Table S1. Small RNA reads that were perfectly mapped to mRNAs

Gene ID	Strand	Start	End	Total	DGCR8_WT	DGCR8_KO	Dicer_WT	Dicer_KO
BC137972.1	+	1334	1349	1032	514	366	127	25
AF413206.1	-	431	415	943	184	343	350	66
BC019506.1	-	950	934	943	184	343	350	66
BC019828.1	-	960	944	943	184	343	350	66
BC025839.1	+	1385	1401	774	215	147	328	84
AJ304796.1	+	1404	1420	774	215	147	328	84
BC019389.1	+	1578	1594	525	190	161	148	26
U53218.1	+	1623	1639	525	190	161	148	26
BC131687.1	+	1632	1648	525	190	161	148	26
BC131688.1	+	1632	1648	525	190	161	148	26
BC152550.1	+	1632	1648	525	190	161	148	26
X94616.1	+	1632	1648	525	190	161	148	26
BC017135.1	-	3606	3590	421	138	177	90	16
BC137979.1	-	286	270	400	102	145	143	10
BC145794.1	-	286	270	400	102	145	143	10
AF175282.1	-	573	558	400	185	96	94	25
BC020078.1	-	2176	2160	400	102	145	143	10
BC099952.1	-	2711	2695	400	102	145	143	10
BC089523.1	-	2740	2724	400	102	145	143	10
AF143683.1	+	1585	1600	305	109	58	112	26
BC079559.1	-	2132	2117	223	86	78	58	1
BC132167.1	-	2140	2125	223	86	78	58	1
BC132499.1	-	2140	2125	223	86	78	58	1
BC137972.1	+	1331	1349	218	65	25	81	47
BC137972.1	+	1332	1349	201	59	27	65	50
AF413206.1	-	430	415	119	37	70	11	1
BC019506.1	-	949	934	119	37	70	11	1
BC019828.1	-	959	944	119	37	70	11	1
BC025839.1	+	1386	1401	116	53	53	9	1
AJ304796.1	+	1405	1420	116	53	53	9	1
BC017135.1	-	3605	3590	113	33	71	8	1
AB002108.1	+	326	341	111	51	26	34	0
BC039768.1	+	457	472	111	51	26	34	0
AK172958.1	+	497	512	111	51	26	34	0
BC091645.1	+	499	514	111	51	26	34	0
AF022992.1	+	551	566	111	51	26	34	0
BC137972.1	+	1333	1349	110	27	21	31	31

BC137972.1	+	1332	1348	96	29	27	25	15
AF416641.1	+	392	408	76	12	30	22	12
BC040767.1	-	623	607	76	12	30	22	12
BC056487.1	-	1220	1204	76	12	30	22	12
BC078639.1	+	2703	2719	76	12	30	22	12
AF240694.1	+	292	307	70	22	20	21	7
BC013594.1	+	336	351	70	22	20	21	7
BC137972.1	+	1331	1348	63	20	8	23	12
BC063076.1	-	2850	2835	61	24	31	4	2
AB002108.1	+	325	340	54	16	16	14	8
BC039768.1	+	456	471	54	16	16	14	8
AK172958.1	+	496	511	54	16	16	14	8
BC091645.1	+	498	513	54	16	16	14	8
AF022992.1	+	550	565	54	16	16	14	8
BC063262.1	+	173	188	51	20	21	10	0
AK122231.1	+	394	409	51	20	21	10	0
BC051164.1	+	394	409	51	20	21	10	0
X14800.1	-	1087	1072	49	12	22	15	0
M16819.1	-	1102	1087	49	12	22	15	0
BC099464.1	-	1304	1289	49	12	22	15	0
AF175282.1	-	573	557	45	13	8	17	7
BC025839.1	+	1385	1400	40	12	24	4	0
AJ304796.1	+	1404	1419	40	12	24	4	0
BC115828.1	-	331	316	38	9	10	17	2
AY217035.1	-	1074	1059	38	9	10	17	2
BC137972.1	+	1333	1348	38	5	13	15	5
AY261803.1	-	1408	1393	38	9	10	17	2
AY261802.1	-	1439	1424	38	9	10	17	2
AY261801.1	-	1496	1481	38	9	10	17	2
AY261800.1	-	1514	1499	38	9	10	17	2
AK220241.1	-	1564	1549	38	9	10	17	2
AY261799.1	-	1676	1661	38	9	10	17	2
L17305.1	+	485	503	37	9	7	9	12
BC017135.1	-	3606	3591	35	13	22	0	0
BC137979.1	-	286	269	34	7	11	5	11
BC145794.1	-	286	269	34	7	11	5	11
BC020078.1	-	2176	2159	34	7	11	5	11
BC099952.1	-	2711	2694	34	7	11	5	11
BC089523.1	-	2740	2723	34	7	11	5	11
AF240694.1	+	291	307	29	12	4	10	3
BC013594.1	+	335	351	29	12	4	10	3

AK129362.1	+	127	142	27	10	7	8	2
BC058524.1	+	487	502	27	4	11	11	1
AB037370.1	+	488	503	27	4	11	11	1
BC002246.1	+	494	509	27	4	11	11	1
BC052891.1	+	499	514	27	4	11	11	1
BC085314.1	+	509	524	27	4	11	11	1
BC110679.1	+	787	802	27	4	11	11	1
X97818.1	+	1591	1606	27	10	7	8	2
BC052397.1	+	1800	1815	27	10	7	8	2
BC003207.1	-	56	39	26	9	9	7	1
BC052501.1	-	120	103	26	9	9	7	1
BC057193.1	-	140	123	26	9	9	7	1
BC059822.1	+	2610	2627	26	9	9	7	1
BC080708.1	+	765	790	25	6	6	7	6
AF413206.1	-	431	416	24	4	15	4	1
BC019506.1	-	950	935	24	4	15	4	1
BC019828.1	-	960	945	24	4	15	4	1
BC138260.1	+	1359	1374	24	8	8	7	1
BC138261.1	+	1359	1374	24	8	8	7	1
U90331.1	+	1817	1832	24	8	8	7	1
AF413206.1	-	432	415	23	3	10	7	3
BC019506.1	-	951	934	23	3	10	7	3
BC019828.1	-	961	944	23	3	10	7	3
BC056365.1	-	4563	4548	22	3	4	9	6
BC080680.1	+	5638	5653	22	5	11	4	2
BC011290.1	-	486	471	21	9	11	1	0
BC083157.1	-	520	505	21	9	11	1	0
L15353.1	-	82	62	20	9	4	6	1
X75261.1	-	83	63	20	9	4	6	1
L15352.1	-	97	77	20	9	4	6	1
BC099446.1	-	625	609	20	3	2	8	7
BC132540.1	-	632	616	20	3	2	8	7
BC132542.1	-	632	616	20	3	2	8	7
AY456960.1	-	642	626	20	3	2	8	7
BC080708.1	+	768	790	20	2	4	8	6
AF104312.1	-	1999	1984	18	10	5	2	1
D38162.1	-	4291	4276	18	10	5	2	1
BC052161.1	-	4427	4412	18	10	5	2	1
L17305.1	-	502	484	17	0	3	7	7
AF413206.1	-	431	414	16	1	5	6	4
BC019506.1	-	950	933	16	1	5	6	4

BC019828.1	-	960	943	16	1	5	6	4
BC083148.1	+	322	343	15	2	10	0	3
L17305.1	+	485	502	14	4	3	6	1
BC094679.1	-	506	491	14	9	2	1	2
BC040802.1	-	710	695	14	9	2	1	2
BC080708.1	+	767	790	14	1	5	7	1
BC031451.1	-	126	111	13	3	5	5	0
BC019389.1	+	1577	1594	13	2	6	5	0
U53218.1	+	1622	1639	13	2	6	5	0
BC131687.1	+	1631	1648	13	2	6	5	0
BC131688.1	+	1631	1648	13	2	6	5	0
BC152550.1	+	1631	1648	13	2	6	5	0
X94616.1	+	1631	1648	13	2	6	5	0
AF167404.1	-	2152	2137	13	2	3	7	1
X95521.1	-	2162	2141	13	2	5	4	2
BC099952.1	-	2440	2425	13	3	5	5	0
BC089523.1	-	2469	2454	13	3	5	5	0
AJ132271.1	-	3020	2999	13	2	5	4	2
AF547435.1	-	3290	3269	13	2	5	4	2
U58494.1	-	81	63	12	4	4	3	1
Z36947.1	-	107	89	12	4	4	3	1
AF201683.1	+	109	128	12	3	2	7	0
AF454556.1	-	112	94	12	4	4	3	1
AF454557.1	-	112	94	12	4	4	3	1
AF454558.1	-	112	94	12	4	4	3	1
AF454559.1	-	112	94	12	4	4	3	1
AF177147.1	-	150	132	12	4	4	3	1
AB086857.1	+	455	474	12	3	2	7	0
BC062919.1	+	475	494	12	3	2	7	0
BC066118.1	+	502	521	12	3	2	7	0
AK131173.1	+	569	584	12	5	3	2	2
BC068231.1	+	581	596	12	5	1	5	1
AF369933.1	-	734	718	12	5	4	2	1
AF006466.1	+	1180	1195	12	5	3	2	2
AF215666.1	+	1258	1273	12	5	3	2	2
BC020078.1	-	1876	1858	12	4	4	3	1
AJ311906.1	-	14810	14794	12	5	4	2	1
L17305.1	+	231	249	11	6	1	2	2
BC137979.1	-	286	271	11	3	7	1	0
BC145794.1	-	286	271	11	3	7	1	0
AJ010736.1	+	383	398	11	5	3	3	0

BC050924.1	+	1381	1396	11	3	5	3	0
BC020078.1	-	2176	2161	11	3	7	1	0
BC099952.1	-	2711	2696	11	3	7	1	0
AK129137.1	+	2727	2742	11	3	5	3	0
BC089523.1	-	2740	2725	11	3	7	1	0
AJ437291.1	-	19	3	10	1	2	5	2
AJ437291.1	-	22	6	10	1	2	5	2
AB086123.1	-	34	18	10	1	2	5	2
AB086123.1	-	37	21	10	1	2	5	2
AB086123.1	-	40	24	10	1	2	5	2
BC108355.1	-	58	42	10	1	2	5	2
U17331.1	+	82	102	10	3	2	5	0
U17332.1	+	82	102	10	3	2	5	0
X66473.1	-	102	86	10	1	2	5	2
BC126921.1	+	110	126	10	1	2	5	2
AF465243.1	-	116	100	10	1	2	5	2
BC081435.1	+	122	142	10	3	2	5	0
BC083329.1	+	125	145	10	3	2	5	0
BC089319.1	+	125	145	10	3	2	5	0
BC093526.1	+	125	145	10	3	2	5	0
BC083166.1	+	127	147	10	3	2	5	0
BC125320.1	-	133	117	10	1	2	5	2
BC125322.1	-	133	117	10	1	2	5	2
BC013165.1	+	136	156	10	3	2	5	0
BC037368.1	-	141	126	10	7	2	1	0
BC086937.1	+	143	163	10	3	2	5	0
AF260271.1	+	146	166	10	3	2	5	0
AF142630.3	-	168	152	10	1	2	5	2
BC006688.1	-	181	165	10	1	2	5	2
BC024852.1	-	181	165	10	1	2	5	2
BC061130.1	-	192	176	10	1	2	5	2
BC098225.1	-	206	190	10	1	2	5	2
AF023482.1	-	224	208	10	1	2	5	2
AF023483.1	-	224	208	10	1	2	5	2
BC012971.1	-	224	208	10	4	1	3	2
BC080788.1	-	232	216	10	1	2	5	2
BC064035.1	-	282	266	10	1	2	5	2
L17305.1	-	283	267	10	5	2	0	3
BC064035.1	-	285	269	10	1	2	5	2
BC141278.1	-	292	276	10	1	2	5	2
BC141278.1	-	295	279	10	1	2	5	2

BC152351.1	-	336	320	10	1	2	5	2
AF279255.1	-	414	399	10	7	2	1	0
L17305.1	+	443	461	10	3	2	3	2
BC114588.1	-	463	447	10	1	2	5	2
BC114589.1	-	463	447	10	1	2	5	2
AB049650.1	-	468	453	10	7	2	1	0
BC052214.1	-	472	457	10	7	2	1	0
BC085278.1	-	594	578	10	1	2	5	2
BC092378.1	-	598	582	10	1	2	5	2
M33212.1	-	614	598	10	1	2	5	2
BC054755.1	-	616	600	10	1	2	5	2
BC090843.1	-	616	600	10	1	2	5	2
BC099446.1	-	625	610	10	2	2	5	1
BC132540.1	-	632	617	10	2	2	5	1
BC132542.1	-	632	617	10	2	2	5	1
BC089546.1	-	633	617	10	1	2	5	2
AY456960.1	-	642	627	10	2	2	5	1
BC099426.1	-	647	632	10	7	2	1	0
BC138647.1	-	672	656	10	1	2	5	2
BC138648.1	-	672	656	10	1	2	5	2
BC096472.1	-	685	669	10	1	2	5	2
AB093283.1	-	702	686	10	1	2	5	2
AF091096.1	-	795	779	10	1	2	5	2
AF335250.2	-	808	792	10	1	2	5	2
AF097416.1	-	836	820	10	1	2	5	2
AF158597.1	-	918	902	10	1	2	5	2
AF158597.1	-	921	905	10	1	2	5	2
AF158597.1	-	924	908	10	1	2	5	2
AF158597.1	-	927	911	10	1	2	5	2
BC023029.1	-	930	914	10	1	2	5	2
BC023029.1	-	933	917	10	1	2	5	2
AB212898.1	-	941	925	10	1	2	5	2
BC131677.1	-	944	928	10	1	2	5	2
DQ185133.1	-	947	931	10	1	2	5	2
BC139167.1	-	1008	992	10	1	2	5	2
BC139168.1	-	1008	992	10	1	2	5	2
AF132218.1	-	1027	1011	10	1	2	5	2
AF132218.1	-	1030	1014	10	1	2	5	2
AF132218.1	-	1033	1017	10	1	2	5	2
AF132218.1	-	1036	1020	10	1	2	5	2
U86338.1	-	1065	1049	10	1	2	5	2

AF158597.1	-	1074	1058	10	1	2	5	2
BC025136.1	-	1161	1145	10	1	2	5	2
AF004295.1	-	1165	1149	10	1	2	5	2
AF132218.1	-	1183	1167	10	1	2	5	2
BC035954.1	-	1207	1191	10	1	2	5	2
BC100362.1	-	1223	1208	10	7	2	1	0
AY352586.2	-	1245	1229	10	1	2	5	2
BC132140.1	-	1276	1260	10	1	2	5	2
Z48043.1	-	1317	1301	10	1	2	5	2
BC025432.1	-	1343	1327	10	1	2	5	2
BC025432.1	-	1346	1330	10	1	2	5	2
BC025432.1	-	1349	1333	10	1	2	5	2
BC025432.1	-	1352	1336	10	1	2	5	2
AF411816.1	-	1369	1353	10	1	2	5	2
AF411816.1	-	1372	1356	10	1	2	5	2
BC050924.1	+	1382	1397	10	6	2	1	1
BC004006.1	-	1524	1508	10	1	2	5	2
BC141388.1	-	1539	1523	10	1	2	5	2
AK220496.1	-	1609	1593	10	1	2	5	2
BC096033.1	-	1630	1614	10	1	2	5	2
BC075672.1	-	1673	1657	10	1	2	5	2
AY273809.1	-	1718	1702	10	1	2	5	2
BC029834.1	-	1725	1709	10	1	2	5	2
BC064711.1	-	1755	1739	10	1	2	5	2
BC113150.1	-	1755	1739	10	1	2	5	2
BC113150.1	-	1758	1742	10	1	2	5	2
BC113150.1	-	1761	1745	10	1	2	5	2
Z98263.1	-	1774	1758	10	1	2	5	2
Z98263.1	-	1777	1761	10	1	2	5	2
Z98263.1	-	1780	1764	10	1	2	5	2
BC054393.1	-	1797	1781	10	1	2	5	2
AF184902.1	-	1833	1817	10	1	2	5	2
AF184902.1	-	1836	1820	10	1	2	5	2
AF184902.1	-	1839	1823	10	1	2	5	2
AB008674.1	-	2060	2044	10	1	2	5	2
AB008674.1	-	2063	2047	10	1	2	5	2
AJ428208.1	-	2078	2063	10	0	10	0	0
X95521.1	-	2159	2143	10	1	2	5	2
X95521.1	-	2162	2146	10	1	2	5	2
X95521.1	-	2165	2149	10	1	2	5	2
AF490392.1	-	2444	2428	10	1	2	5	2

BC037711.1	-	2484	2468	10	1	2	5	2
BC027187.1	-	2643	2627	10	1	2	5	2
BC027187.1	-	2646	2630	10	1	2	5	2
BC034098.1	-	2689	2673	10	1	2	5	2
AK129137.1	+	2728	2743	10	6	2	1	1
AJ132271.1	-	3017	3001	10	1	2	5	2
AJ132271.1	-	3020	3004	10	1	2	5	2
AJ132271.1	-	3023	3007	10	1	2	5	2
AF547435.1	-	3287	3271	10	1	2	5	2
AF547435.1	-	3290	3274	10	1	2	5	2
AF547435.1	-	3293	3277	10	1	2	5	2
AF227274.1	+	3362	3378	10	1	2	5	2
AF282772.1	+	3362	3378	10	1	2	5	2
AF282773.1	+	3362	3378	10	1	2	5	2
BC137706.1	-	3656	3640	10	1	2	5	2
BC060651.1	-	3666	3650	10	1	2	5	2
BC059227.1	-	3792	3776	10	1	2	5	2
BC058970.1	-	4072	4056	10	1	2	5	2
BC058970.1	-	4075	4059	10	1	2	5	2
AB093241.1	-	4521	4505	10	1	2	5	2
AB093241.1	-	4524	4508	10	1	2	5	2
BC085157.1	-	5103	5087	10	1	2	5	2
BC085157.1	-	5106	5090	10	1	2	5	2
BC141410.1	-	6099	6083	10	1	2	5	2
Number of Reads					5649	6022	5978	1417
Normalized Number of Reads					5649	7128	5978	2340
Normalized Expression					100%	126%	100%	39%

Note: The reads number in the table were provided as raw data and not being normalized.

Small RNA reads with more than 10 hits from all four libraries were shown. The expression of these small RNAs were generally independent of DGCR8 whereas they were depleted by an average of 60% in the *Dicer* null sample.</.>