

Effects of polyamine and lysophosphatidylcholine in protein-free medium on growth of adaptation-free CHO-DG44 cells

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Abstract

In our previous study, protein-free medium that consists of plant-derived and synthetic components has utilized successfully in culturing CHO cell line. In spite of reducing risk connected to animal-derived components, suspension culture of CHO-DG44 cells in protein-free medium had so hard that we used specific growth factors to attain desirable passage numbers and culture time. Recently, we evaluated the effects of polyamines^{1,2)} and plant-derived Lysophosphatidylcholine (LPC)³⁾ on CHO cell growth. Fortification of protein-free medium with those components has resulted in stimulating the cell growth. Our results indicated that the protein-free medium could be used for long-term culture of cells without having adaptation process to suspension. The medium supplemented with polyamines and LPC is a promising choice for animal-cell culture.

References

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