

Solentim InstiSHAKE™ CHO

Description

InstiSHAKE CHO is an animal component free cell culture supplement which is designed to support the viability and viable cell density of suspension CHO cell lines. The supplement can be used to support expansion of cell to shaking culture vessels, and to nurture the health of cells in bulk culture. InstiSHAKE CHO consists of two components; Solution A (25x concentrate) and Solution B (100x concentrate). Both solutions should be diluted to a final concentration of 1x in cell culture medium.

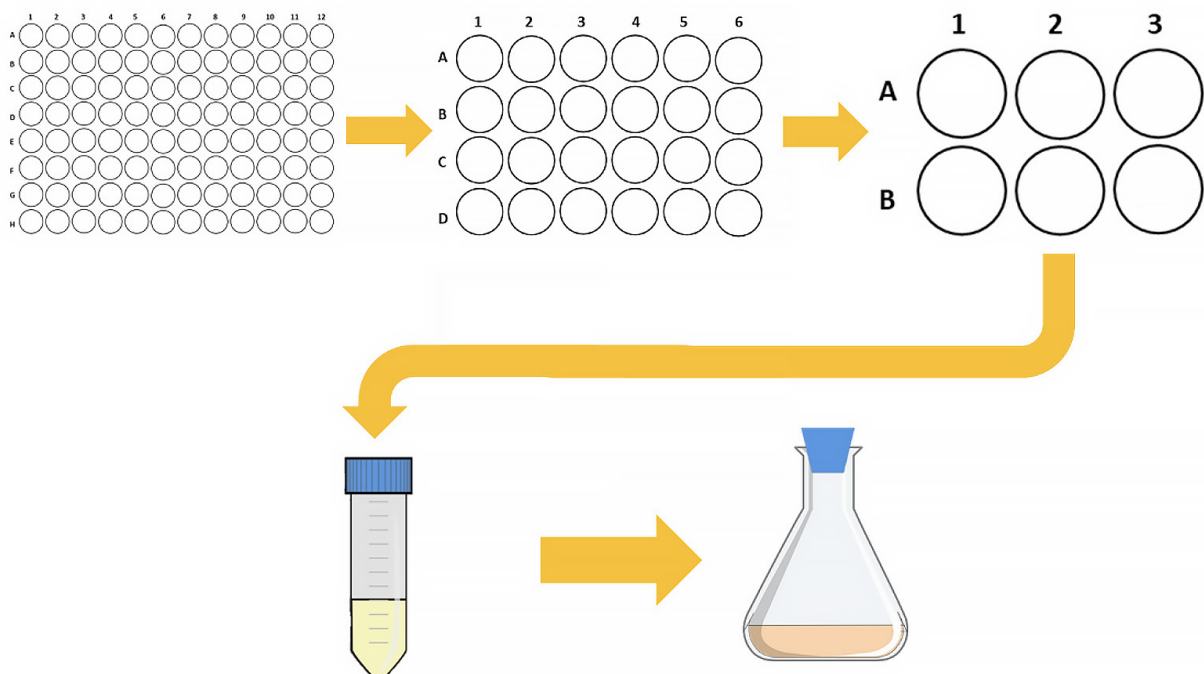
Features & Benefits

- **Supports clonal expansion:** Protects cells as they transition from static to shaking culture vessels, enabling scalable manufacture.
- **Heightens health of bulk cultures:** Nurtures the viability and viable cell density of cells in shaking culture vessels.
- **Ready to Use:** Simply add to your cell culture medium.

Data

To assess InstiSHAKE CHO's ability to support clonal expansion, 96 clones were expanded from a static 96 well plate to a static 24 well plate. Of the 96 clones expanded, 48 were expanded in the presence of InstiSHAKE CHO, while the remaining 48 were expanded following the customer's standard operating procedure.

After 6 days in 24 well plates, clone productivity was assessed and the top 48 clones were expanded to static 6 well plates (24 clones with, and 24 without InstiSHAKE). Productivity was again assessed in the 6 well plate, and the top 37 clones were expanded from 6 well to 50mL spin tubes (18 clones from the control and 19 clones from the InstiSHAKE group). Once the clones had been expanded from 50mL spin tubes to shake flasks, clones were evaluated for productivity during a 14-day fed-batch experiment with Dynamis media (Gibco) and 3% Cell Boost 7a/7b feeds (HyClone).



Results

InstiSHAKE CHO increased the number of clones which survived expansion from static to shaking culture. 12 out of the 19 InstiSHAKE clones successfully transitioned with high viable cell density (VCD). By comparison, of the 12 control clones which survived expansion, only 6 met the desired VCD while the remaining were either lost, or suffered with low VCD (see Figure 1).

The InstiSHAKE CHO clones also excelled during the fed batch experiment with both higher viability (%) and higher VCD (cells/mL), see Figures 2 and 3.

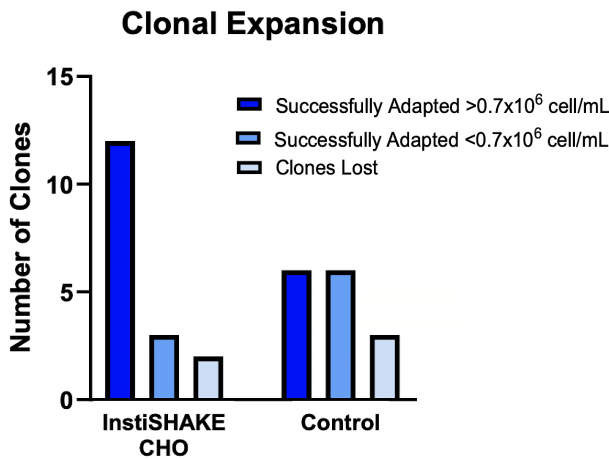


Figure 1. Shows the number of clones which were successfully expanded from static to shaking culture with and without InstiSHAKE CHO. Of the successfully expanded clones, those with viable cell density >/<0.7x10⁶ cells/mL are presented.

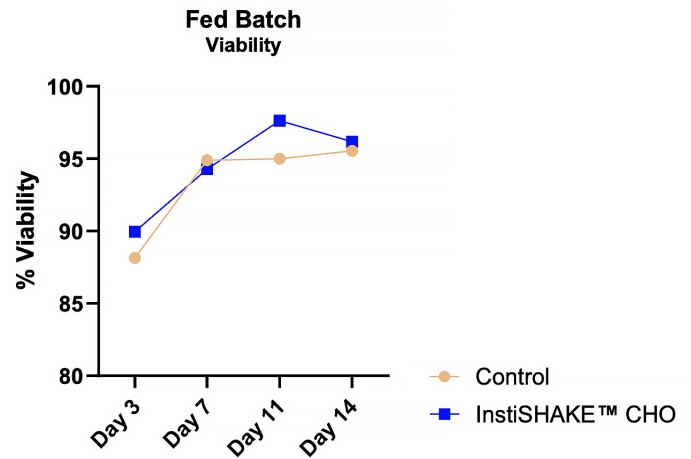


Figure 2. Shows the average viability of the 18 clones expanded from the control group and 19 clones expanded from the InstiSHAKE CHO group at each time point.

Product Information

Part Number	Part Name	Product Size (mL)
RS-2125	InstiSHAKE CHO	Solution A (20mL) and Solution B (5mL)

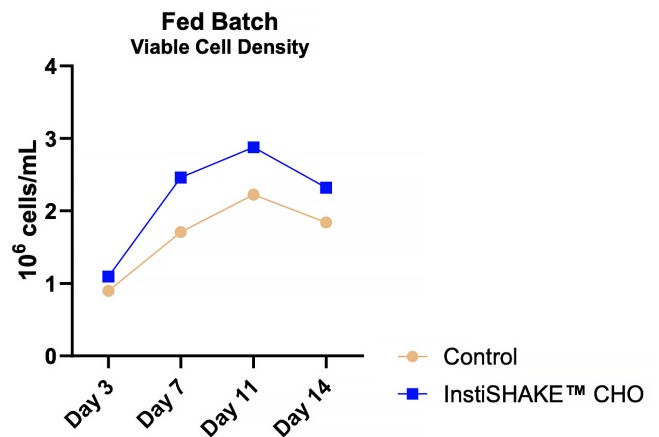


Figure 3. Shows the average viable cell density (cells/mL) for the 18 clones expanded from the control group and 19 clones expanded from the InstiSHAKE CHO group.

Storage & Handling

- Store at 2-8°C
- Shelf life: 18 months

Quality Control Testing

Certificates of analysis can be found on our website in the following location: www.aicompanies.com/support/certificates-of-analysis

- Testing performed on each batch:
- Sterility testing (bacterial & fungal)
 - Mycoplasma Testing

Intended Use

FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USE.

Resources

A Discussion About Cell Growth Supplements: <https://www.aicompanies.com/education-training/webinars/a-discussion-about-cell-growth-supplements/>