# GENETICS

Supporting Information

http://www.genetics.org/cgi/content/full/genetics.109.103630/DC1

## A *Drosophila* Resource of Transgenic RNAi Lines for Neurogenetics

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Male UAS-dcr2; engrailed-GAL4 wings



UAS-EGFR.JF01083 VALIUM1	UAS-DINR.JF01183 VALIUM1	UAS-ketel.JF01755 VALIUM1
UAS-phl.JF01185 VALIUM1	UAS-PTEN.JF01987 VALIUM10	UAS-cadmus.JF01428 VALIUM1
UAS-Dsor.JF01697 VALIUM1	UAS-PTP99A.JF01858 VALIUM10	UAS-embargoed.JF01311 VALIUM1

Male ms1096-GAL4; UAS-dcr2 wings



Male UAS-dcr2; C96-GAL4 wings

Figure S1.—Examples of wing phenotypes generated using VALIUM1 and VALIUM10.

#### The "Toolbox kit" represents a set of lines used in this study to either generate the transgenic RNAi lines or test their efficacy

TRiP Toolbox Stocks	Genotypes	Locations
Injection stocks		
y sc v nanos-integrase; attP40	$y[1] \ sc[1] \ v[1] \ P\{y[+t7.7]=nos-phiC31 \setminus int.NLS\}X; P\{y[+t7.7]=CaryP\}attP40$	X; II, 25C7
y v nanos-integrase; attP40	y[1] v[1] P{y[+t7.7]=nos-phiC31\int.NLS}X; P{y[+t7.7]=CaryP}attP40	X; II, 25C7
y sc v nanos-integrase; attP2	$y[1] \ sc[1] \ v[1] \ P\{y[+t7.7]=nos-phiC31 \ int.NLS\}X; P\{y[+t7.7]=CaryP\}attP2$	
Gal4, UAS dcr2 stocks		
w, elav-Gal4; UAS-dcr2	$w[1118], P\{w[+mC]=GAL4-elaw.L\}; P\{w[+mC]=UAS-Dcr-2.D\}$	X; II
w, ms1096-Gal4; UAS-dcr2	$w[1118], P\{w[+mW.hs]=GawB\}Bx[MS1096]; P\{w[+mC]=UAS-Dcr-2.D\}2$	X; II
w, UAS-dcr2; twist-Gal4	$P\{w[+mC]=UAS-Dcr-2.D\}1, w[1118]; P\{w[+mC]=GAL4-twi.2xPE\}1$	X; II
w, UAS-dcr2; actin-Gal4/CyO	$P\{w[+mC]=UAS-Dcr-2.D\}1, w[1118]; P\{w[+mC]=Act5C-GAL4\}25FO1 \land CyO, Cy[1]$	X; II
w, UAS-dcr2; nanos-Gal4	$P\{w[+mC]=UAS-Dcr-2.D\}1, w[1118]; P\{w[+mC]=GAL4-nos.NGT\}40$	
w, UAS-dcr2; engrailed-Gal4, UAS-GFP	$P\{w[+mC] = UAS - Dcr - 2.D\}1, w[1118]; P\{w[+mW.hs] = en2.4 - GAL4\}e16E, P\{w[+mC] = UAS - 2xEGFP\}AH2$	X; II
w, UAS-dcr2; blistered-Gal4/CyO	$P\{w[+mC]=UAS-Dcr-2.D\}1, w[1118]; P\{w[+mC\}=bs-GAL4.Term\}GI$	X; II
w, UAS-dcr2; nubbin-Gal4	$P\{w[+mC]=UAS-Dcr-2.D\}1, w[1118]; P\{w[+mW.hs]=GawB\}nubbin-AC-62$	X; II
w, UAS-dcr2; spalt-Gal4	$P\{w[+mC]=UAS-Dcr-2.D\}1, w[1118]; P\{w[+mW.hs]=GawB\}salm[LP39]$	X; II
w, UAS-dcr2; Dmef2-Gal4	$P\{w[+mC]=UAS-Dcr-2.D\}1, w[1118]; P\{w[+mC]=GAL4-Mef2.R\}R1$	X; II
w, UAS-dcr2; C96-Gal4	$P\{w[+mC]=UAS-Dcr-2.D\}1, w[1118]; P\{w[+mW.hs]=GawB\}bbg[C96]$	X; III
w, UAS-dcr2; pannier-Gal4/TM3, Ser	$P\{w[+mC]=UAS-Dcr-2.D\}1, w[1118]; P\{w[+mW.hs]=GawB\}pnr[MD237] /TM3, Ser[1]$	X; III
Mapping stocks		
y sc v; Gla Bc/CyO	y[1] sc[1] v[1]; wg[Gla-1], Bc[1] / CyO, Cy[1]	X; II
y v; Sco/CyO	y[1] v[1]; noc[Sco] / CyO, Cy[1]	X; II

y v; TM3, Sb/TM6, Tb	y[1] v[1]; TM3, Sb[1] / TM6, Tb[1]	X; III
y v; Ly/TM3, Sb	y[1] v[1]; sens[Ly-1] / TM3, Sb[1]	X; III

y v; Sb/TM3, Ser	$y[1] v[1]; Sb[1] \neq TM3, Ser[1]$	X; III
y v; Dr, e/ TM3, Sb	y[1] v[1]; Dr[1] e[1] / TM3, Sb[1]	X; III
y sc v; Sb/TM3, Sb	y[1] sc[1] v[1]; Sb[1] / TM3, Sb[1]	X; III

#### Information on the various lines used in this study

Table S2 is available for download as an Excel file at http://www.genetics.org/cgi/content/full/genetics.109.103630/DC1.

#### List of constructs and transgenic RNAi lines generated as part of this study

Table S2 is available for download as an Excel file at http://www.genetics.org/cgi/content/full/genetics.109.103630/DC1. As lines are being continuously generated, check http://www.flyrnai.org

for an up to date list.

#### Lethality of hairpins (HP) associated with ubiquitous drivers

		actin5C-Gal4/CyC	)	actin5C-Gal4/TM6B, Tb	
		21°C	25°C	21°C	25°C
CG#/gene name	TR#	act5C/+; HP/+	act5C/+; HP/+	act5C/HP	act5C/HP
CG15860/pain	TR00015A.1				
CG15860/pain	TR00016A.1				
CG11020/nompc	TR00018A.1				
CG7245/eys	TR00021A.1				
CG17759/G <b>a</b> 49B	TR00593A.1	PL	PL	PL	PL
CG4574/Plc21C	TR00595A.1				
CG6518/inaC	TR00601A.1	L	PL	PL	PL
CG5962/Arr2	TR00603A.1				
CG18085/sev	TR00604A.1				
CG1744/chp	TR00610A.1				
CG10609/Or83b	TR00615A.1				
CG10609/Or83b	TR00616A.1	PL	L	PL	PL
CG13984/Gr21a	TR00431A.1	PL	PL		
CG13948/Gr21a	TR00619A.1				
CG2647/per	TR00624A.1				
CG5996/trp	TR00660A.1	PL	L		
CG5996/trp	TR00661A.1				
CG7245/eys	TR00022A.1				

Three different Gal4 lines (*act5C-Gal4/CyO*; *act5C-Gal4/TM6B*, *Tb*; and *tub-Gal4/TM6B*, *Tb*) were used. Crosses where significant lethality (more than 70%) of the *Gal4; UAS-RNAi* combination, when compared to the sibling combination *Balancer/UAS-RNAi*, was observed, are indicated as "L". "PL" indicates instances where lethality was only significant in males, reflecting the observation that RNAi phenotypes are commonly stronger in males (NI *et al.* 2008).