

## SUPPLEMENTAL MATERIAL

Pichiorri et al., <http://www.jem.org/cgi/content/full/jem.20120950/DC1>**Table S1.** List of miRNAs, obtained by NanoString technology, differentially expressed at 72 h in HeLa cells transfected with si-*NCL* versus si-*Scr*

miRNA ID	P-value	Fold change
<i>miR-708</i>	0.000005	-6.4
<i>miR-221</i>	0.000005	-5.8
<i>miR-1915</i>	0.000005	-5.6
<i>miR-21</i>	0.002	-3.3
<i>miR-2117</i>	0.0005	-2.7
<i>miR-1246</i>	0.0005	-2.5
<i>miR-29a</i>	0.001	-2.5
<i>miR-493</i>	0.001	-2.5
<i>miR-100</i>	0.001	-2.4
<i>miR-29b</i>	0.0006	-2.2
<i>miR-31</i>	0.0011	-2.2
<i>miR-125b</i>	0.004	-2.2
<i>miR-103</i>	0.002	-2.2
<i>miR-183</i>	0.003	-2.2
<i>miR-96</i>	0.002	-2.0
<i>miR-203</i>	0.003	-2.0
<i>miR-222</i>	0.0025	-2.0
<i>miR-200a</i>	0.005	-2.0
<i>miR-130b</i>	0.007	-2.0
<i>miR-126</i>	0.002	-1.8
<i>miR-151-5p</i>	0.006	-1.8
<i>miR-151-3p</i>	0.005	-1.7
<i>miR-216a</i>	0.021	-1.7
<i>miR-378</i>	0.009	-1.7
<i>miR-148a</i>	0.01	-1.6
<i>miR-1305</i>	0.02	-1.6
<i>miR-128</i>	0.01	-1.6
<i>miR-93</i>	0.013	-1.6
<i>miR-10a</i>	0.015	-1.6
<i>miR-630</i>	0.018	-1.6
<i>miR-135b</i>	0.025	-1.5

**Table S2.** List of miRNAs differentially expressed between sh-*NCL* and sh-*Scr* at 72 + 48 h in HeLa cells obtained by high-throughput sequencing

Parametric p-value	FDR	sh- <i>NCL</i>	sh- <i>Scr</i>	Fold change	Unique ID
0.0081876	0.0246	67.29	1,912.62	0.035	let-7b@22:4650571-46509592 22(+)
0.0017246	0.0113	158.32	3,110.65	0.051	mir-107@10:91352513-91352535 23(-)
0.0021025	0.0118	44.44	676.06	0.066	mir-744@17:11985226-11985246 21(+)
0.0025592	0.0127	2,847.21	42,849.77	0.066	mir-103a-1@-1:-70-48 23(-1)
0.0070539	0.0226	42.04	608.31	0.069	mir-196a-1@17:46709894-46709915 22(-)
0.001086	0.00935	24.18	318.54	0.076	mir-629@15:70371766-70371786 21(-)
0.0023902	0.0125	28.38	362.04	0.078	mir-320a@8:22102488-22102509 22(-)
0.0080433	0.0246	16.53	190.06	0.087	mir-26b@2:21926738-219267401 22(+)
0.0014214	0.0106	508.58	5,765.91	0.088	mir-125a@19:52196521-52196544 24(+)
0.0007366	0.00761	20.22	223.74	0.09	mir-421@X:73438226-73438249 24(-)
0.002314	0.0122	15.00	154.52	0.097	mir-186@1:71533363-71533385 23(-)
0.0029403	0.0135	43.19	413.67	0.1	let-7c@21:17912158-17912179 22(+)
0.0004218	0.006041	38.49	347.69	0.11	mir-340@5:179442318-179442340 23(-)
0.0014949	0.0107	75.53	699.57	0.11	let-7e@19:52196046-52196067 22(+)
0.0001601	0.00434	15.00	128.50	0.12	mir-181b-1@1:198828054-198828076 23(-)
0.0014531	0.0106	25.76	211.62	0.12	mir-1036@22:20073595-20073616 22(+)
0.0054528	0.0191	29.93	245.34	0.12	mir-10a@17:46657266-46657287 22(-)
0.0010941	0.00935	18.91	143.41	0.13	mir-505@X:139006318-139006340 23(-)
0.001626	1.011	18.35	141.47	0.13	mir-4256@1:113004426-113004445 20(-)
0.0040515	0.0158	16.95	128.33	0.13	mir-183@7:129414806-129414827 22(-)
0.004474	0.0167	26.92	214.13	0.13	mir-93@7:99691439-99691460 22(-)
0.0001224	0.00417	408.07	2,857.10	0.14	mir-99b@19:52195871-52195892 22(+)
0.0001612	0.00434	91.41	641.81	0.14	mir-30c-1@1:412229272-41222994 23(+)
0.000368	0.00563	288.08	2,004.93	0.14	mir-342@14:100576052-100576075 24(+)
0.0001033	0.00413	18.28	122.36	0.15	mir-148b@12:54731062-54731083 22(+)
0.0001465	0.00434	3,687.26	24,925.48	0.15	mir-191@3:49058106-49058127 22(-)
0.0003084	3.00522	26.19	169.09	0.15	mir-766@X:118780725-118780747 23(-)
0.0003822	0.00575	272.54	1,779.18	0.15	mir-192@11:64658675-65658695 21(-)
0.004195	0.00604	19.08	124.82	0.15	mir-324@17:7126662-7126686 22(-)
0.0012176	0.00957	464.44	3,160.64	0.15	let-7a-2@11:122017276-122017297 22(-)
0.0030697	0.0135	25.13	171.45	0.15	mir-452@X:151128147-151128171 25(-)
0.0086355	0.0253	249.46	1,622.12	0.15	let-7d@9:96941123-96941144 22(+)
2.91E-05	0.00178	15.58	97.82	0.16	mir-877@6:30552174-30552194 21(+)
0.0001816	0.00436	133.07	808.63	0.16	mir30d@8:135817160-135817183 24(-)
0.0002624	0.0049	69.66	447.68	0.16	mir222@X:45606439-45606462 24(-)
0.0003208	0.00522	637.23	4,005.22	0.16	mir574@4:38869713-38869738 26(+)
0.0029235	0.0135	31.64	192.00	0.16	mir-126@9:139565068-139565089 22(+)
0.0066939	0.0219	246.60	1,537.46	0.16	mir26a-1@3:38010904-38010925 22(+)
0.0001706	0.00436	15.58	89.45	0.17	mir-188@X:49768123-49768143 21(+)
0.0002104	0.00462	345.05	1,975.04	0.17	mir-484@16:15737158-15737179 22(+)
0.0006395	0.00701	35.52	203.33	0.17	mir-181a-1@1:198828197-198828219 23(-)
0.0024525	0.0126	319.50	1,846.19	0.17	mir-378@5:149112430-149112421 22(+)
0.0050571	0.0181	27.41	160.93	0.17	mir-21@17:57918635-57918653 19(+)
1.62E-05	0.00167	16.99	96.14	0.18	mir-935@19:54485616-54485638 23(+)
0.0009431	0.00901	136.55	755.35	0.18	mir-135b@1:205417489-205417511 23(-)
0.0014135	0.0106	20.46	116.75	0.18	mir-130b@22:22007605-22007626 22(+)
0.0015263	0.0107	15.61	87.59	0.18	mir-210@11:568150-568171 22(-)
0.0031479	0.0135	15.00	81.14	0.18	mir-345@14:100774213-100774234 22(+)
0.0074462	0.0235	16.73	94.09	0.18	mir-1249@22:45596838-45596860 23(-)

**Table S2.** List of miRNAs differentially expressed between sh-*NCL* and sh-*Scr* at 72 + 48 h in HeLa cells obtained by high-throughput sequencing (*Continued*)

Parametric p-value	FDR	sh- <i>NCL</i>	sh- <i>Scr</i>	Fold change	Unique ID
0.0001536	0.00434	247.11	1,309.98	0.19	mir-21@17:57918635-57918655 21(+)
0.000676	0.00724	298.31	1,530.02	0.19	mir-30b@8:135812813-135812834 22(-)
0.0011609	0.00946	977.53	5,028.81	0.19	mir-197@1:110141562-110141583 22(+)
0.0019551	0.0118	862.27	4,424.61	0.19	let-7g@3:52302352-52302373 22(-)
0.00826	0.0248	34.65	184.61	0.19	mir-532@X:49767810-49767930 21(+)
0.0085449	0.025	15.00	77.56	0.19	mir-221@X:45605610-45605630 21(-)
0.0088863	0.0258	128.74	668.75	0.19	mir-301a@17:57228510-57228532 23(-)
0.0004964	0.00658	139.33	699.57	0.2	mir-424@X:133680710-133680731 22(-)
0.0030119	0.0135	39.59	200.30	0.2	mir-940@16:2321807-2321827 21(+)
0.0001536	0.00434	247.11	130.98	0.19	mir-30a@6:72113296-72113319 24(-)

FDR, false discovery rate.

Table S3, included as a separate Excel file, shows Gene Set Enrichment Analysis and Gene Ontology terms of *miR-21*, *miR-103*, *miR-221*, and *miR-222* target genes after AS1411 treatments in MCF-7 cells.

#### Supplemental materials and methods

Oligonucleotides used for in vivo and in vitro experiments are as follows: TL *miR-21*, biotin 5'-UGACUGUUGAAUCUCAUGGC-3'; TL *miR-155*, Biotin 5'-UUUUGCCUCCAACUGA-3'; AS1411, 5'-GGTGGTGGTGGTTGTGGTGGTGG-3'; and DCT, 5'-CCTCCTCCTCCTTCCTCCTCCTCC-3'.