



**University of Dundee**

## **Generation of a transgenic ORFeome library in Drosophila**

Bischof, Johannes; Sheils, Emma M.; Bjorklund, Mikael; Basler, Konrad

*Published in:*  
Nature Protocols

*DOI:*  
[10.1038/nprot.2014.105](https://doi.org/10.1038/nprot.2014.105)

*Publication date:*  
2014

*Document Version*  
Peer reviewed version

[Link to publication in Discovery Research Portal](#)

### *Citation for published version (APA):*

Bischof, J., Sheils, E. M., Bjorklund, M., & Basler, K. (2014). Generation of a transgenic ORFeome library in Drosophila. *Nature Protocols*, 9(7), 1607-1620. <https://doi.org/10.1038/nprot.2014.105>

### **General rights**

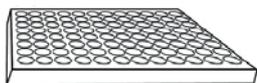
Copyright and moral rights for the publications made accessible in Discovery Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from Discovery Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain.
- You may freely distribute the URL identifying the publication in the public portal.

### **Take down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Vector Preparation  
&  
Gateway ORF  
Cloning



Barcode the *pGW-HA.attB* vector

Clone and sequence ORFs  
into *pDONR221*

Transfer ORFs into  
*pGW-HA.attB*

Determine barcodes of  
*pGW-HA.attB* plasmids

Injections  
&  
Generating  
ORF Strains



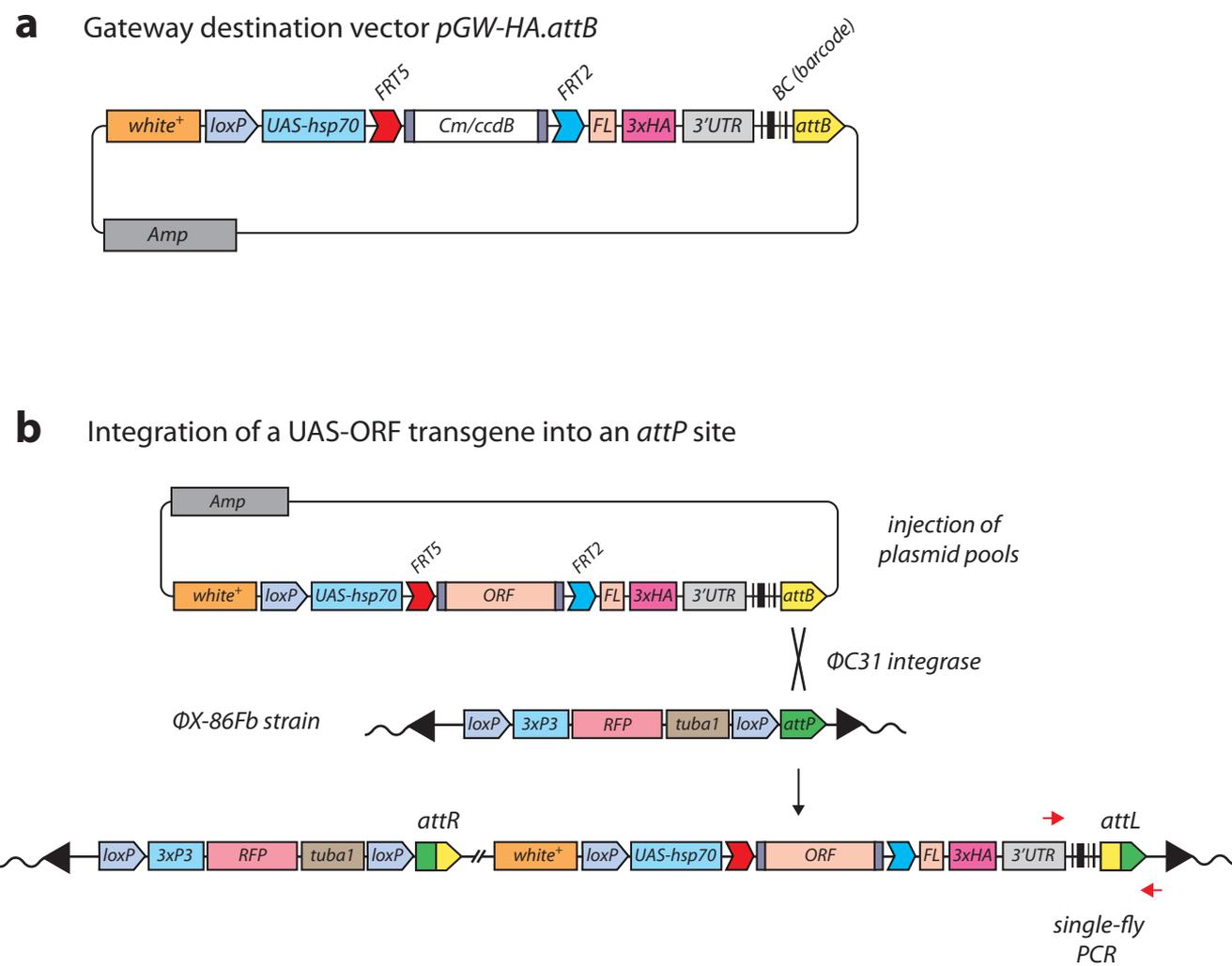
Inject pooled plasmids

Establish fly strains

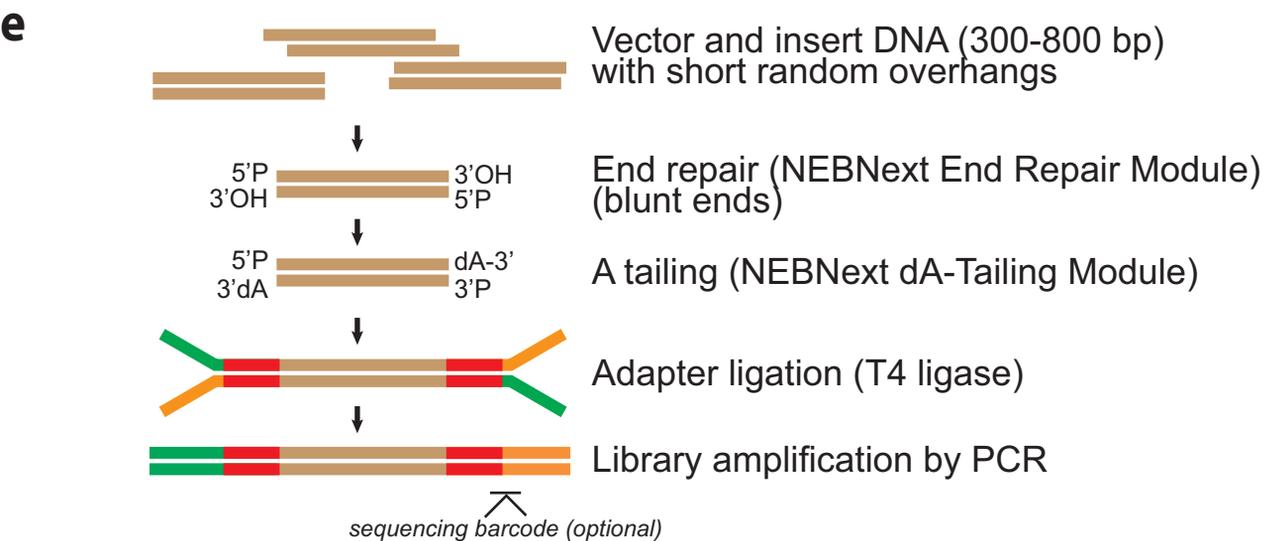
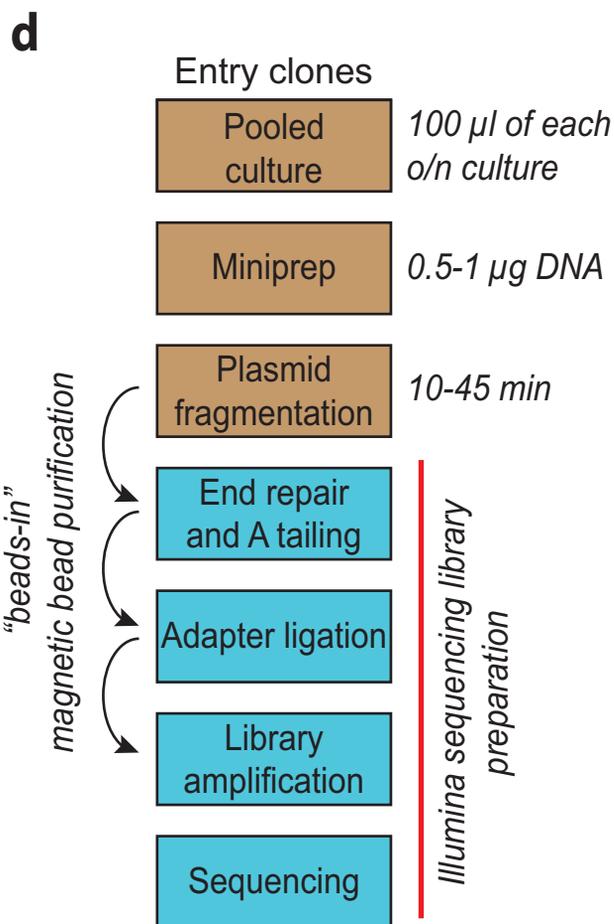
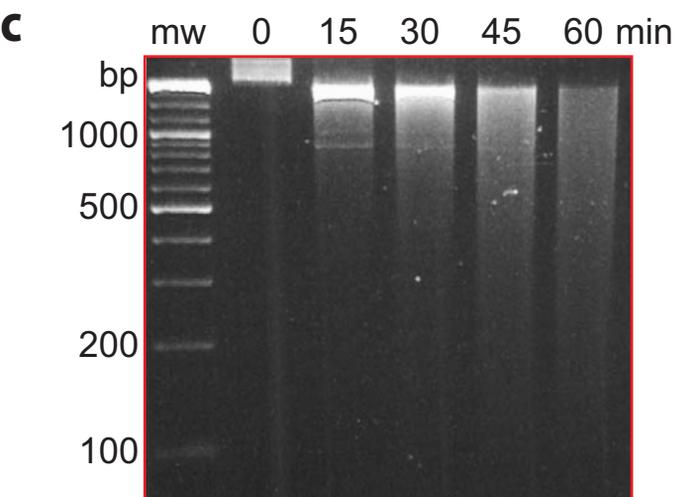
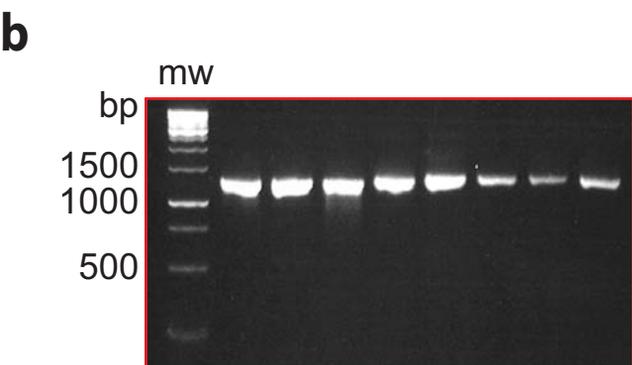
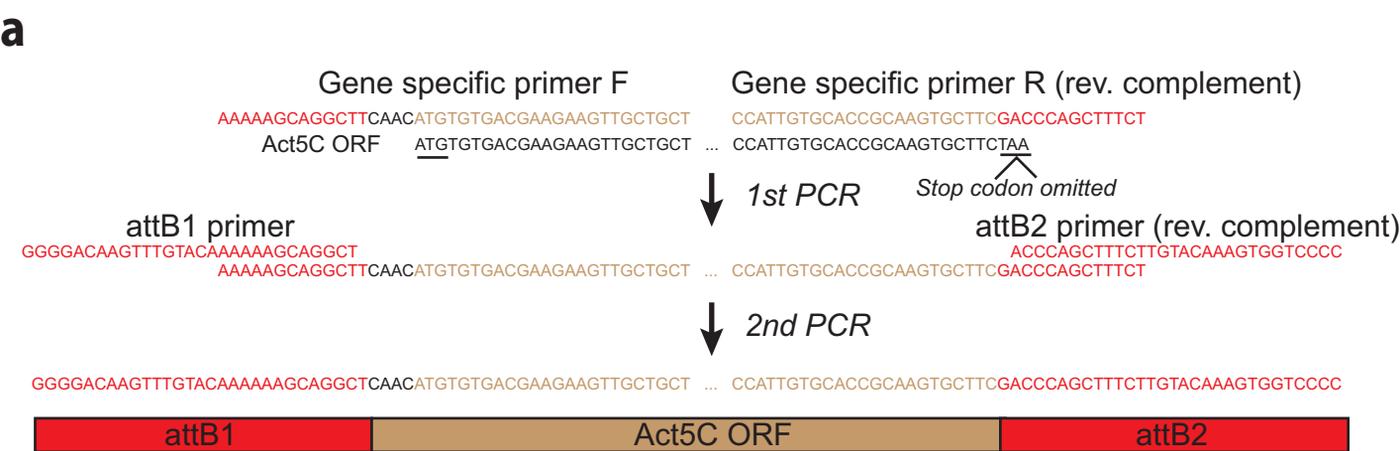
Identify strains via barcode  
determination

Confirm ORFs by single-fly PCR

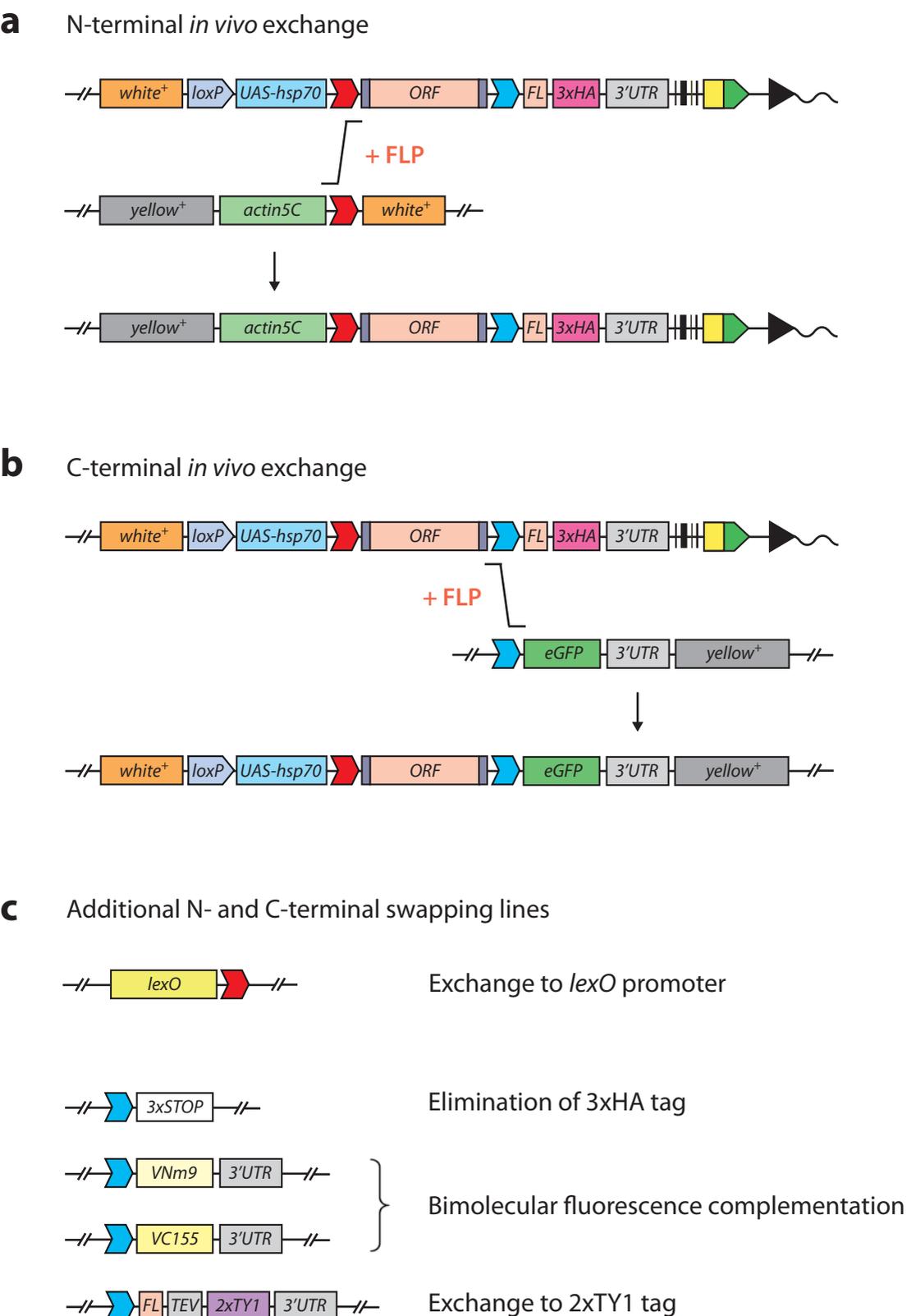
**Figure 1**



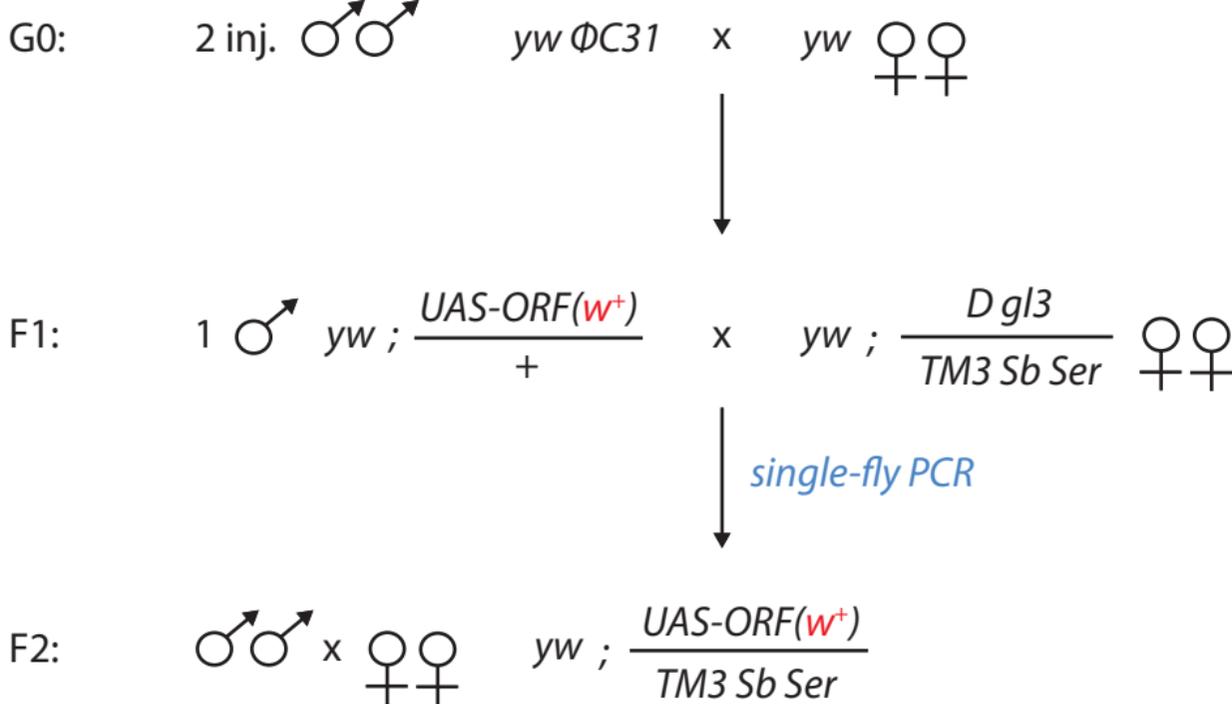
**Figure 2**



**Figure 3**



**Figure 4**



**Figure 5**