Table S2. Fly *k*-mers complementary to 5' extremity of known fly miRNAs. *k*-mers are grouped by sequence similarity and overlap. Each *k*-mer within a group is complementary to (*i.e.* matches) at least one miRNA, indicated by a number. If the *k*-mer is also found within the list of highest conserved worm *k*-mers, its rank is given, and * indicates that the *k*-mer is also complementary to the 5' extremity of a worm miRNA.

Rank	Worm rank	*k*-mers	Matches	complementary miRNAS	
1	7*	UGUGAUA	1-6	(1) *miR-2a*	**UAUCACAg**ccagcuuugaugagc
9	49	UGUGAUU	7	(2) *miR-2b*	**UAUCACAg**ccagcuuugaggagc
10	1*	CUGUGAU	1-7	(3) *miR-2c*	**UAUCACAg**ccagcuuugaugggc
				(4) *miR-6*	**UAUCACAg**uggcuguucuuuuu
				(5) *miR-13a*	**UAUCACAg**ccauuuugaugagu
				(6) *miR-13b*	**UAUCACAg**ccauuuugaugagu
				(7) *miR-308*	**AAUCACAg**gauuauacugugag
3	–	GCAUUUA	1	(1) *miR-277*	**UAAAUGCa**cuaucugguacgaca
6	107*	UGCAUUU			
7	–	AGUAUUA	1	(1) *miR-8*	**UAAUACUg**ucagguaaagauguc
37	132*	CAGUAUU			
13	23*	CUAGUCA	1,2	(1) *miR-279*	**UGACUAGa**uccacacucauuaa
27	5*	UCUAGUC		(2) *miR-286*	**UGACUAGa**ccgaacacucgugcu
14	19*	GUGCAAU	1-6	(1) *miR-92a*	c**AUUGCAC**uugucccggccuau
				(2) *miR-92b*	a**AUUGCAC**uagucccggccugc
				(3) *miR-310*	u**AUUGCAC**acuucccggccuuu
				(4) *miR-311*	u**AUUGCAC**auucaccggccuga
				(5) *miR-312*	u**AUUGCAC**uugagacggccuga
				(6) *miR-313*	u**AUUGCAC**uuuucacagcccga
15	12*	ACAUUCC	1	(1) *miR-1*	u**GGAAUGU**aaagaaguauggag
42	41*	CAUUCCA			
23	27*	AGCUUUA	1,2	(1) *miR-4*	a**UAAAGCU**agacaaccauuga
				(2) *miR-79*	**UAAAGCU**agauuaccaaagcau
28	13*	GUGCCUU	1	(1) *miR-124*	u**AAGGCAC**gcggugaaugccaag
116	–	UGCCUUA			
29	–	CCAAAGA	1-3	(1) *miR-9a*	**UGUUUGG**uuaucuagcuguauga
				(2) *miR-9b*	**UGUUUGG**ugauuuuagcuguaug
				(3) *miR-9c*	**UGUUUGG**uauucuagcuguaga
31	160	GUGCCAA	1	(1) *miR-263b*	c**UUGGCAC**ugggagaauucac
38	–	AGACUGA	1	(1) *miR-14*	**UCAGUCU**uuuucucucuccua
51	–	AAGACUG			
52	–	AAAAGAC	1	(1) *miR-316*	u**GUCUUUU**uccgcuuacuggcg
77	–	AAAGACA			
64	–	AGUACAA	1	(1) *miR-305*	a**UUGUACU**ucaucaggugcucug
435	–	GUACAAU			
89	14*	GAUCUCA	1	(1) *bantam*	**UGAGAUC**auuuugaaagcugauu
93	–	CCGUCCA	1	(1) *miR-184*	**UGGACGG**agaacugauaagggc
283	–	UCCGUCC			
98	34*	UUGCUCA	1	(1) *miR-87*	u**UGAGCAA**aauuucaggugug
118	93*	UGCUCAA			
105	–	UGAUAUUUA	1	(1) *miR-283*	**UAAAUAUCA**gcugguaauucu
110	441	ACUGCCA	1	(1) *miR-34*	**UGGCAGU**gugguuagcugguug
218	202*	CACUGCC			
126	345*	UGUGAUG	1	(1) *miR-11*	**CAUCACA**gucugaguucuugc
143	–	GUUCCUA	1,2	(1) *miR-276a*	**UAGGAACu**ucauuaccgugcucu
369	–	AGUUCCU		(2) *miR-276b*	**UAGGAACu**uaauaccgugcucu
188	–	GUCUUCC	1	(1) *miR-7*	u**GGAAGAC**uagugauuuuguugu
196	–	GUGUUCA	1	(1) *miR-317*	**UGAACAC**agcuggugguauccagu
201	–	AUACUCA	1	(1) *miR-12*	**UGAGUAU**uacaucagguacuggu
321	–	AAUACUC			
238	–	UGAGAUU	1	(1) *miR-304*	u**AAUCUCA**uuuuguaaaugugag
241	66*	UCUUGCC	1,2	(1) *miR-31a*	u**GGCAAGA**ugucggcauagcuga
				(2) *miR-31b*	u**GGCAAGA**ugucggaauagcug
289	183*	CAUGACA	1	(1) *miR-281*	**UGUCAUG**gaauugcucucuuugu
314	211*	UACCUCA	1	(1) *let-7*	**UGAGGUA**guagguuguauagu
387	–	GUUCCUU	1	(1) *miR-5*	a**AAGGAAC**gaucguugugauaug
488	–	ACGCACA	1	(1) *miR-210*	u**UGUGCGU**gugacagcggcua
490	–	CCAGUGA	1,2	(1) *miR-3*	**UCACUGG**gcaaagugugucuca
				(2) *miR-318*	**UCACUGG**gcuuuguuuaucuca
497	–	UGAUAAG	1	(1) *miR-184**	c**CUUAUCA**uucucucgccccg