



# Novel Dual-Plasmid Transfection System

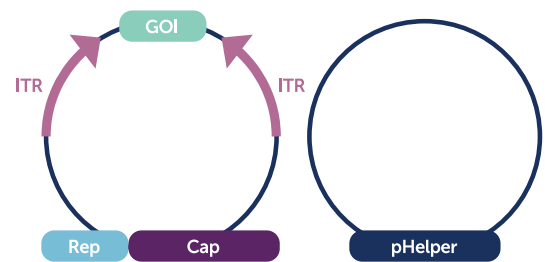


The Dual-Plasmid system resolves some of the key manufacturing challenges faced by AAV developers

Our team of experts at OXB have developed a proprietary 'plug and play' Dual-Plasmid system for transient transfection for effective AAV-based gene therapies resulting in:

- ✓ Higher titre
- ✓ High product quality
- ✓ Proven scalability

## OXB's Dual Plasmid System



Our novel Dual-Plasmid system optimizes performance and quality

## Continuously exploring opportunities for titre improvement

Today  
Novel Dual Plasmid transfection

Up to  
**E15 vg/L**

2020  
Optimized plasmid/construct design

Up to  
**E14 vg/L**

2019  
Improved GMP execution with internal MFG facility

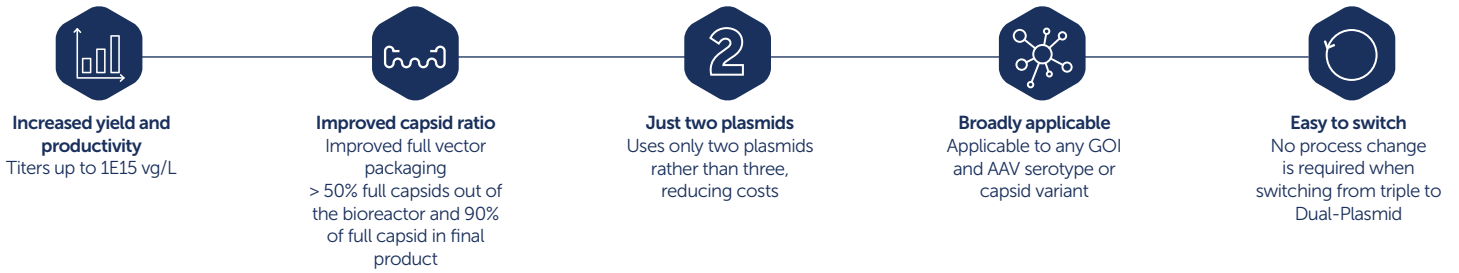
Up to  
**E13 vg/L**

2018  
Triple transfection reference

Up to  
**E13 vg/L**

Titre is construct and serotype dependent

## Advantages of our Dual-Plasmid system include:



## An optimised configuration to outperform traditional triple-plasmid system

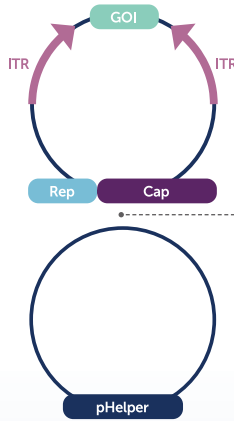
### Traditional triple-plasmid system

GOI, Helper and Rep Cap



### OXB Dual-Plasmid system

GOI + Rep Cap and Helper



### Dual-Plasmid System delivers

Same sequence, different configuration

Performance and quality

Consistency, comparability and scalability

### Client benefits

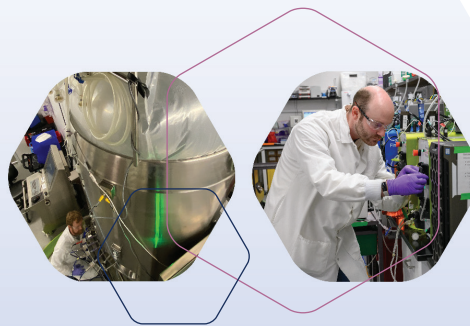
Improved downstream performance

High productivity and improved safety profile

Reliable technology proven in GMP manufacturing



- ✓ No change in RepCap and GOI (Gene of Interest) DNA sequences, and the pHelper plasmid is the same: the conversion from the triple-plasmid to the Dual-Plasmid system is straightforward
- ✓ The Dual-Plasmid system, together with our proprietary transfection process increases bioreactor vg titer up to 10-fold over current industry standard. The process has been successfully scaled up to 2,000L and has been proven to deliver up to 1.5E17 total vgs at 500L scale



## Let's do something life-changing together

We are a quality and innovation-led CDMO with over 25 years of experience, committed to helping our clients deliver cell and gene therapies that transform patients' lives.

We offer end-to-end capabilities, from plasmid design and optimisation, to clinical and commercial GMP manufacturing, accompanied by robust control systems, analytical methods and deep regulatory knowledge.

To discuss your project, please contact our team at [partnering@oxb.com](mailto:partnering@oxb.com)

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