



IS CHO™ Serum-Free Cell Culture Medium

IS CHO™ is a serum-free cell culture medium optimized for the production of recombinant proteins in Chinese Hamster Ovary (CHO) cells.

This medium is designed to achieve high-density growth and high levels of recombinant protein expression in CHO cell cultures. IS CHO is provided without L-Glutamine, Hypoxanthine, and Thymidine to allow its use in a variety of applications. Cells grown in either serum-containing or serum-free media can be sub-cultured directly into IS CHO with little or no adaptation.

Performance

Cell growth and expression data were obtained from shaker cultures. Each 125 mL flask contained 50 mL of medium and was seeded with 1×10^5 viable CHO cells/mL. The cultures were grown for seven days at 160 rpm in a 6% CO₂ humidified incubator. Viable cell counts were measured on several days to provide a meaningful comparison of the various media samples.

Features and Benefits

- Available as a complete liquid.
- Reduces clumping of cells.
- Little or no adaptation required.
- IS CHO has a shelf life of one (1) year when stored at 2-8°C and protected from light.
- Available in packages of 500 mL and 1 L.
- Custom configurations are available.
- Lot-to-lot consistency.
- Supports high recombinant protein production.
- Produced with Irvine Scientific's WFI Grade Water.

Catalog Number 91109: IS CHO Serum-Free Medium

Cell Growth

Figures 1 and 2 describe the superior cell growth results obtained with IS CHO compared to the other media samples. Shaker cultures achieved cell densities of 4×10^6 cells/mL or greater in each cell line and maintained high viability (>90%) through day 6. Consistency from lot to lot was also demonstrated by an evaluation of cell growth performance (Figure 3).

Expression

Figure 4 shows the effect of different media on recombinant protein expression. Again, the performance of IS CHO was superior to that of the other serum-free media, and equal to the performance of DME supplemented with 10% Fetal Bovine Serum.

The Final Conclusion

IS CHO provides several important benefits for the production of recombinant proteins in CHO cells. This medium allows for rapid adaptation from serum-containing cultures, provides superior performance and exceptional lot-to-lot consistency for use in a standardized process.

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.

Figure 1. CHO DG44 (dhfr) Cell Growth

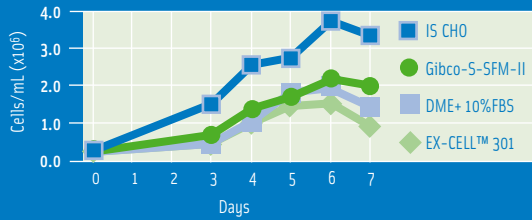


Figure 2. CHO K1 (G418) Cell Growth

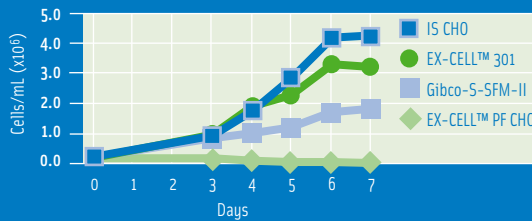


Figure 3. IS CHO Lot-to-Lot Consistency (CHO DG44 Cell Growth)

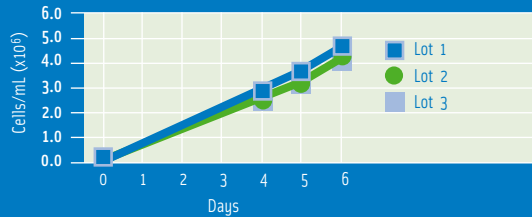


Figure 4. β-GAL Expression in CHO DG44 (dhfr) Cells

