

Increasing HD BIOP3 Seeding Efficiencies Using VIPS and InstiGRO CHO

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Single cell cloning (SCC) and associated cloning efficiency (colony outgrowth) is currently regarded as an important and discrete step in stable cell line development and cell engineering. The advent of new gene editing technologies, new cell lines, supplements and automated technologies for single cell cloning are rapidly increasing the efficiency of cell line development. We have previously demonstrated the capabilities and advantages of the VIPS platform over manual limiting dilution for several cell lines. The VIPS results in higher seeding efficiencies over manual limiting dilution whilst giving confidence in clonality thereby reducing the number of plates required for screening.

In this poster we use Horizon Discovery's HD BIOP3 GS Knockout CHO KI cell line in combination with the VIPS seeding and optimised outgrowth conditions using SAL Scientific InstiGRO CHO reagents to produce a significantly higher number of colonies per plate, thereby reducing the number of plates needing to be screened. The experiment was designed to assess the outgrowth of the HD-BIOP3 cell line by manual limiting dilution and VIPS under a variety of conditions.