

Table S1. The GEO accession numbers of the small RNA libraries used in this study.

GEO accession	Species	Tissues/Development stages	Platform	Sources
GSM180328	<i>Drosophila melanogaster</i>	adult heads (female heads, male heads)	454	Ruby <i>et al.</i> 2007
GSM180329	<i>Drosophila melanogaster</i>	adult bodies (female bodies, male bodies)	454	Ruby <i>et al.</i> 2007
GSM180330	<i>Drosophila melanogaster</i>	very early embryo (0-1)	454	Ruby <i>et al.</i> 2007
GSM180331	<i>Drosophila melanogaster</i>	early embryo (2-6)	454	Ruby <i>et al.</i> 2007
GSM180332	<i>Drosophila melanogaster</i>	mid embryo (6-10)	454	Ruby <i>et al.</i> 2007
GSM180333	<i>Drosophila melanogaster</i>	late embryo (12-24)	454	Ruby <i>et al.</i> 2007
GSM180334	<i>Drosophila melanogaster</i>	larvae: 1st instar and 3rd instars	454	Ruby <i>et al.</i> 2007
GSM180335	<i>Drosophila melanogaster</i>	larval brain/gonads/imaginal discs	454	Ruby <i>et al.</i> 2007
GSM180336	<i>Drosophila melanogaster</i>	pupae: 0-1 day, 0-2 day, 2-4 day	454	Ruby <i>et al.</i> 2007
GSM180337	<i>Drosophila melanogaster</i>	tissue culture cells (S2 only)	454	Ruby <i>et al.</i> 2007
GSM246084	<i>Drosophila melanogaster</i>	adult male heads	454	Lu <i>et al.</i> 2008
GSM280082	<i>Drosophila melanogaster</i>	adult ovaries from 2-4 day old flies	solexa	Czech <i>et al.</i> 2008
GSM280085	<i>Drosophila melanogaster</i>	adult testes from 2-4 day old flies	solexa	Czech <i>et al.</i> 2008
GSM280088	<i>Drosophila melanogaster</i>	S2cell (AGO1IP)	solexa	Czech <i>et al.</i> 2008
GSM385744	<i>Drosophila melanogaster</i>	OSS cell replicates 1	solexa	Lau <i>et al.</i> 2009
GSM385748	<i>Drosophila melanogaster</i>	OSS cell replicates 2	solexa	Lau <i>et al.</i> 2009
GSM385821	<i>Drosophila melanogaster</i>	OSS cell replicates 3	solexa	Lau <i>et al.</i> 2009
GSM385822	<i>Drosophila melanogaster</i>	OSS cell replicates 4	solexa	Lau <i>et al.</i> 2009
GSM275691	<i>Drosophila melanogaster</i>	larval brain/gonads/imaginal discs	solexa	Chung <i>et al.</i> 2008
GSM286613	<i>Drosophila melanogaster</i>	0-1hr embryo replicates 2	solexa	Chung <i>et al.</i> 2008
GSM286604	<i>Drosophila melanogaster</i>	0-1hr embryo replicates 1	solexa	Chung <i>et al.</i> 2008
GSM286605	<i>Drosophila melanogaster</i>	2-6hr embryo replicates 1	solexa	Chung <i>et al.</i> 2008
GSM286606	<i>Drosophila melanogaster</i>	2-6hr embryo replicates 2	solexa	Chung <i>et al.</i> 2008
GSM286607	<i>Drosophila melanogaster</i>	6-10hr embryo replicates 1	solexa	Chung <i>et al.</i> 2008
GSM286611	<i>Drosophila melanogaster</i>	6-10hr embryo replicates 2	solexa	Chung <i>et al.</i> 2008
GSM286602	<i>Drosophila melanogaster</i>	adult male body	solexa	Chung <i>et al.</i> 2008
GSM286603	<i>Drosophila melanogaster</i>	adult female body	solexa	Chung <i>et al.</i> 2008
GSM240749	<i>Drosophila melanogaster</i>	adult female head	solexa	Chung <i>et al.</i> 2008
GSM286601	<i>Drosophila melanogaster</i>	adult male head	solexa	Chung <i>et al.</i> 2008
GSM364902	<i>Drosophila melanogaster</i>	12-24hr embryo	solexa	modENCODE
GSM322245	<i>Drosophila melanogaster</i>	3rd instar larvae replicates 2	solexa	modENCODE
GSM322208	<i>Drosophila melanogaster</i>	3rd instar larvae replicates 1	solexa	modENCODE
GSM322219	<i>Drosophila melanogaster</i>	2-4 day old pupae replicates 1	solexa	modENCODE
GSM322338	<i>Drosophila melanogaster</i>	2-4 day old pupae replicates 2	solexa	modENCODE
GSM399105	<i>Drosophila melanogaster</i>	larval brain/gonads/imaginal discs	solexa	modENCODE
GSM360256	<i>Drosophila melanogaster</i>	1st instar larvae replicates 1	solexa	modENCODE
GSM360257	<i>Drosophila melanogaster</i>	1st instar larvae replicates 2	solexa	modENCODE

GSM360260	<i>Drosophila melanogaster</i>	0-1 day old pupae	solexa	modENCODE
GSM360262	<i>Drosophila melanogaster</i>	0-2 day old pupae	solexa	modENCODE
GSM322533	<i>Drosophila melanogaster</i>	adult female head	solexa	modENCODE
GSM322543	<i>Drosophila melanogaster</i>	adult male head	solexa	modENCODE
GSM399106	<i>Drosophila melanogaster</i>	adult female body	solexa	modENCODE
GSM399107	<i>Drosophila melanogaster</i>	adult male body	solexa	modENCODE
GSM1165052	<i>Drosophila simulans</i>	adult ovaries from 3-5 day old flies	solexa	this study
GSM1165053	<i>Drosophila simulans</i>	adult testes from 3-5 day old flies	solexa	this study
GSM343915	<i>Drosophila simulans</i>	pooled 0-12 and 12-24 hour embryos	solexa	Berezikov <i>et al.</i> 2010
GSM246085	<i>Drosophila simulans</i>	adult male heads	454	Lu <i>et al.</i> 2008
GSM1165054	<i>Drosophila pseudoobscura</i>	adult ovaries from 3-5 day old flies	solexa	this study
GSM1165055	<i>Drosophila pseudoobscura</i>	adult testes from 3-5 day old flies	solexa	this study
GSM1165056	<i>Drosophila pseudoobscura</i>	larval brains and imaginal discs	solexa	this study
GSM343916	<i>Drosophila pseudoobscura</i>	pooled 0-12 and 12-24 hour embryos	solexa	Berezikov <i>et al.</i> 2010
GSM444067	<i>Drosophila pseudoobscura</i>	head	solexa	Berezikov <i>et al.</i> 2010
GSM246086	<i>Drosophila pseudoobscura</i>	adult male heads	454	Lu <i>et al.</i> 2008
GSM548599	<i>Drosophila virilis</i>	testes from Argentina strain	solexa	Rozhkov <i>et al.</i> 2010
GSM548600	<i>Drosophila virilis</i>	ovaries from Argentina strain	solexa	Rozhkov <i>et al.</i> 2010
GSM548603	<i>Drosophila virilis</i>	0-2hr embryos from 160 strain	solexa	Rozhkov <i>et al.</i> 2010
GSM548610	<i>Drosophila virilis</i>	testes from 9 strain	solexa	Rozhkov <i>et al.</i> 2010
GSM548613	<i>Drosophila virilis</i>	ovaries from 9 strain	solexa	Rozhkov <i>et al.</i> 2010
GSM548623	<i>Drosophila virilis</i>	testes from 160 strain	solexa	Rozhkov <i>et al.</i> 2010
GSM548627	<i>Drosophila virilis</i>	0-2hr embryos from 9 strain	solexa	Rozhkov <i>et al.</i> 2010
GSM548628	<i>Drosophila virilis</i>	ovaries from 160 strain	solexa	Rozhkov <i>et al.</i> 2010