency. This is achieved normally 3-4 days after inoculation.

- Place into a new flask HELIANTHUS culture medium according to the table below
- Remove the medium from the confluent flask completely
- Add 0.25 % Trypsin-EDTA solution to the cells according to the table below
- Incubate for 1 – 2 minutes at 37°C and verify cell dissociation
- Following cell detachment, add DPBS w/o Ca, w/o Mg, according to the table below
- Resuspend the cells gently and transfer the cell suspension into a falcon tube
- Centrifuge the suspension (5 min., 400 g, room temperature), discard the supernatant
- Resuspend the pellet in pre-warmed HELIANTHUS medium according to the table below
- Add cell suspension (inoculum) into the new culture vessel which contains pre-warmed HELIANTHUS medium according to the table below
- Incubate the cells in a humidified 7% CO₂ incubator at 37 °C.

Table1: Stock Culture When Cells are Cultured in The Same Flask

Flask type	T25	T75	T175
Surface area [cm²]	25	75	175
Split ratio	1:3	1:3	1:3
Medium to add into the flask for pre-warming [mL]	7	14	44
0.25 % Trypsin-EDTA for detachment of the cells [mL]	1	2	4
Add to the detached cells DPBS for centrifugation [mL]	7	15	30
Resuspend cell pellet in pre-warmed medium (inoculum) [mL]	3	3	3
Inoculum to add onto pre-warmed medium in flask [mL]	1	1	1
Working volume after inoculation [mL]	8	15	45

Transferring Cells from T25 to T75 Culture Flask

- Place in a T75 culture flask 12 mL HELIANTHUS medium and place in incubator for 2 hours.
- Resuspend the cell pellet of a T25 flask in 5 mL pre-warmed medium
- Take 3 mL cell suspension (inoculum) and add in the T75 flask
- All other parameters are the same as in above table.

Transferring Cells from T75 to T175 Culture Flask

- Place in a T175 flask 43 mL HELIANTHUS medium and place in incubator for 2 hours.
- Resuspend the cell pellet of a T75 flask in 5 mL pre-warmed medium
- Take 2.5 mL cell suspension (inoculum) and add in T175 flask
- All other parameters are the same as in above table.

PERFORMANCE

Stock Culture Data

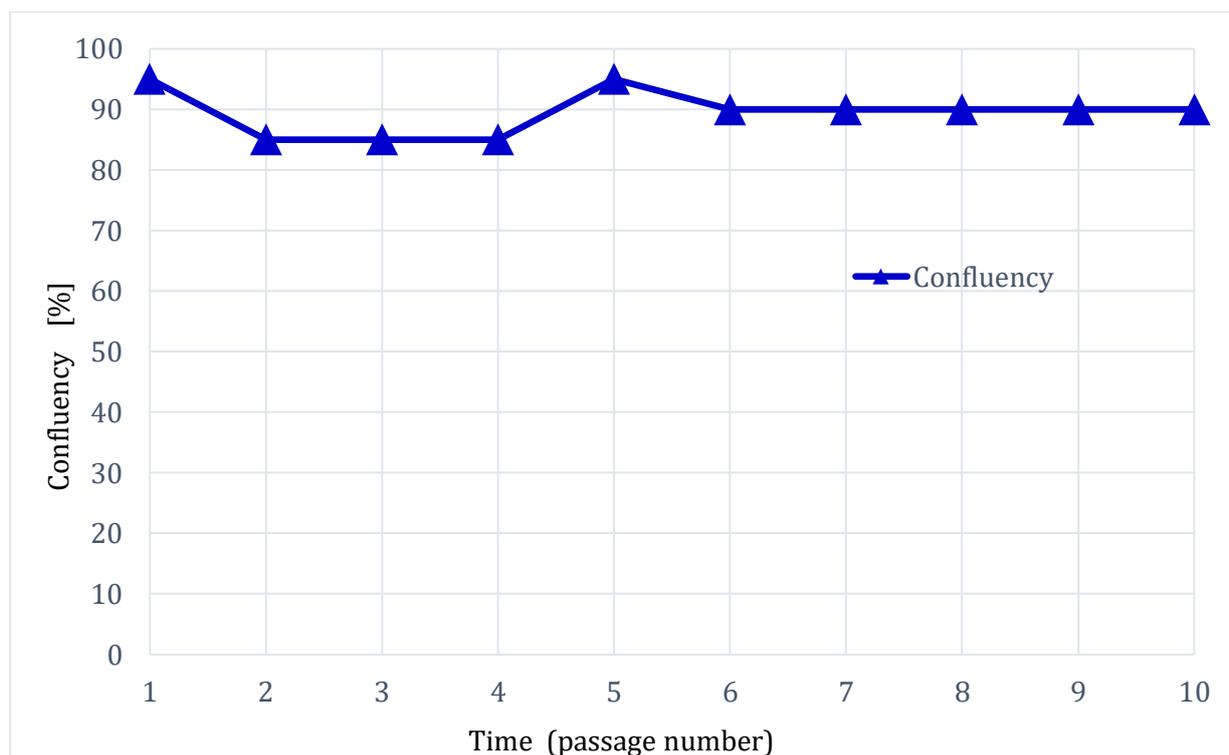


Figure 1: VERO adherent cells are cultured in stock culture (T75 flask with 15 mL working volume) in HELIANTHUS medium for 10 passages. Split ratio was 1:3. Cells were split every 3-4 days when confluency reached 80-95 %.

MEDIA SUPPLY SECURITY

- 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
	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.