

Stocks for doxycycline-dependent expression

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Bieschke ET, Wheeler JC, Tower J. Doxycycline-induced transgene expression during *Drosophila* development and aging. *Mol Gen Genet*. 1998 Jun;258(6):571-9.

[PUBMED](http://www.ncbi.nlm.nih.gov/pubmed?term=E.%20T.%20Bieschke%20C3%A1%20J.%20C.%20Wheeler%20C3%A1%20J.%20Tower%20Doxycycline-induced%20transgene) <http://www.ncbi.nlm.nih.gov/pubmed?term=E.%20T.%20Bieschke%20C3%A1%20J.%20C.%20Wheeler%20C3%A1%20J.%20Tower%20Doxycycline-induced%20transgene>

Landis G, Bhole D, Lu L, Tower J. High-frequency generation of conditional mutations affecting *Drosophila melanogaster* development and life span. *Genetics*. 2001 Jul;158(3):1167-76.

[PUBMED](http://www.ncbi.nlm.nih.gov/pubmed/11454765) <http://www.ncbi.nlm.nih.gov/pubmed/11454765>

Breakpoints coordinates are indicated according to FlyBase released September 3rd, 2010 (FB2010_07)

Description	Genotype	Break point	ID	Wb
Expresses lacZ under tetO control	w[+] 7T40(X)N1/Y*	1	me2	Wb-
Expresses rtTA under the control of constitutive Actin5C promoter	W[1118]; rtTA(3)E2G/TM3 Sb**	3	me4	---
Expresses rtTA under the control of constitutive Actin5C promoter	w[1118];rtTA(2)C1**	2	me5	---
Expresses rtTA under the control of constitutive Actin5C promoter	w[1118];rtTA(2)E1**	2	---	---
Line containing P-element construct Ponce de Leon (<i>PdL</i>) to create conditional (DOX- dependent) mutations	w[-] P{w[+]} recipient strain y ac w1118	X:2195148	me6	---
Tet-on dsRed	---	2	---	---

*7T40 - reporter construct consisting of seven tetO sequences, the hsp70 core promoter, 5' untranslated region and translational initiation sequence, the *E. coli* lacZ coding region and the hsp70 poly(A) signal sequence.

** rtTA - the constitutive Actin5C promoter and 5' untranslated region are fused to the coding sequences for the rtTA (reverse tetracycline transactivator), which is a fusion of the rtR (reverse tetracycline repressor) and the transcriptional activation domain of herpes virus protein VP16. The poly(A) signal sequences are from SV40.