

Figure	Species	Strains
Figs. 1a-f, 2, 3, 6 Extended Data Figs. 1-3	<i>D. santomea</i>	STO4
Fig. 1g	<i>D. santomea</i>	18CAR05-10
Fig. 1g	<i>D. santomea</i>	18TRNE01-05
Fig. 1g	<i>D. santomea</i>	Q1-02
Figs. 2a, 6	<i>D. yakuba</i>	14021-0261.02
Fig. 1g	<i>D. yakuba</i>	3-41
Fig. 1g	<i>D. yakuba</i>	4-72
Fig. 1g	<i>D. yakuba</i>	1-03
Fig. 1g	<i>D. yakuba</i>	2-0F11
Figs. 1g, 2a, 5h,i, 6	<i>D.melanogaster</i>	Canton S
Figs. 1g, 6	<i>D. simulans</i>	sim5
Figs. 1g, 6	<i>D. teissieri</i>	14021-0257.01
Figs. 1g, 6	<i>D. erecta</i>	14021-0224.01
Fig. 4a-i	<i>D. santomea</i>	sanw; ; Otd-Flp (2253), <i>dsx</i> -GAL4/FRT-stop-FRT-CsChrimson:mVenus (2253)
Fig. 4a-i	<i>D.melanogaster</i>	w1118; Otd-Flp (attP40)/+; <i>dsx</i> -GAL4/FRT-stop-FRT-CsChrimson:mVenus (vk5)
Extended Data Fig. 4a,b	<i>D. yakuba</i>	yakw; FRT-stop-FRT-CsChrimson:mVenus (2180)/+; <i>dsx</i> -GAL4/Otd-Flp (2285)
Fig. 4a-i	<i>D. yakuba</i>	yakw; FRT-stop-FRT-CsChrimson:mVenus (2180)/+; <i>dsx</i> -GAL4/Otd-Flp (2285)
Extended Data Fig. 4c,d	<i>D.melanogaster</i>	vpoDN-SS2: 20xUAS-CsChrimson-mVenus (attP18)/w1118; 45670-AD(p40)/Cyo; 52F12-DBD(p2)=ss50795
Fig. 5a-h	<i>D.melanogaster</i>	vpoDN-SS2: 20xUAS-CsChrimson-mVenus (attP18)/w1118; 45670-AD(p40)/Cyo; 52F12-DBD(p2)=ss50795
Extended Data Fig. 5a-j	<i>D.melanogaster</i>	vpoDN-SS1: 20xUAS-CsChrimson-mVenus (attP18)/w1118; 31D07-AD(p40)/Cyo; 52F12-DBD(p2)=ss50200
Extended Data Fig. 5a,b	<i>D.melanogaster</i>	vpoDN-SS1: 20xUAS-CsChrimson-mVenus (attP18)/w1118; 31D07-AD(p40)/Cyo; 52F12-DBD(p2)=ss50200
Extended Data fig. 5a,b	<i>D.melanogaster</i>	vpoDN-SS3: 20xUAS-CsChrimson-mVenus (attP18)/w1118;45670-AD(p40)/Cyo;10A09-DBD(p2)=ss53451
Fig. 6	<i>D. eugracilis</i>	14026-0451.02
Fig. 6	<i>D. lucipennis</i>	unknown
Fig. 6	<i>D. biarmipes</i>	G#224
Fig. 6	<i>D. takahashii</i>	unknown
Fig. 6	<i>D. elegans</i>	unknown
Fig. 6	<i>D. gunungola</i>	sk
Fig. 6	<i>D. kikkawai</i>	14028-05161.14
Fig. 6	<i>D. parabiptinata</i>	VT04-70 Vietnam
Fig. 6	<i>D. malerkotliana</i>	C1Z19-L9
Fig. 6	<i>D. ananassae</i>	14024-0371.13
Fig. 6	<i>D. biptinata</i>	THT 08 Taiwan
Fig. 6	<i>D. pseudoananassae</i>	R186 Puerto Princessa
Fig. 6	<i>D. pseudoobscura</i>	14022-0121.94
Fig. 6	<i>D. willistoni</i>	14030-0814.24
Fig. 6	<i>D. ezoana</i>	15010-0971.00
Fig. 6	<i>D. mojaviensis wrightleyi</i>	15081-1352.22
Fig. 6	<i>D. mercatorum</i>	unknown