



High-throughput cloning, simplified



Eco-friendly format

Pre-aliquoted and lyophilized

Room temperature storage

Available in 8-well and 96-well formats

Cloning accuracy of >95%

**In-Fusion®
Snap Assembly
EcoDry® Master Mix**

- Minimizes liquid handling
- Reduces pipetting errors
- Eliminates contamination risks
- Decreases waste

- Frees up freezer space
- Reduces energy consumption

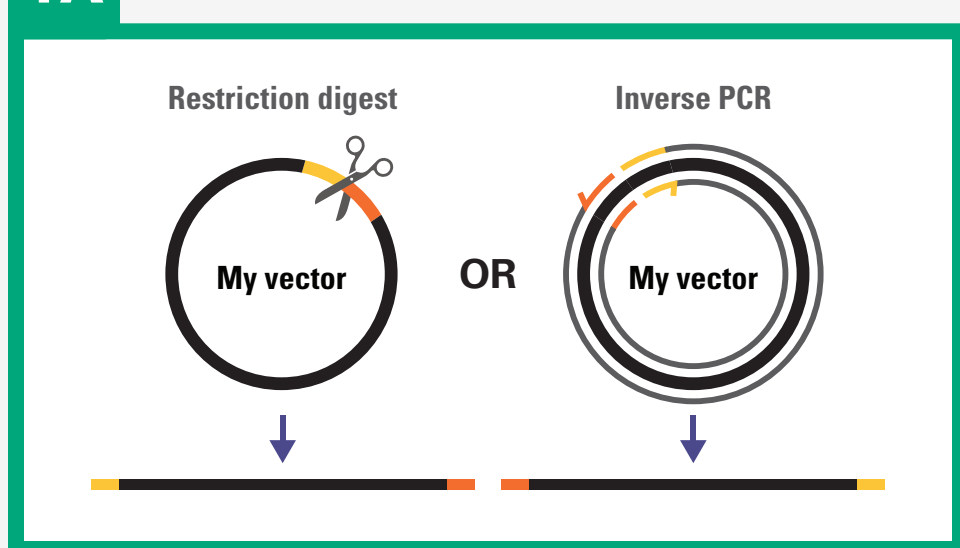
- Supports high throughput
- Streamlines automation

- Requires fewer replicates
- Saves time and reagents

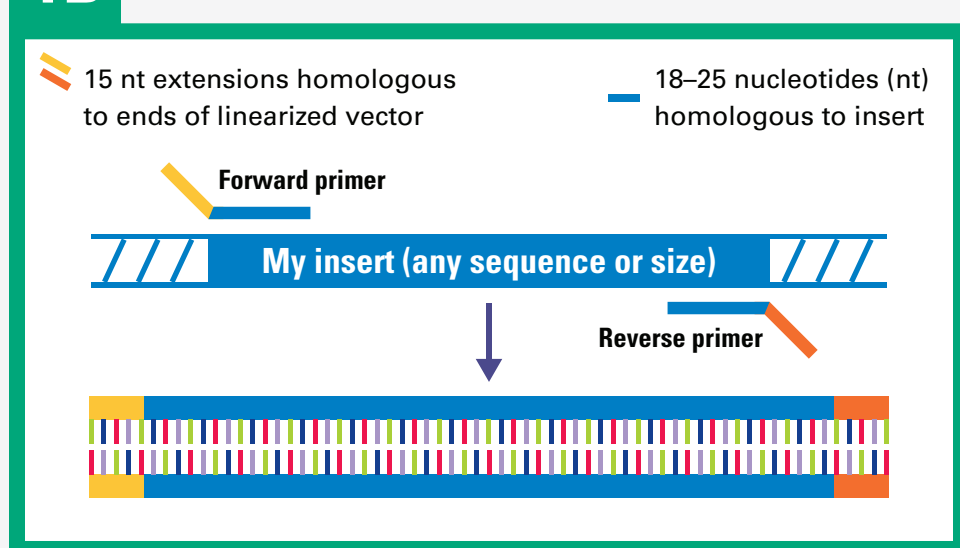
Single-insert cloning

High-throughput applications

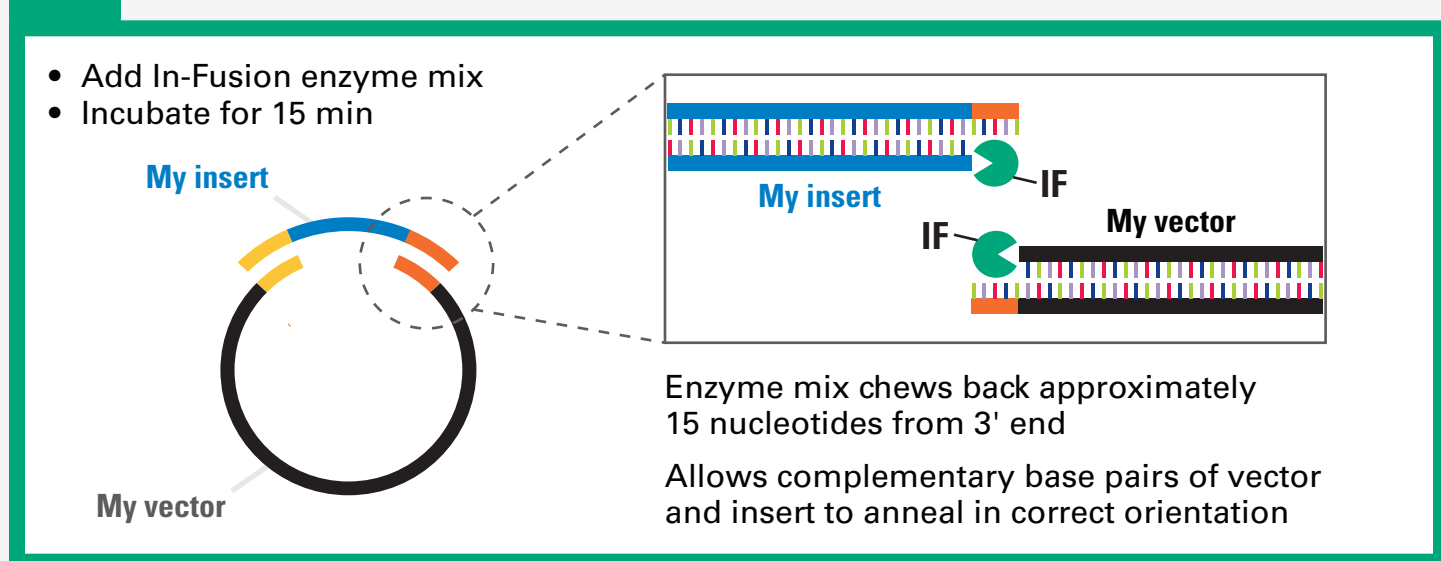
1A Linearize any vector at desired insertion site



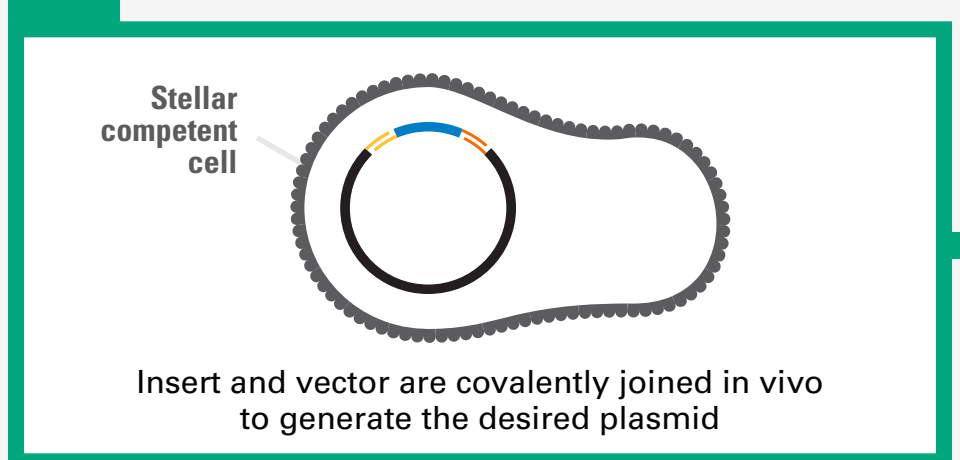
1B Design primers and amplify your insert with PCR



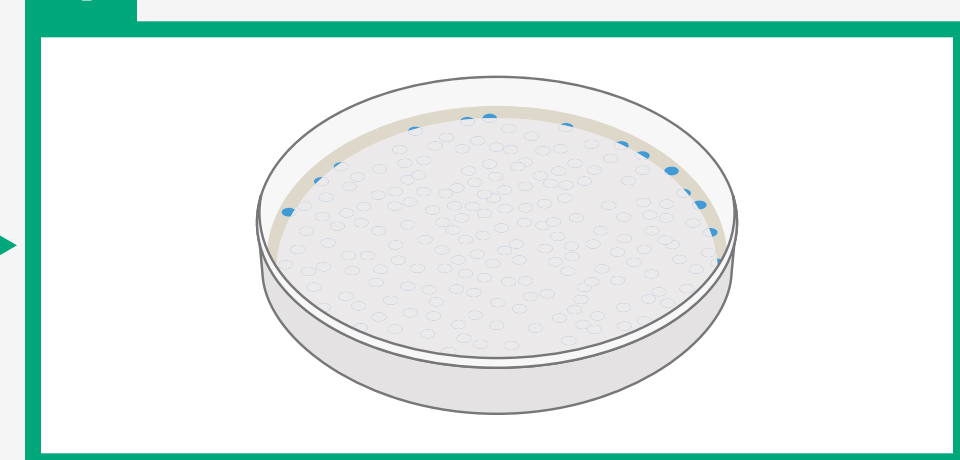
2 Combine vector and insert with homologous ends



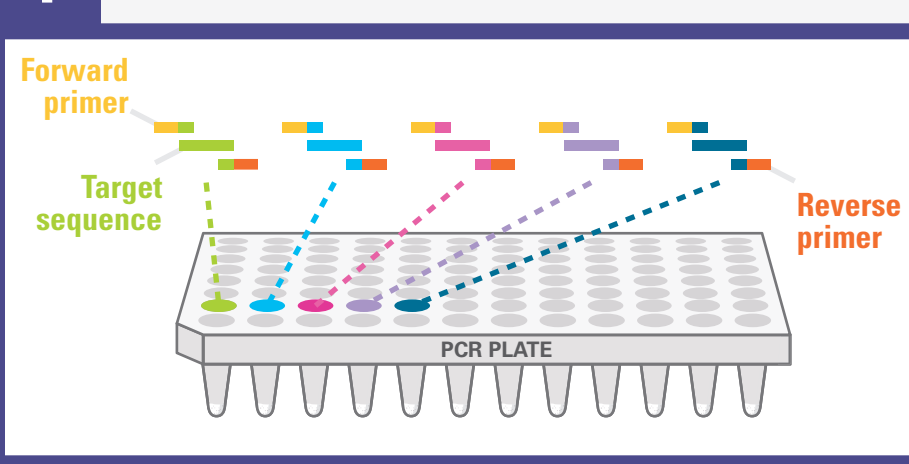
3 Transform into Stellar™ Competent Cells



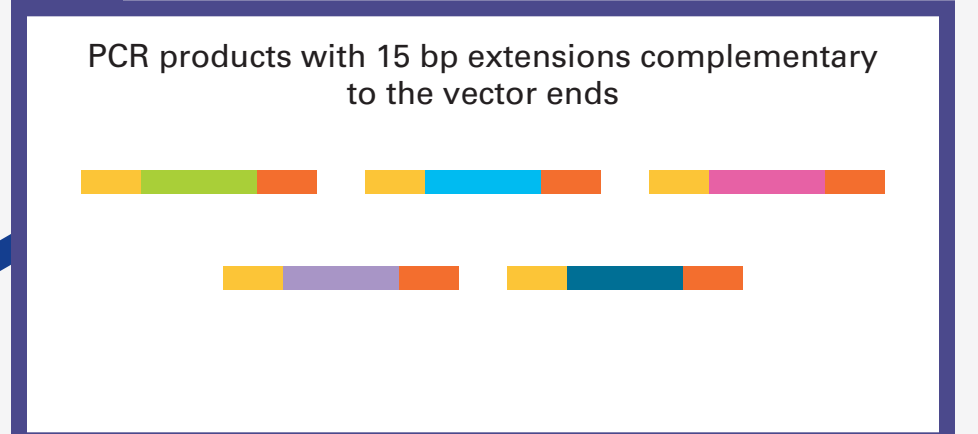
4 Plate transformed cells on selective media overnight



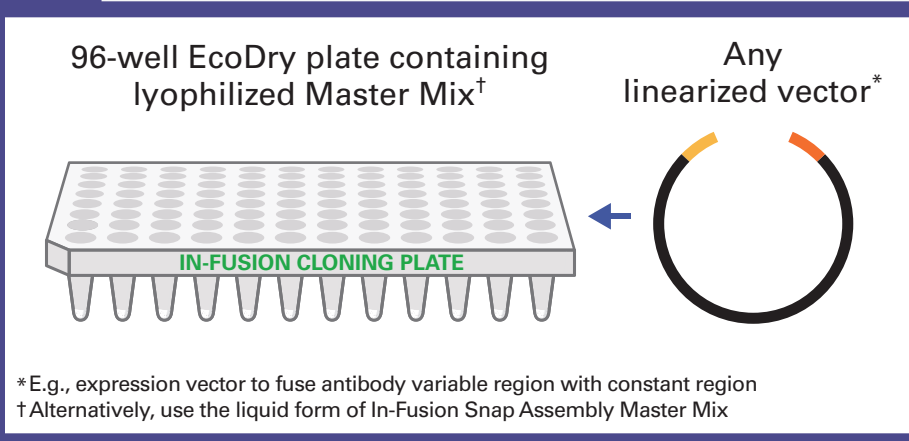
1 Amplify genes of interest with PCR



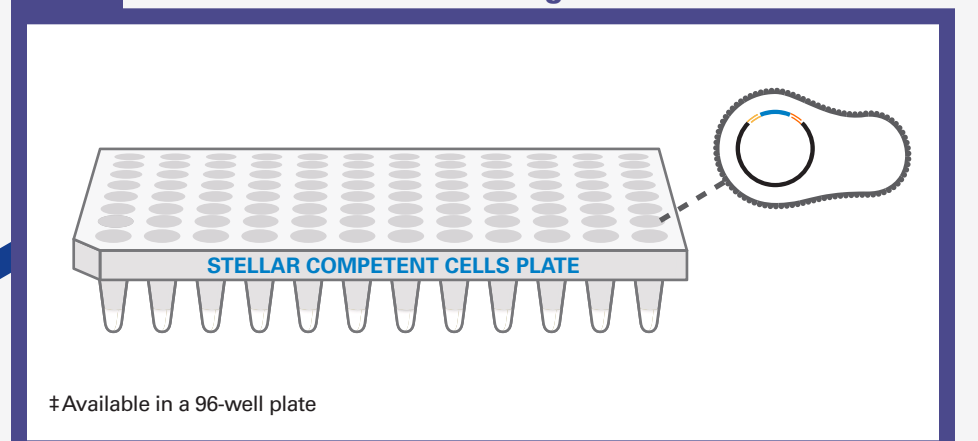
2 Treat PCR products with Cloning Enhancer or perform 96-well PCR cleanup



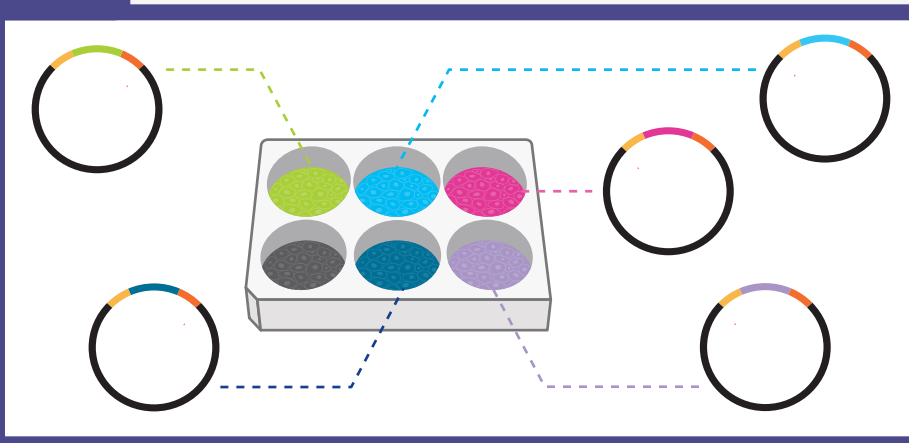
3 Combine PCR product and linearized vector to perform In-Fusion Cloning reaction



4 Transform Stellar Competent Cells[‡] directly with the In-Fusion Cloning reactions



5 Plate transformed cells on selective medium in 6-well plates

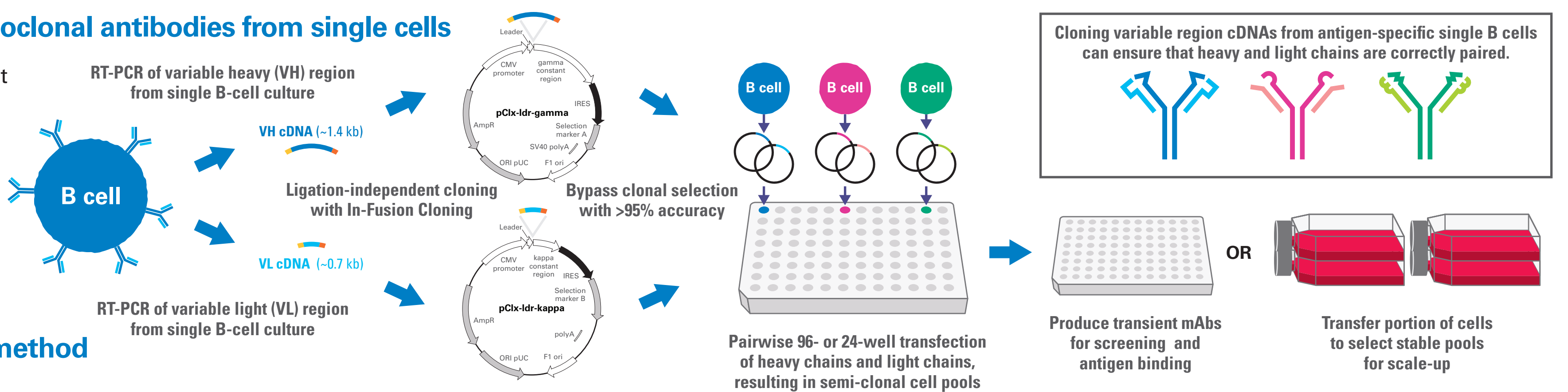


In-Fusion Cloning is fast, easy, and directional. Cloning accuracy is >95%!

Example application: rapid, high-throughput cloning for antibody discovery

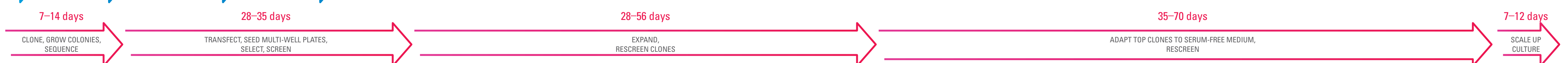
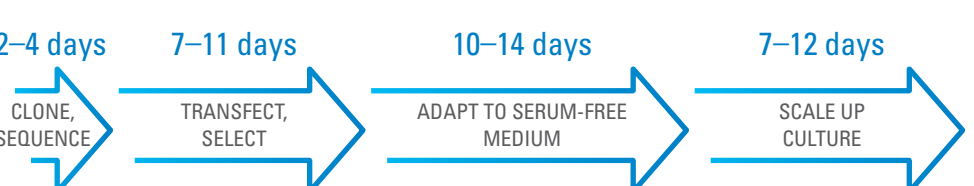
Cloning antigen-specific monoclonal antibodies from single cells

- Highly efficient, ligation-independent In-Fusion Cloning can eliminate the need for clonal selection steps
- Bicistronic plasmids can be used to generate stable, semi-clonal cell pools
- Single round of screening identifies highest affinity mAbs



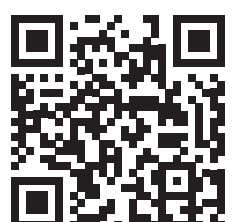
Time savings in semi-clonal method

Semi-clonal method: 4-6 weeks



Multi-clonal method: 4-6 months

Reference: Spidel, J.L. et al. Rapid high-throughput cloning and stable expression of antibodies in HEK293 cells. *Journal of Immunological Methods* 439 (2016).



Visit takarabio.com/in-fusion-HTP to learn more

that's
GOOD
science!