FUJIFILM
Value from Innovation

IrvineScientific

BalanCD CHO DG44

INCREASE MONOCLONAL ANTIBODY PRODUCTION IN DG44 CELLS

Maximize cell productivity for CHO DG44 cultures

Support high cell density cultures and achieve robust titers of monoclonal antibodies (mAbs) and recombinant proteins with chemically defined BalanCD CHO DG44.

The medium delivers consistent cell productivity in suspension cultures for cost-effective biomolecule drug development and commercialization.

- Scalable and adaptable to use with a variety of CHO DG44 cell strains in both batch and fed-batch cultures
- Efficient, cost-effective workflow solution for CHO DG44 cells for small- to large-scale bioreactors
- Compatible with a range of culture platforms and transfection reagents
- Pair with BalanCD CHO Feed 4 for optimal mAbs production in fed-batch mode

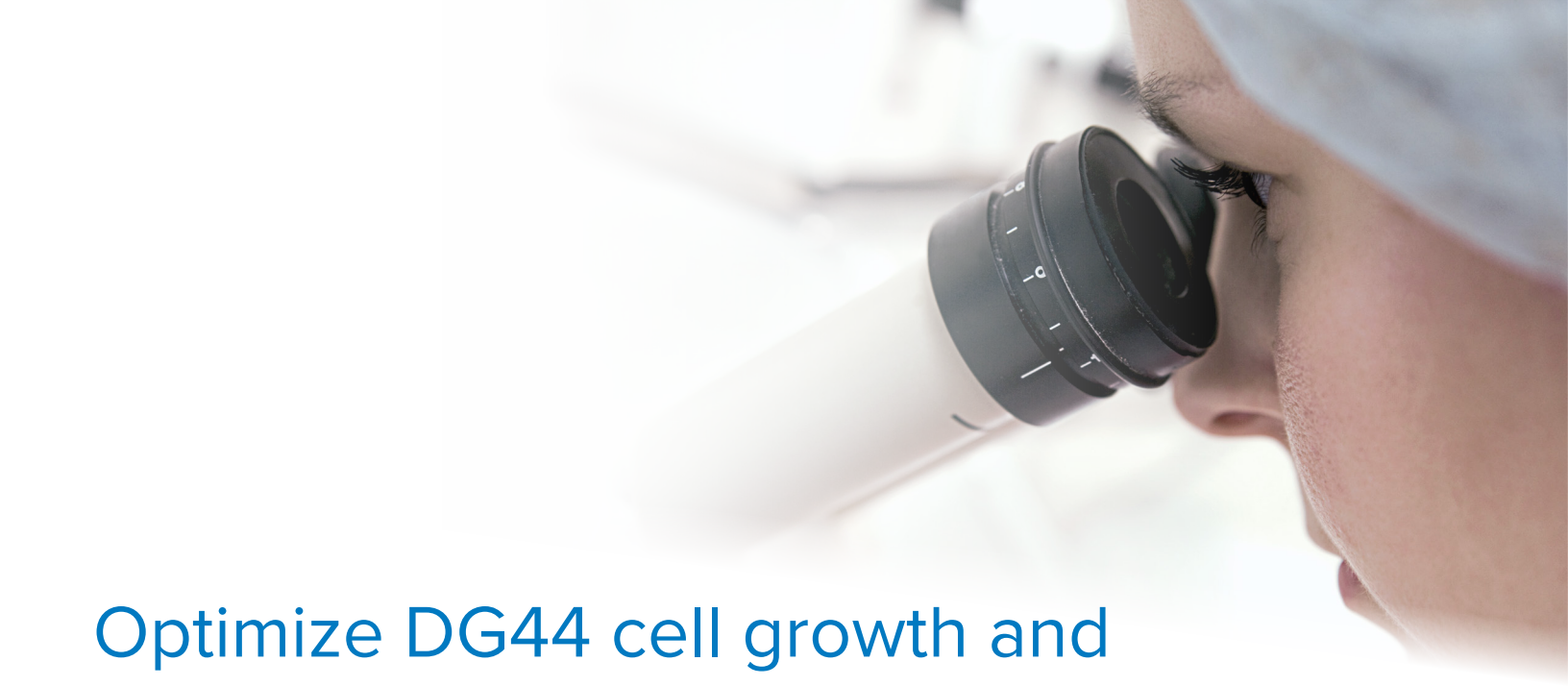
This product is for further manufacturing purposes, not for injection or diagnostic procedures.

Global Supply Continuity for Bioprocessing

BalanCD CHO DG44 is manufactured in a cGMP-compliant facility using qualified raw materials sourced from a solid supply chain to ensure continuity of supply and lot-to-lot reliability for CHO media-specific applications. Our stringent oversight provides confirmation of formula and assurance that BalanCD CHO DG44 medium meets the highest global and regional standards while fulfilling regulatory demands with each manufacturing lot file.

- Stringent raw materials control and sourcing program
- cGMP-compliant manufacturing
- COA, COO, TSE/BSE statements
- ISO13485, EN 13485:2016 certified
- Drug Master Files (DMF) supported*

* Available upon request



Optimize DG44 cell growth and productivity for bioprocessing

The latest advanced formulation specifically designed for DG44

High-Performing

Achieve reliable, high titers with lot-to-lot consistency

Flexible

Supports multiple cell lines and a variety of platforms

Efficient

Simplified media preparation and use

BalanCD CHO DG44 delivers high-density cell growth in extended cell culture for the production of mAbs and recombinant proteins.

CHO DG44 is one of the most widely used CHO subtypes for the commercial manufacture of mAbs. Derived from the original CHO cell line, DG44 has had both copies of the dihydrofolate reductase (DHFR) gene eliminated, allowing for a stringent metabolic selection method to generate host cell protein production.

Cell Growth: Viable Cell Density (VCD) and Viability in Multiple CHO DG44 Cell Lines

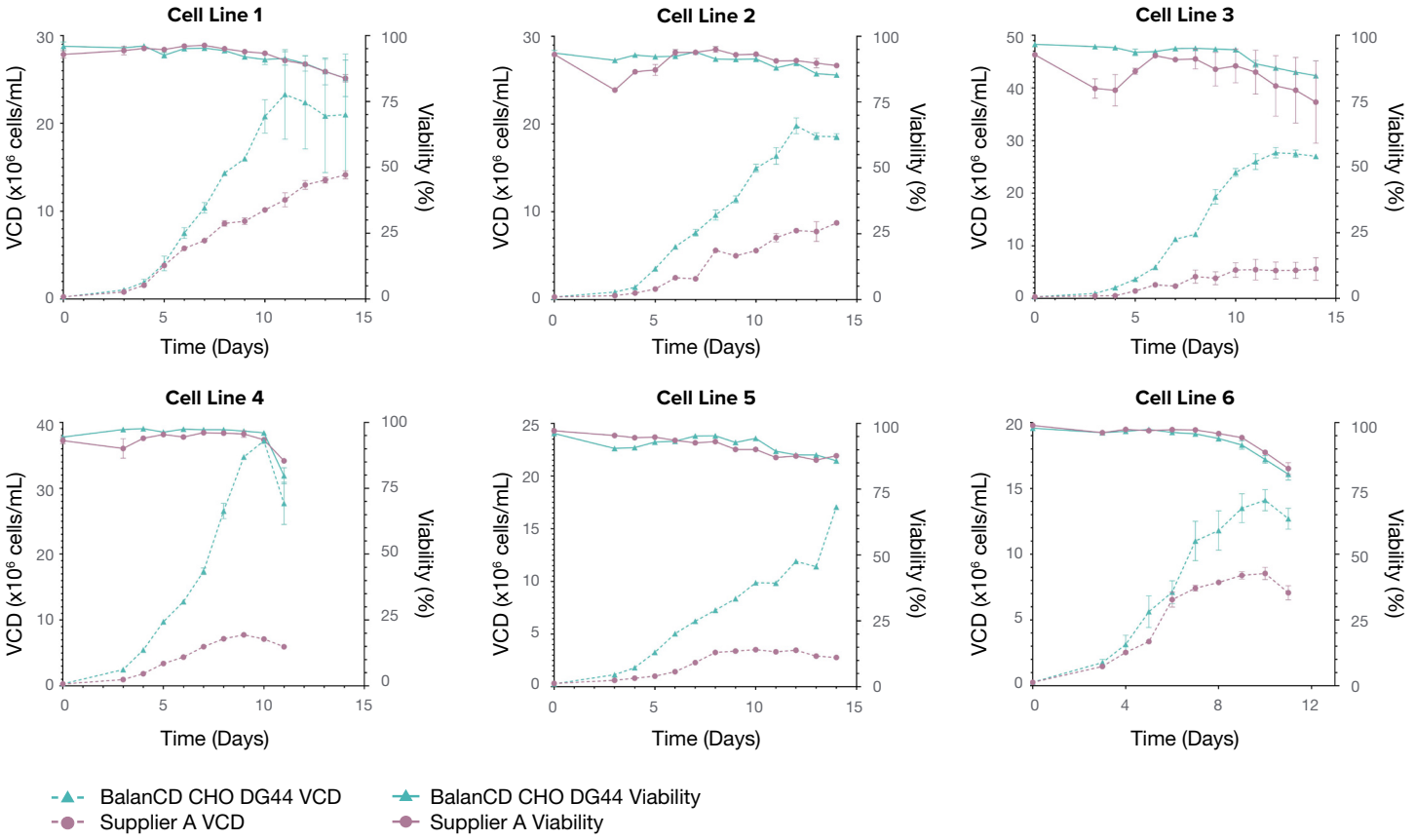


Figure 1. Growth of multiple CHO DG44 cell lines, including widely-used commercial DG44 cell lines, with BalanCD CHO DG44. Cells were grown in an Ambr® 15 microbioreactor system with Supplier A (medium and feed, using recommended feed strategy) or BalanCD CHO DG44 with BalanCD CHO Feed 4. Feed 4 was added at 4% of the initial culture volume starting on day 3 and added on days 5, 7, 9, and 11. Viable cell density (VCD) and viability were measured in duplicate (error bars) throughout the culture. BalanCD CHO DG44 increased cell growth across all independent cell lines shown, compared to Supplier A.

Antibody Production in Multiple CHO DG44 Cell Lines

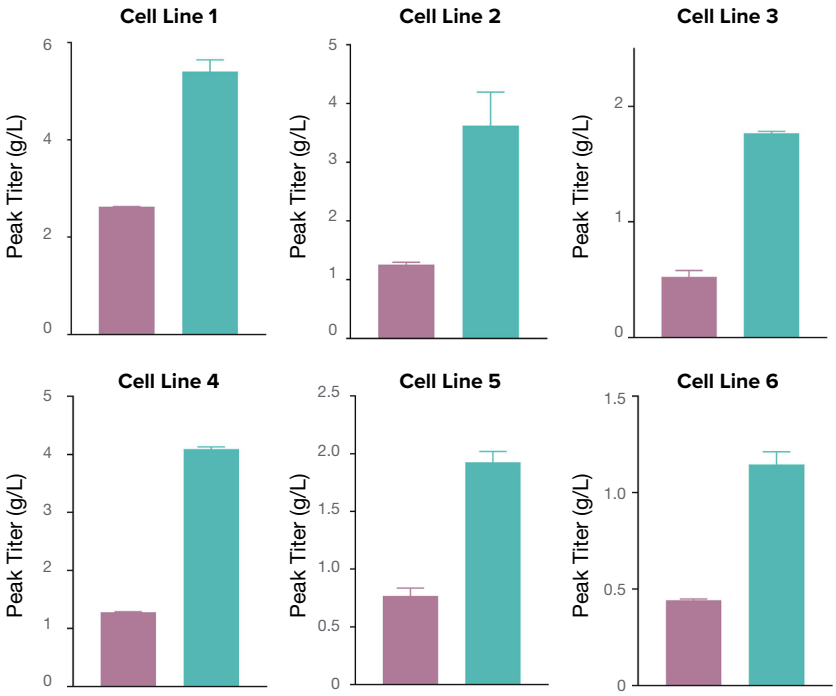


Figure 2. Peak titers of multiple DG44 cell lines cultured with BalanCD CHO DG44 or Supplier A, and fed with BalanCD CHO Feed 4 or Supplier A Feed, respectively. Culture vessels in Figure 1 were sampled at regular intervals and measured for antibody titer using biolayer interferometry. Cells grown in BalanCD CHO DG44 increased antibody titers 2-fold to 3-fold, demonstrating improved productivity of multiple independent DG44 cell lines, compared to Supplier A.

Improved Cell Growth Compared to Competitor Media

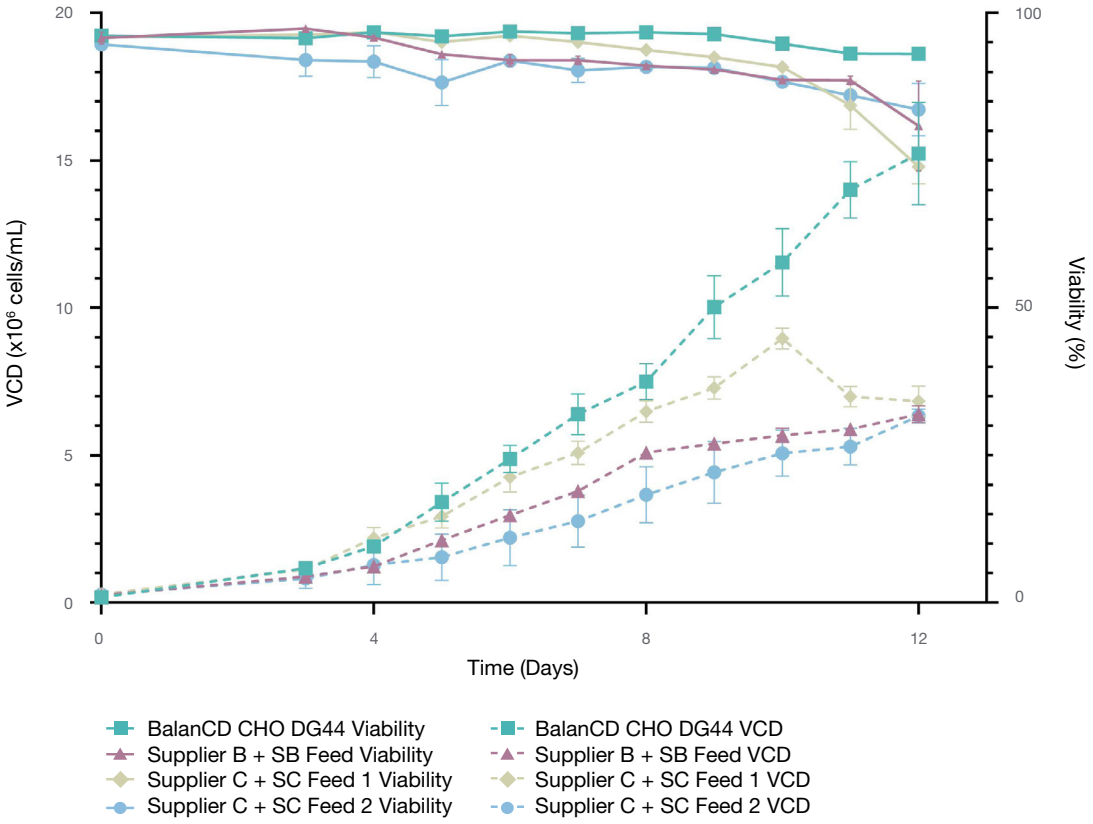


Figure 3. Growth of DG44 cells (Cell Line 2) cultured with BalanCD CHO DG44 and Feed 4, or other commercial media and feeds (Supplier B and Supplier C). Cells were grown in an Ambr® 15 microbioreactor system, and feed strategies were implemented per manufacturer's protocol. BalanCD CHO Feed 4 was added at 4% (v/v) on days 3, 5, 7, 9 and 11 to cultures grown in BalanCD CHO DG44. Viable cell density (VCD) and viability were measured in triplicate (error bars) daily from day 3. BalanCD CHO DG44 increased cell growth of Cell Line 2, compared to other supplier media.

Antibody Production in Fed-batch Process

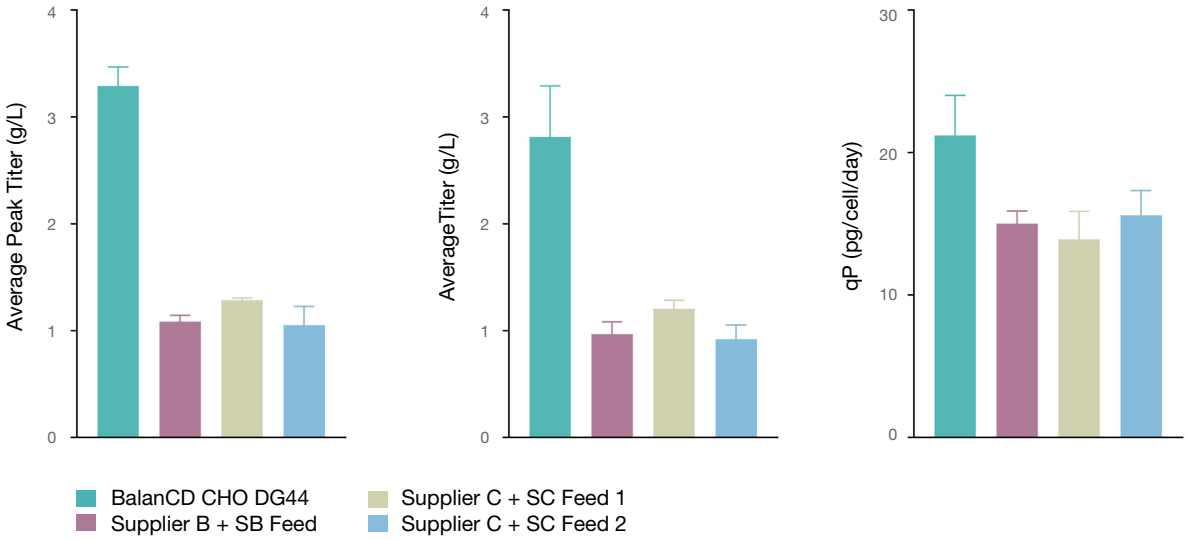


Figure 4. Average peak titers, average titer, and cell specific productivities were calculated from culture vessels (in triplicate, error bars) from Figure 3. Cultures were sampled and measured for titer using biolayer interferometry. qP was calculated using the titer, VCD and days of culture. Fed-batch cultures utilizing BalanCD CHO DG44 and BalanCD CHO Feed 4 increased average peak titer and average titer approximately 3-fold, with cell specific productivity improved compared to other supplier media.

Ordering Information

Product	Catalog #	Size*	Additional Information
BalanCD CHO DG44, Liquid	91177	1 L	Chemically defined, animal component-free formula
BalanCD CHO DG44, Powder	94148	10 L	Chemically defined, animal component-free formula
BalanCD CHO Feed 4, Powder	94134	1 L 10 L	Chemically defined, animal component-free formula
BalanCD Gal Supplement	91175	100 mL 1 L	Chemically defined, animal component-free formula
Anti-Clumping Supplement	91150	50 mL	Animal component-free formula

*Custom sizes and packaging available upon request.

To learn more about BalanCD CHO DG44 and the BalanCD CHO Media Platform, please contact your representative at **getinfo@irvinesci.com** or visit **www.irvinesci.com/contact-us**.

www.irvinesci.com

FUJIFILM
Value from Innovation

IrvineScientific

FUJIFILM Irvine Scientific – Corporate
1830 E Warner Avenue, Santa Ana, CA 92705 USA
Phone: 1 (949) 261-7800
Toll Free: 1 (800) 437-5706
Fax: 1 (949) 261-6522
Support: fisitmrequest@fujifilm.com