



IrvineScientific®
Grow With Us

IS CHO-CD™ Chemically-Defined Medium

Figure 1. Growth of CHO K1

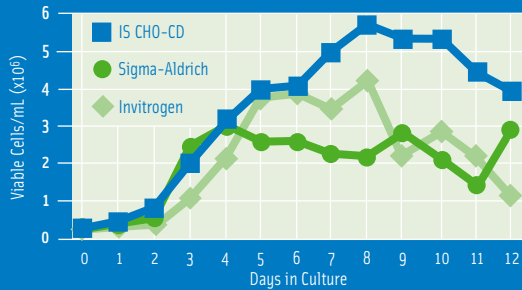


Figure 1. High density culture of CHO K1 Clone. Parallel 30 mL cultures were grown in 125 mL shaker flasks at 160 RPM in a humidified, 5% CO₂, 37° C incubator. CHO K1 cells were seeded at an initial density of 3x10⁵ cells/mL from a common culture.

Figure 2. Growth of CHO K1 GS

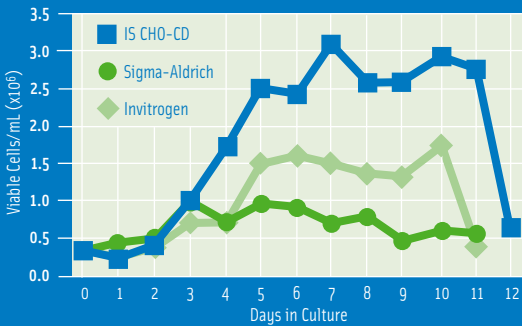


Figure 2. High density culture of CHO K1 GS Clone. Parallel 30 mL cultures were grown in 125 mL shaker flasks at 160 RPM in a humidified, 5% CO₂, 37° C incubator. Recombinant CHO K1 cells containing the selectable glutamine synthetase (GS) gene were seeded at an initial density of 3x10⁵ cells/mL from a common culture. Cell counts and viability were determined daily for 12 days.

Figure 3. Growth of DXB11

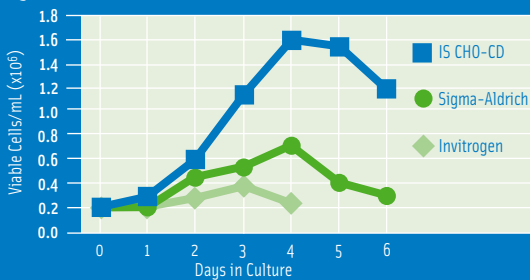


Figure 3. High density culture of CHO DXB11 Clone. Parallel 30 mL cultures were grown in 125 mL shaker flasks at 160 RPM in a humidified, 5% CO₂, 37° C incubator. Recombinant CHO cells (DXB11 clone) were seeded at an initial density of 2x10⁵ cells/mL from a common culture.

Figure 4. Productivity of CHO K1 GS

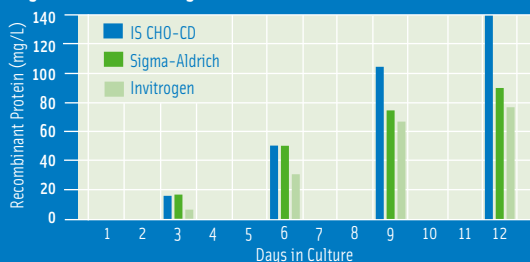


Figure 4. Recombinant protein expression in CHO K1 GS Clone. Parallel 30 mL cultures were grown in 125 mL shaker flasks at 160 RPM in a humidified, 5% CO₂, 37° C incubator. Recombinant CHO K1 cells containing the selectable glutamine synthetase (GS) gene were seeded at an initial density of 3x10⁵ cells/mL from a common culture. Recombinant protein production was measured by HPLC.

IS CHO-CD™ is a chemically-defined cell culture medium developed for high-density culture of Chinese Hamster Ovary (CHO) cells.

This medium is free of L-Glutamine, Hypoxanthine and Thymidine to allow for use in a variety of applications. To address customer concerns relating to consistency, regulatory and downstream process issues, IS CHO-CD has been developed with components which are defined and of non-animal origin. This medium is also characterized for its ability to meet the different nutritional requirements of commonly used CHO clones.

Performance

Data demonstrates that IS CHO-CD supports robust growth and productivity of CHO K1, DXB11, and DG44 clones. IS CHO-CD was tested against comparable media from Sigma-Aldrich and Invitrogen. Each figure demonstrates superior performance with respect to high-density cell culture and recombinant protein expression (Figures 1-4).

Features and Benefits

- Produced with Irvine Scientific's WFI Grade Water.
- Components are chemically defined and non-animal in origin.
- Contains no hydrolysates, extracts or other undefined components.
- Useful with dhfr selection system and GS selection system: does not contain L-Glutamine, Hypoxanthine or Thymidine.
- Supports high recombinant protein production.
- IS CHO-CD has a shelf life of one (1) year when stored at 2-8°C and protected from light.
- Available as a liquid in packages of 500 mL, 1 L & 20 L and as a powder in 10 L packages.
- Custom configurations are available.

Catalog Number 91119: IS CHO-CD Chemically-Defined Medium - Liquid
Catalog Number 94111: IS CHO-CD Chemically-Defined Medium - Powder

The Final Conclusion

IS CHO-CD addresses customer concerns relating to consistency, regulatory, and downstream process issues because it has been developed with components that are defined and of non-animal origin. IS CHO-CD consistently outperforms competitor media in both growth and expression, allows complete adaptation from serum-free media, and demonstrates lot-to-lot consistency.

Partnering

This medium has been optimized for the specific cells we have used. Your cells and application may differ to varying degrees. This medium may be tailored to meet the specific requirements of individual customers. Whether your efforts are focused on optimizing yields, improving product quality or addressing regulatory concerns, Irvine Scientific has the answers to your specific requirements.

For more information on any of our Industrial Cell Culture products, call 1 800 437 5706 and request that your Territory Manager contact you. Visit our website at www.irvinesci.com or e-mail us at nucleus@irvinesci.com.

Note: Always refer to product insert for complete instructions for use.

Irvine Scientific

2511 Daimler Street, Santa Ana, CA 92705

Customer Service: 1 800 577 6097 • Technical Service: 1 800 437 5706

• Telephone: 1 949 261 7800 • Fax: 1 949 261 6522

