ABSTRACT

In certain embodiments, this disclosure provides novel methods of increasing the viable cell density of an N-1 large-scale bioreactor cell culture, comprising culturing a host cell expressing a recombinant polypeptide of interest in a non-perfusion-based culture system, and wherein the viable cell density is increased to at least 5×10^6 cells/mL. In certain embodiments, the disclosure provides novel methods for large-scale production of a recombinant polypeptide of interest, comprising: (1) culturing a host cell expressing a recombinant polypeptide of interest in an N-1 stage in a non-perfusion-based culture system, wherein the viable cell density is increased to at least 5×10^6 cells/mL; and (2) culturing N fed-batch production cells in an enriched media with high-seed density at least 1.5×10^6 cells/mL, wherein the N fed-batch production cells are inoculated from the N-1 stage in a non-perfusion-based culture system.

[No figure to accompany]