Generation and Characterization of a Novel HEK293 Cell Line for rAAV Production M Vona, I Bodenmann, L Nanni, R Daveau, P Kolak Yasli, A Felix, MA Perrenoud, R Buchs, T Schuepbach, I Fisch, E Guzman⁺ and N Mermod

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Introduction

- NewBiologix (NBX) has developed its proprietary Xcell[™] Eng-HEK293 Cell Line optimized for efficient plasmid transfection and rAAV production.
- and superior rAAV production capacity.
- The performance of NBX-HEK Clones was benchmarked against a leading commercially available HEK293 cell lines, demonstrating competitive efficiency in rAAV production for gene therapy applications.





• Two single clones (NBX HEK293 Clone-1 and NBX Clone-2) from the parental HEK293 cell were selected based on high transfection efficiency, robust growth in single-cell suspension,

Conclusions



High rAAV Production Meticulously selected cell clone for optimal rAAV production.	 Fully Characterized Completely characterized and traceable cell line for reliable results. 	Genomic Stability Enhanced stability with chromosome number remaining stable over 60 generations.	High-Density G Suspension growth to in defined media.
 Æfficient Transfection Improved efficiencies using chemical transfection and electroporation methods. 	 Scalable Process Enables reliable and scalable rAAV production for various applications. 	Robust Growth Optimal doubling time and high-density culture performance with fast recovery.	Long-Term Star Consistent growth char maintained for 60 gen





