

Site-Specific Integration of Transgenes In Mammalian Cells and Animals

Reference:

Bosiljka Tasic, Simon Hippenmeyer, Charlene Wang, Matthew Gamboa, Hui Zong, Yanru Chen-Tsai, and Liqun Luo

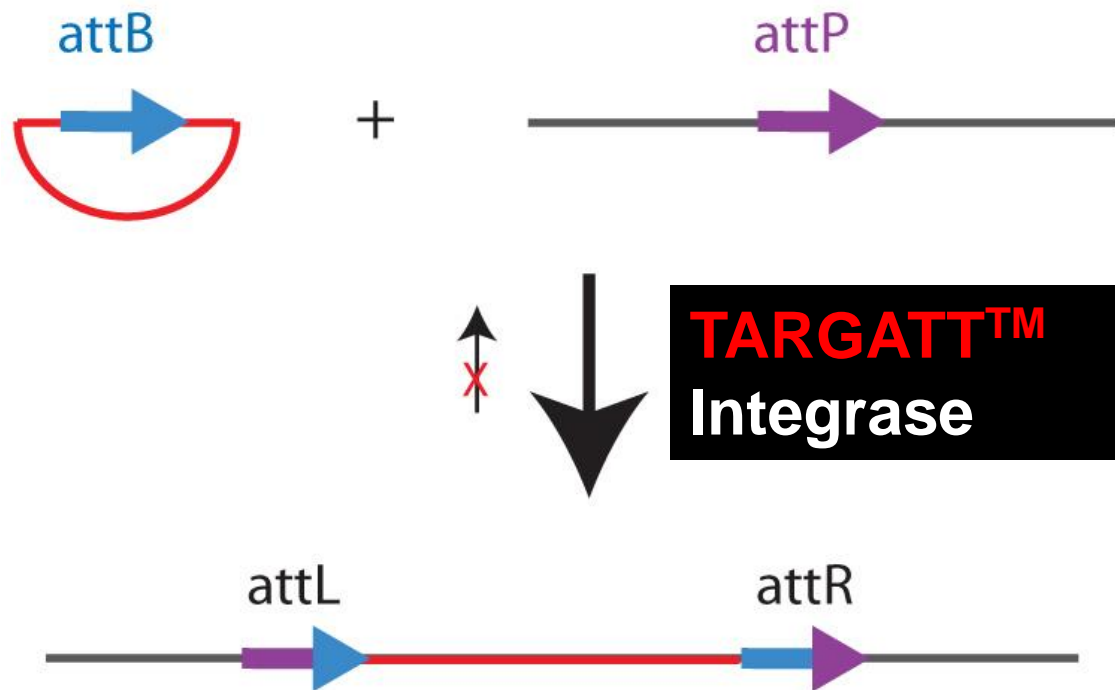
Site-specific integrase-mediated transgenesis in mice via pronuclear injection

PNAS 2011 : 1019507108v1-201019507.

Applied StemCell, Inc.

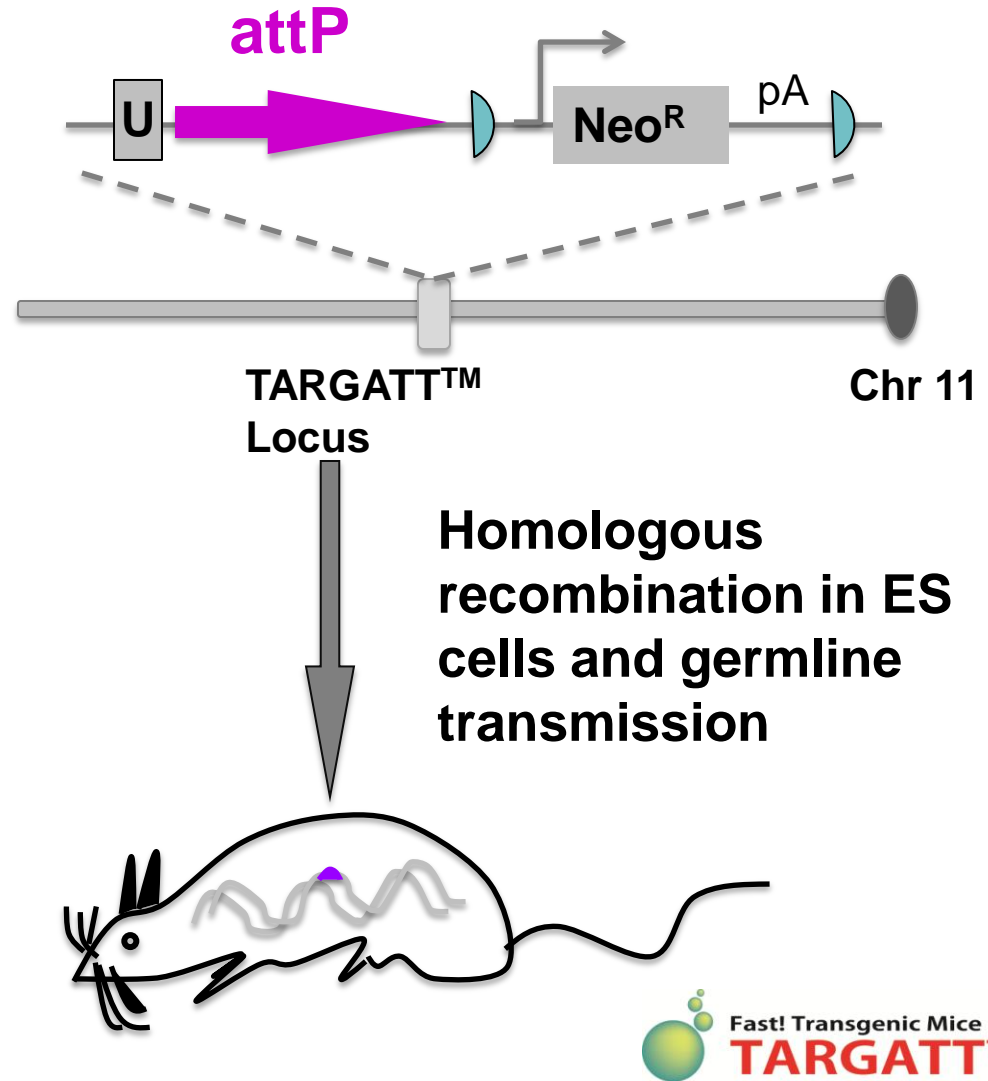


TARGATT™ Integrase Catalyzes Irreversible and Site-specific Gene Integration



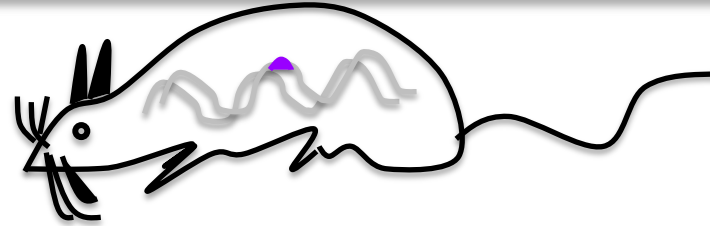
TARGATT™ attP Knock-in Mouse

Mouse strains containing attP sites were generated and successfully tested for site-specific integration at the attP sites:

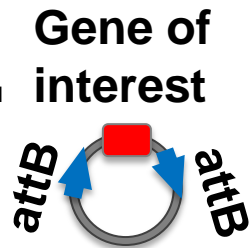


Generating Site-specific Transgenic Mice via Pronuclear Injection

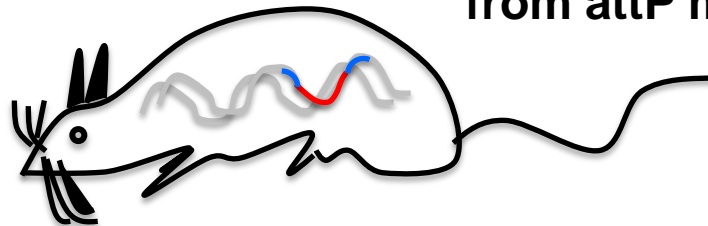
Using **TARGATT™** Integrase to insert single copy transgenes at our proprietary locus in the mouse genome



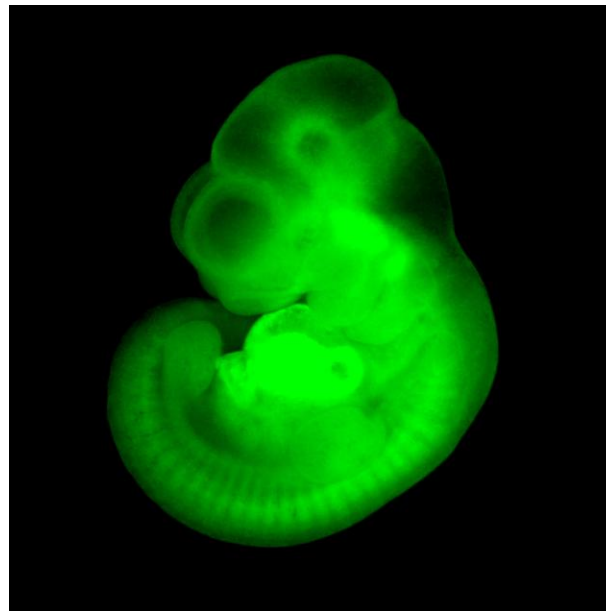
TARGATT™
Integrase



Pronuclear injection in single cell embryos from attP mice



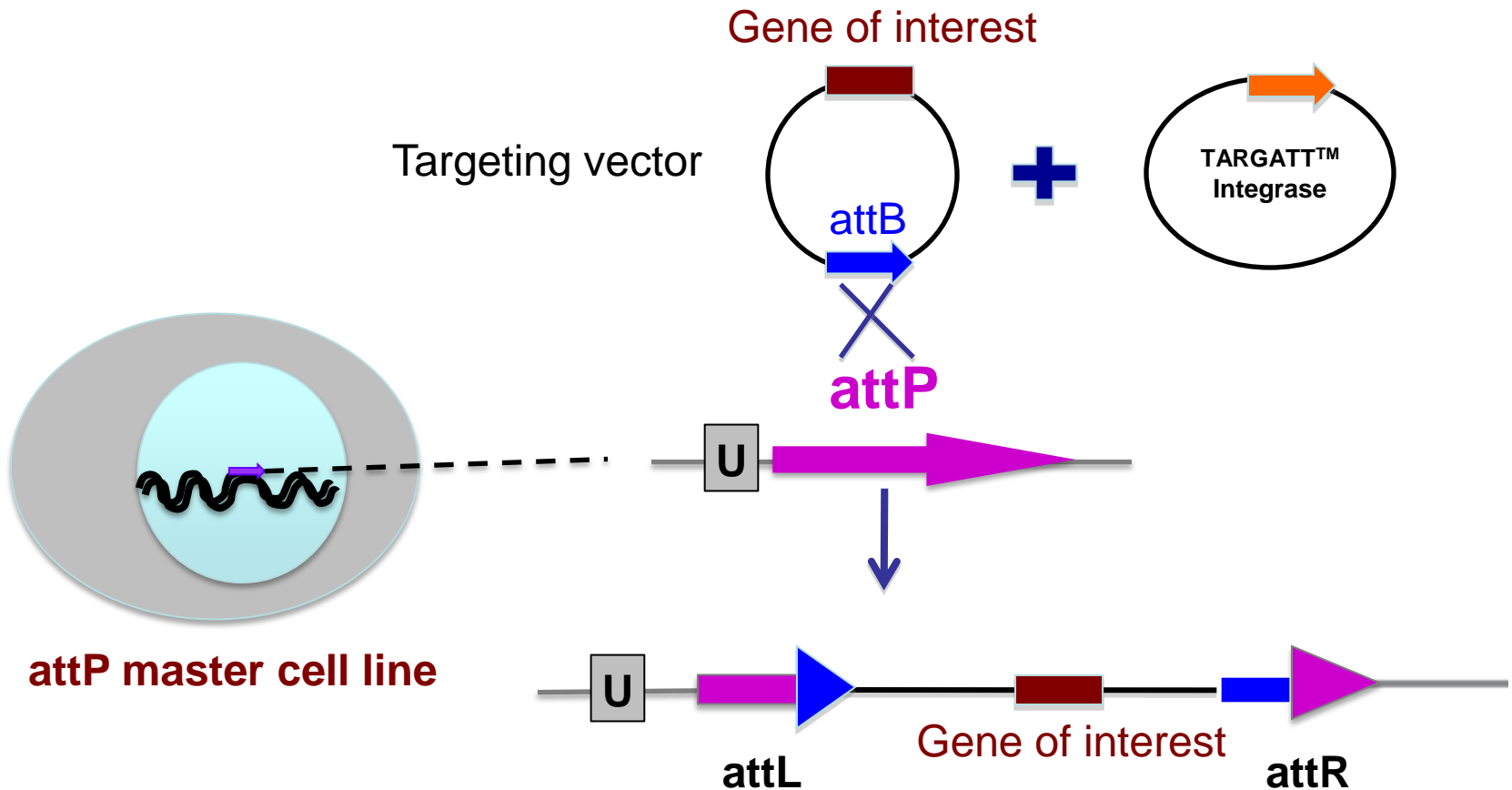
In Vivo Test



Tasic B, Hippenmeyer S, Wang C, Gamboa M, Zong H, Chen-Tsai Y, Luo L. Site-specific integrase-mediated transgenesis in mice via pronuclear injection. **Proc Natl Acad Sci U S A.** 2011 Apr 4.



Application of TARGATT™ Technology in Cell Lines



Advantages of TARGATT™

- **Site-directed DNA integration in a transcriptionally active locus, ensuring robust gene expression and eliminating unpredictable phenotypes caused by random integration.**
- **Stable integrant cell lines with a high level of gene expression.**
- **Savings in time (months) and costs.**

Contact:

-Custom Service

-Embryo and Kits

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Applied StemCell, Inc.

