

Supplementary Tables

Table S1. Summary of miRNA mimic library screen to identify miRNAs that regulate p53 expression. Z-scores represented the mean value from three independent experiments.

Mature Sanger ID	PreCursor Accession	z-sco	SD
hsa-miR-199b	MI0000282	-1.76	0.67
hsa-miR-9*	MI0000468	-1.61	1.04
hsa-miR-127-5p	MI0000472	-1.60	0.68
hsa-miR-345	MI0000825	-1.59	1.62
hsa-miR-26b	MI0000084	-1.48	0.70
hsa-miR-633	MI0003648	-1.44	0.69
hsa-miR-22	MI0000078	-1.41	0.52
hsa-let-7i*	MI0000434	-1.40	0.61
hsa-miR-96	MI0000098	-1.34	0.70
hsa-miR-504	MI0003189	-1.26	0.51
hsa-miR-194*	MI0000732	-1.23	1.17
hsa-miR-564	MI0003570	-1.22	0.81
hsa-miR-137	MI0000454	-1.20	0.94
hsa-miR-299-3p	MI0000744	-1.20	0.46
hsa-miR-640	MI0003655	-1.20	0.26
hsa-miR-125b	MI0000446	-1.20	0.09
hsa-miR-20b	MI0001519	-1.20	0.39
hsa-miR-639	MI0003654	-1.19	0.60
hsa-miR-586	MI0003594	-1.19	0.66
hsa-miR-125a	MI0000469	-1.17	0.90
hsa-miR-505	MI0003190	-1.15	0.75
hsa-miR-637	MI0003652	-1.12	0.41
hsa-miR-641	MI0003656	-1.10	0.70
hsa-miR-450b-3p	MI0005531	-1.10	1.30
hsa-miR-494	MI0003134	-1.08	1.08
hsa-miR-584	MI0003591	-1.06	0.50
hsa-miR-623	MI0003637	-1.05	1.16
hsa-miR-197	MI0000239	-1.05	0.45
hsa-miR-626	MI0003640	-1.05	0.85
hsa-miR-550	MI0003600	-1.02	0.61
hsa-miR-145*	MI0000461	-1.01	1.96
hsa-miR-9	MI0000467	-1.00	0.41
hsa-miR-668	MI0003761	-0.97	0.26
hsa-miR-9	MI0000468	-0.96	0.39
hsa-miR-146b	MI0003129	-0.96	0.14
hsa-miR-151	MI0000809	-0.95	0.72
hsa-miR-193a-5p	MI0000487	-0.93	0.70
hsa-miR-422a	MI0001444	-0.92	0.57
hsa-miR-502	MI0003186	-0.92	0.72
hsa-miR-129	MI0000252	-0.92	0.27
hsa-miR-497*	MI0003138	-0.91	0.71
hsa-miR-328	MI0000804	-0.91	0.12
hsa-miR-138	MI0000455	-0.91	1.04
hsa-miR-124*	MI0000445	-0.90	0.92
hsa-miR-302a*	MI0000738	-0.90	1.31
hsa-miR-21	MI0000077	-0.90	0.71
hsa-miR-382	MI0000790	-0.88	0.91
hsa-miR-520c-5p	MI0003158	-0.88	0.44
hsa-miR-106a	MI0000113	-0.86	1.98
hsa-miR-483	MI0002467	-0.86	0.90

hsa-miR-103	MI0000109	-0.85	0.53
hsa-miR-125b	MI0000470	-0.85	0.41
hsa-miR-141*	MI0000457	-0.85	0.47
hsa-miR-218	MI0000295	-0.84	0.73
hsa-miR-508	MI0003195	-0.83	0.09
hsa-miR-450b-5p	MI0005531	-0.83	1.44
hsa-miR-595	MI0003607	-0.82	0.55
hsa-miR-124*	MI0000444	-0.82	1.16
hsa-miR-320	MI0000542	-0.81	0.84
hsa-miR-542-5p	MI0003686	-0.81	0.34
hsa-miR-486-3p	MI0002470	-0.81	0.28
hsa-miR-652	MI0003667	-0.81	0.46
hsa-miR-585	MI0003592	-0.81	0.35
hsa-miR-20a	MI0000076	-0.81	0.16
hsa-miR-877*	MI0005561	-0.80	0.79
hsa-miR-193b*	MI0003137	-0.80	1.35
hsa-miR-608	MI0003621	-0.80	0.51
hsa-miR-429	MI0001641	-0.80	1.04
hsa-miR-144	MI0000460	-0.79	0.15
hsa-miR-107	MI0000114	-0.79	1.11
hsa-miR-26a	MI0000083	-0.78	0.75
hsa-miR-19b-2*	MI0000075	-0.77	0.63
hsa-miR-125a-3p	MI0000469	-0.77	0.88
hsa-miR-744	MI0005559	-0.77	0.33
hsa-miR-625	MI0003639	-0.77	0.88
hsa-miR-580	MI0003587	-0.75	0.57
hsa-miR-18a*	MI0000072	-0.74	0.37
hsa-miR-376b	MI0002466	-0.74	0.82
hsa-miR-143	MI0000459	-0.74	0.24
hsa-miR-577	MI0003584	-0.73	0.69
hsa-miR-622	MI0003636	-0.73	0.88
hsa-miR-380-3p	MI0000788	-0.72	1.24
hsa-miR-29c*	MI0000735	-0.71	1.07
hsa-miR-574-5p	MI0003581	-0.70	1.01
hsa-miR-619	MI0003633	-0.69	0.61
hsa-miR-517c	MI0003174	-0.69	0.15
hsa-miR-635	MI0003650	-0.69	1.16
hsa-miR-125b-1*	MI0000446	-0.68	1.42
hsa-miR-566	MI0003572	-0.67	0.61
hsa-miR-551b	MI0003575	-0.67	0.69
hsa-miR-760	MI0005567	-0.66	0.42
hsa-miR-662	MI0003670	-0.66	0.22
hsa-miR-33a*	MI0000091	-0.65	1.52
hsa-miR-340	MI0000802	-0.63	2.05
hsa-miR-1224-3p	MI0003764	-0.63	0.74
hsa-miR-625*	MI0003639	-0.62	0.64
hsa-miR-202*	MI0003130	-0.62	0.71
hsa-miR-425	MI0001448	-0.62	1.31
hsa-miR-513	MI0003191	-0.62	0.38
hsa-miR-532-3p	MI0003205	-0.61	0.95
hsa-miR-301	MI0000745	-0.61	0.28
hsa-miR-604	MI0003617	-0.60	0.34

hsa-miR-621	MI0003635	-0.60	1.15
hsa-miR-518d-5p	MI0003171	-0.60	1.06
hsa-miR-200c	MI0000650	-0.60	0.42
hsa-miR-144*	MI0000460	-0.59	0.84
hsa-miR-495	MI0003135	-0.58	0.65
hsa-miR-576-3p	MI0003583	-0.58	1.00
hsa-miR-888	MI0005537	-0.56	1.44
hsa-miR-409-3p	MI0001735	-0.56	1.24
hsa-miR-588	MI0003597	-0.56	1.28
hsa-miR-146a	MI0000477	-0.56	0.63
hsa-miR-769-3p	MI0003834	-0.55	0.64
hsa-miR-589	MI0003599	-0.55	1.08
hsa-miR-365	MI0000769	-0.55	1.37
hsa-miR-423	MI0001445	-0.55	1.24
hsa-miR-220	MI0000297	-0.54	0.52
hsa-miR-483-5p	MI0002467	-0.53	1.61
hsa-miR-363	MI0000764	-0.53	0.31
hsa-miR-23a	MI0000079	-0.53	0.50
hsa-miR-369-3p	MI0000777	-0.53	0.16
hsa-miR-653	MI0003674	-0.53	0.95
hsa-miR-18a	MI0000072	-0.52	0.44
hsa-miR-615-5p	MI0003628	-0.51	0.12
hsa-miR-302b*	MI0000772	-0.51	0.26
hsa-miR-92a-2*	MI0000094	-0.51	0.92
hsa-miR-324-3p	MI0000813	-0.51	0.69
hsa-miR-1224-5p	MI0003764	-0.50	0.83
hsa-miR-649	MI0003664	-0.50	0.25
hsa-miR-100	MI0000102	-0.49	0.80
hsa-miR-130b	MI0000748	-0.49	0.22
hsa-miR-105*	MI0000111	-0.49	1.70
hsa-miR-574	MI0003581	-0.49	1.06
hsa-miR-296	MI0000747	-0.48	0.94
hsa-miR-26a	MI0000750	-0.48	0.19
hsa-miR-185*	MI0000482	-0.48	0.54
hsa-miR-34c-3p	MI0000743	-0.47	0.42
hsa-miR-501	MI0003185	-0.47	0.64
hsa-miR-223	MI0000300	-0.47	1.01
hsa-miR-129-3p	MI0000473	-0.47	0.31
hsa-miR-421	MI0003685	-0.46	0.68
hsa-miR-106b	MI0000734	-0.46	0.49
hsa-miR-801	MI0005202	-0.46	0.22
hsa-miR-1234	MI0006324	-0.46	1.09
hsa-miR-885-3p	MI0005560	-0.46	0.63
hsa-miR-618	MI0003632	-0.45	0.36
hsa-miR-923	MI0005715	-0.45	0.54
hsa-miR-568	MI0003574	-0.45	1.05
hsa-miR-433	MI0001723	-0.45	0.97
hsa-miR-548d	MI0003668	-0.44	0.38
hsa-miR-539	MI0003514	-0.44	0.46
hsa-miR-27a*	MI0000085	-0.44	0.44
hsa-miR-181b	MI0000683	-0.44	0.62
hsa-miR-139	MI0000261	-0.44	0.57
hsa-miR-18b*	MI0001518	-0.44	0.46
hsa-miR-99a	MI0000101	-0.43	0.52
hsa-miR-330-5p	MI0000803	-0.43	0.90
hsa-miR-620	MI0003634	-0.42	1.40
hsa-miR-219	MI0000740	-0.41	0.11
hsa-miR-181c*	MI0000271	-0.41	0.25
hsa-miR-888*	MI0005537	-0.41	1.24

hsa-miR-575	MI0003582	-0.40	0.54
hsa-miR-636	MI0003651	-0.40	0.18
hsa-miR-410	MI0002465	-0.39	0.48
hsa-miR-939	MI0005761	-0.39	0.54
hsa-miR-638	MI0003653	-0.38	0.11
hsa-miR-100*	MI0000102	-0.38	1.73
hsa-miR-140-3p	MI0000456	-0.37	0.49
hsa-miR-412	MI0002464	-0.37	0.61
hsa-miR-506	MI0003193	-0.37	0.42
hsa-miR-937	MI0005759	-0.36	0.31
hsa-miR-7-1*	MI0000263	-0.36	0.55
hsa-miR-183	MI0000273	-0.35	0.11
hsa-miR-147b	MI0005544	-0.35	0.46
hsa-miR-19a	MI0000073	-0.35	1.05
hsa-miR-216	MI0000292	-0.35	0.55
hsa-miR-562	MI0003568	-0.35	0.20
hsa-miR-874	MI0005532	-0.34	1.48
hsa-miR-450	MI0003187	-0.34	0.75
hsa-miR-509-3-5p	MI0005717	-0.34	0.55
hsa-miR-372	MI0000780	-0.34	0.42
hsa-miR-182	MI0000272	-0.34	0.70
hsa-miR-363*	MI0000764	-0.34	0.43
hsa-miR-16-2*	MI0000115	-0.33	0.60
hsa-miR-548b	MI0003596	-0.33	0.56
hsa-miR-380-5p	MI0000788	-0.33	0.27
hsa-miR-491	MI0003126	-0.33	0.45
hsa-miR-665	MI0005563	-0.33	0.42
hsa-miR-520f	MI0003146	-0.32	0.56
hsa-miR-551a	MI0003556	-0.32	0.22
hsa-miR-627	MI0003641	-0.31	0.78
hsa-miR-7	MI0000265	-0.31	0.82
hsa-miR-326	MI0000808	-0.31	0.66
hsa-miR-516-3p	MI0003181	-0.31	1.18
hsa-miR-146a*	MI0000477	-0.30	1.27
hsa-miR-218-2*	MI0000295	-0.30	0.28
hsa-miR-34a	MI0000268	-0.30	0.42
hsa-miR-455-3p	MI0003513	-0.30	0.45
hsa-miR-129	MI0000473	-0.30	0.77
hsa-miR-126*	MI0000471	-0.30	0.47
hsa-miR-7-2*	MI0000264	-0.30	1.18
hsa-miR-503	MI0003188	-0.30	0.58
hsa-miR-30a-3p	MI0000088	-0.29	0.90
hsa-miR-219	MI0000296	-0.29	0.60
hsa-miR-548d-5p	MI0003668	-0.29	0.60
hsa-miR-642	MI0003657	-0.29	0.16
hsa-miR-31*	MI0000089	-0.29	0.38
hsa-miR-425-5p	MI0001448	-0.28	0.67
hsa-miR-30d*	MI0000255	-0.28	0.71
hsa-miR-616	MI0003629	-0.28	0.37
hsa-miR-212	MI0000288	-0.28	0.84
hsa-miR-611	MI0003624	-0.28	0.58
hsa-miR-19a*	MI0000073	-0.28	0.25
hsa-miR-643	MI0003658	-0.27	0.54
hsa-miR-202	MI0003130	-0.27	0.64
hsa-miR-484	MI0002468	-0.27	0.77
hsa-miR-629	MI0003643	-0.27	0.34
hsa-miR-138-2*	MI0000455	-0.27	0.68
hsa-miR-196b	MI0001150	-0.27	0.66
hsa-miR-148a	MI0000253	-0.26	0.80

hsa-miR-30e-3p	MI0000749	-0.26	0.26
hsa-miR-29a*	MI0000087	-0.26	0.31
hsa-miR-548b-5p	MI0003596	-0.26	1.23
hsa-miR-220c	MI0005536	-0.26	0.14
hsa-miR-371-5p	MI0000779	-0.26	1.03
hsa-miR-339	MI0000815	-0.25	1.30
hsa-miR-589*	MI0003599	-0.25	0.22
hsa-miR-181b	MI0000270	-0.25	0.71
hsa-miR-93	MI0000095	-0.25	0.56
hsa-miR-509-5p	MI0003196	-0.25	0.32
hsa-miR-500*	MI0003184	-0.25	0.08
hsa-miR-217	MI0000293	-0.25	0.66
hsa-miR-519a	MI0003182	-0.24	0.27
hsa-miR-196a	MI0000238	-0.24	0.54
hsa-miR-138	MI0000476	-0.24	0.44
hsa-miR-99a*	MI0000101	-0.24	0.27
hsa-miR-553	MI0003558	-0.24	0.60
hsa-miR-181a	MI0000289	-0.24	0.43
hsa-miR-663	MI0003672	-0.24	0.41
hsa-miR-609	MI0003622	-0.23	0.71
hsa-miR-30c	MI0000736	-0.23	0.47
hsa-miR-199a*	MI0000242	-0.23	0.26
hsa-miR-452	MI0001733	-0.23	0.62
hsa-miR-210	MI0000286	-0.23	1.00
hsa-miR-200b	MI0000342	-0.22	0.36
hsa-miR-548d	MI0003671	-0.22	0.46
hsa-miR-423-5p	MI0001445	-0.22	0.72
hsa-miR-373*	MI0000781	-0.22	0.32
hsa-miR-7	MI0000264	-0.21	0.29
hsa-miR-10b	MI0000267	-0.21	0.37
hsa-miR-767-3p	MI0003763	-0.21	0.15
hsa-miR-933	MI0005755	-0.21	0.73
hsa-miR-99b	MI0000746	-0.20	0.63
hsa-miR-101*	MI0000103	-0.20	0.93
hsa-miR-675	MI0005416	-0.20	0.41
hsa-miR-191*	MI0000465	-0.20	0.79
hsa-miR-9*	MI0000467	-0.20	0.70
hsa-miR-195*	MI0000489	-0.20	1.49
hsa-miR-765	MI0005116	-0.20	0.54
hsa-miR-33	MI0000091	-0.20	0.81
hsa-miR-550	MI0003601	-0.19	0.69
hsa-miR-122*	MI0000442	-0.19	0.19
hsa-miR-103	MI0000108	-0.19	0.93
hsa-miR-615	MI0003628	-0.19	1.02
hsa-miR-569	MI0003576	-0.19	0.71
hsa-miR-200a*	MI0000737	-0.19	0.39
hsa-miR-370	MI0000778	-0.19	0.25
hsa-miR-218-1*	MI0000294	-0.18	0.65
hsa-miR-658	MI0003682	-0.18	0.32
hsa-miR-7	MI0000263	-0.18	0.49
hsa-miR-877	MI0005561	-0.18	0.63
hsa-miR-92	MI0000093	-0.18	0.76
hsa-miR-376a	MI0003529	-0.18	0.82
hsa-miR-1225-5p	MI0006311	-0.18	0.25
hsa-miR-145	MI0000461	-0.17	0.42
hsa-miR-518e*	MI0003169	-0.17	1.42
hsa-miR-572	MI0003579	-0.17	0.51
hsa-miR-381	MI0000789	-0.17	1.78
hsa-miR-505*	MI0003190	-0.17	0.56

hsa-miR-141	MI0000457	-0.17	0.15
hsa-miR-140	MI0000456	-0.17	0.10
hsa-miR-581	MI0003588	-0.16	0.56
hsa-miR-133b	MI0000822	-0.15	0.64
hsa-miR-130a*	MI0000448	-0.15	0.77
hsa-miR-196a	MI0000279	-0.14	0.73
hsa-miR-758	MI0003757	-0.14	1.21
hsa-miR-648	MI0003663	-0.14	0.85
hsa-miR-661	MI0003669	-0.13	0.88
hsa-miR-195	MI0000489	-0.13	1.13
hsa-miR-29b	MI0000105	-0.13	0.87
hsa-miR-548a	MI0003593	-0.13	0.79
hsa-miR-448	MI0001637	-0.13	0.89
hsa-miR-368	MI0000776	-0.12	0.29
hsa-miR-516-5p	MI0003172	-0.12	0.63
hsa-miR-592	MI0003604	-0.12	0.55
hsa-miR-124*	MI0000443	-0.11	0.35
hsa-miR-206	MI0000490	-0.11	0.17
hsa-miR-1225-3p	MI0006311	-0.11	0.54
hsa-miR-329	MI0001726	-0.11	1.02
hsa-miR-606	MI0003619	-0.11	0.41
hsa-miR-886-5p	MI0005527	-0.11	0.48
hsa-miR-650	MI0003665	-0.11	1.52
hsa-miR-204	MI0000284	-0.11	0.40
hsa-miR-371	MI0000779	-0.10	0.78
hsa-miR-18b	MI0001518	-0.10	1.30
hsa-miR-330	MI0000803	-0.10	0.17
hsa-miR-218	MI0000294	-0.10	0.67
hsa-miR-632	MI0003647	-0.10	0.57
hsa-miR-582-3p	MI0003589	-0.10	0.34
hsa-miR-887	MI0005562	-0.10	0.16
hsa-miR-224	MI0000301	-0.10	0.35
hsa-miR-453	MI0001727	-0.09	0.73
hsa-miR-146b-3p	MI0003129	-0.09	0.42
hsa-miR-488*	MI0003123	-0.09	0.59
hsa-miR-541*	MI0005539	-0.08	0.70
hsa-miR-301b	MI0005568	-0.08	0.15
hsa-miR-624*	MI0003638	-0.08	1.57
hsa-miR-25	MI0000082	-0.08	0.34
hsa-miR-9	MI0000466	-0.08	1.14
hsa-miR-886-3p	MI0005527	-0.08	0.68
hsa-miR-516a-5p	MI0003181	-0.07	0.87
hsa-miR-519d	MI0003162	-0.07	0.73
hsa-miR-302b	MI0000772	-0.07	0.54
hsa-miR-500	MI0003184	-0.07	0.55
hsa-miR-873	MI0005564	-0.06	0.25
hsa-miR-203	MI0000283	-0.06	1.41
hsa-miR-369-5p	MI0000777	-0.06	0.50
hsa-miR-92	MI0000094	-0.06	0.62
hsa-miR-153	MI0000463	-0.06	0.90
hsa-miR-24	MI0000081	-0.06	0.16
hsa-miR-19b	MI0000074	-0.06	1.22
hsa-miR-95	MI0000097	-0.05	0.88
hsa-miR-613	MI0003626	-0.05	1.07
hsa-miR-593	MI0003605	-0.05	0.67
hsa-miR-487b	MI0003530	-0.04	0.43
hsa-miR-552	MI0003557	-0.04	1.31
hsa-miR-26a-1*	MI0000083	-0.04	0.83
hsa-miR-30b*	MI0000441	-0.04	0.71

hsa-miR-200b*	MI0000342	-0.04	0.53
hsa-miR-550	MI0003600	-0.04	1.54
hsa-miR-523*	MI0003153	-0.03	1.06
hsa-miR-516-3p	MI0003172	-0.03	0.28
hsa-miR-624	MI0003638	-0.03	0.69
hsa-miR-196a*	MI0000279	-0.02	0.53
hsa-miR-338-5p	MI0000814	-0.02	0.63
hsa-miR-502-3p	MI0003186	-0.01	0.73
hsa-miR-1226	MI0006313	-0.01	1.19
hsa-miR-383	MI0000791	-0.01	1.04
hsa-miR-148b*	MI0000811	-0.01	0.77
hsa-miR-92b*	MI0003560	-0.01	0.89
hsa-miR-198	MI0000240	-0.01	0.54
hsa-miR-657	MI0003681	-0.01	1.14
hsa-miR-342-5p	MI0000805	-0.01	0.66
hsa-miR-23b	MI0000439	-0.01	1.16
hsa-miR-516a-5p	MI0003180	-0.01	0.95
hsa-miR-654	MI0003676	0.00	0.82
hsa-miR-135b*	MI0000810	0.00	1.23
hsa-miR-432*	MI0003133	0.00	0.83
hsa-miR-570	MI0003577	0.01	0.52
hsa-miR-379	MI0000787	0.01	0.42
hsa-miR-135b	MI0000810	0.01	0.05
hsa-miR-362-3p	MI0000762	0.01	2.04
hsa-miR-941	MI0005763	0.01	0.30
hsa-miR-223*	MI0000300	0.01	0.88
hsa-miR-629*	MI0003643	0.02	0.44
hsa-miR-578	MI0003585	0.02	0.66
hsa-miR-890	MI0005533	0.02	0.58
hsa-miR-548d-5p	MI0003671	0.02	0.99
hsa-miR-602	MI0003615	0.02	0.84
hsa-miR-16	MI0000070	0.03	0.77
hsa-miR-184	MI0000481	0.03	0.80
hsa-miR-766	MI0003836	0.03	0.66
hsa-miR-519b-5p	MI0003151	0.03	1.46
hsa-miR-520e	MI0003143	0.03	0.13
hsa-miR-130a	MI0000448	0.04	1.38
hsa-miR-515-3p	MI0003147	0.04	0.05
hsa-let-7a	MI0000061	0.04	0.75
hsa-miR-520a	MI0003149	0.04	0.70
hsa-miR-573	MI0003580	0.04	0.24
hsa-miR-150*	MI0000479	0.05	1.12
hsa-miR-516-5p	MI0003167	0.05	0.83
hsa-miR-610	MI0003623	0.05	0.50
hsa-miR-191	MI0000465	0.05	0.45
hsa-miR-517*	MI0003165	0.06	0.82
hsa-miR-548c-5p	MI0003630	0.06	0.63
hsa-miR-125b-2*	MI0000470	0.06	0.74
hsa-miR-29b	MI0000107	0.06	0.57
hsa-miR-375	MI0000783	0.06	0.41
hsa-miR-422b	MI0000786	0.07	1.05
hsa-miR-512-3p	MI0003140	0.07	0.19
hsa-miR-520b	MI0003155	0.07	0.71
hsa-miR-33b*	MI0003646	0.08	1.46
hsa-miR-15a	MI0000069	0.08	1.00
hsa-miR-150	MI0000479	0.08	0.88
hsa-miR-517*	MI0003161	0.08	0.61
hsa-miR-124a	MI0000445	0.08	0.21
hsa-miR-373	MI0000781	0.08	0.08

hsa-miR-523	MI0003153	0.08	0.40
hsa-miR-187*	MI0000274	0.08	0.10
hsa-miR-522	MI0003177	0.08	0.43
hsa-miR-297	MI0005775	0.09	0.34
hsa-miR-507	MI0003194	0.09	1.27
hsa-miR-449	MI0001648	0.09	0.79
hsa-miR-628	MI0003642	0.09	0.85
hsa-miR-518e	MI0003169	0.09	0.41
hsa-miR-450	MI0001652	0.09	0.09
hsa-miR-16	MI0000115	0.09	1.34
hsa-miR-941	MI0005764	0.09	0.78
hsa-miR-17-5p	MI0000071	0.10	0.03
hsa-miR-522*	MI0003177	0.10	1.06
hsa-miR-199a*	MI0000281	0.10	0.92
hsa-miR-493	MI0003132	0.10	0.68
hsa-miR-15b	MI0000438	0.10	1.01
hsa-miR-513	MI0003192	0.10	0.80
hsa-miR-1226*	MI0006313	0.11	0.61
hsa-miR-617	MI0003631	0.11	0.20
hsa-miR-139-3p	MI0000261	0.11	0.74
hsa-miR-325	MI0000824	0.11	0.20
hsa-miR-511	MI0003127	0.11	0.95
hsa-miR-513c	MI0006649	0.11	0.78
hsa-miR-346	MI0000826	0.11	0.63
hsa-miR-338	MI0000814	0.12	0.71
hsa-miR-21*	MI0000077	0.12	0.37
hsa-miR-802	MI0003906	0.12	0.44
hsa-miR-199a	MI0000281	0.12	0.13
hsa-miR-329	MI0001725	0.12	1.28
hsa-miR-142-5p	MI0000458	0.12	0.51
hsa-miR-582	MI0003589	0.13	0.46
hsa-miR-340*	MI0000802	0.13	1.05
hsa-miR-219-2-3p	MI0000740	0.13	1.38
hsa-miR-517a	MI0003161	0.13	0.71
hsa-miR-628-5p	MI0003642	0.13	0.84
hsa-miR-337	MI0000806	0.13	0.93
hsa-miR-526a	MI0003157	0.13	0.36
hsa-miR-520a*	MI0003149	0.14	0.66
hsa-miR-302d*	MI0000774	0.14	0.26
hsa-miR-143*	MI0000459	0.14	0.19
hsa-miR-298	MI0005523	0.14	0.84
hsa-miR-192	MI0000234	0.14	0.24
hsa-miR-644	MI0003659	0.14	0.03
hsa-miR-599	MI0003611	0.14	0.21
hsa-miR-526a	MI0003168	0.14	0.30
hsa-miR-138-1*	MI0000476	0.14	0.47
hsa-miR-189	MI0000080	0.15	0.77
hsa-miR-520h	MI0003175	0.15	0.21
hsa-miR-29a	MI0000087	0.16	1.19
hsa-miR-671	MI0003760	0.16	1.05
hsa-miR-186*	MI0000483	0.16	0.44
hsa-miR-23a*	MI0000079	0.16	0.93
hsa-miR-181c	MI0000271	0.16	1.32
hsa-let-7c*	MI0000064	0.16	0.26
hsa-miR-520d	MI0003164	0.16	0.72
hsa-miR-590	MI0003602	0.17	0.82
hsa-miR-28-3p	MI0000086	0.17	0.66
hsa-let-7f	MI0000067	0.17	0.57
hsa-miR-655	MI0003677	0.17	0.40

hsa-miR-30c-1*	MI0000736	0.17	0.50
hsa-miR-524	MI0003160	0.18	1.16
hsa-miR-532	MI0003205	0.18	0.38
hsa-miR-33b	MI0003646	0.18	0.37
hsa-miR-892a	MI0005528	0.19	0.65
hsa-miR-454-5p	MI0003820	0.19	0.92
hsa-miR-509	MI0003196	0.19	1.74
hsa-miR-525*	MI0003152	0.19	0.42
hsa-miR-515-5p	MI0003144	0.19	0.40
hsa-miR-634	MI0003649	0.19	0.95
hsa-miR-889	MI0005540	0.19	0.66
hsa-miR-548a-5p	MI0003612	0.19	0.08
hsa-miR-411	MI0003675	0.20	0.65
hsa-miR-30e-5p	MI0000749	0.20	1.15
hsa-miR-567	MI0003573	0.20	1.09
hsa-miR-200a	MI0000737	0.20	0.55
hsa-let-7a*	MI0000062	0.20	1.32
hsa-miR-943	MI0005768	0.20	0.52
hsa-miR-34c	MI0000743	0.20	0.52
hsa-miR-151-5p	MI0000809	0.20	0.71
hsa-miR-199a	MI0000242	0.20	1.06
hsa-miR-891a	MI0005524	0.21	0.42
hsa-miR-122a	MI0000442	0.21	0.52
hsa-miR-490-5p	MI0003125	0.21	0.90
hsa-miR-558	MI0003564	0.21	1.33
hsa-miR-34a*	MI0000268	0.21	1.54
hsa-miR-875-5p	MI0005541	0.22	1.30
hsa-miR-875-3p	MI0005541	0.22	0.99
hsa-miR-28	MI0000086	0.22	1.56
hsa-miR-941	MI0005766	0.23	0.73
hsa-miR-616*	MI0003629	0.23	0.69
hsa-miR-377*	MI0000785	0.23	1.58
hsa-miR-128a	MI0000447	0.23	0.30
hsa-miR-496	MI0003136	0.23	0.50
hsa-miR-154*	MI0000480	0.23	0.77
hsa-miR-374a*	MI0000782	0.23	0.74
hsa-miR-768-5p	MI0005117	0.24	0.30
hsa-miR-519e*	MI0003145	0.24	1.74
hsa-miR-513b	MI0006648	0.24	0.42
hsa-miR-554	MI0003559	0.24	0.90
hsa-miR-190b	MI0005545	0.24	0.69
hsa-miR-193a	MI0000487	0.24	0.47
hsa-miR-548a	MI0003598	0.24	0.80
hsa-miR-876-5p	MI0005542	0.24	0.17
hsa-miR-376a	MI0000784	0.24	0.69
hsa-miR-205	MI0000285	0.25	0.38
hsa-miR-516-3p	MI0003167	0.25	0.30
hsa-miR-26a-2*	MI0000750	0.25	0.42
hsa-miR-186	MI0000483	0.25	0.66
hsa-miR-99b*	MI0000746	0.25	1.36
hsa-miR-181d	MI0003139	0.25	1.26
hsa-miR-126	MI0000471	0.25	0.49
hsa-miR-194	MI0000732	0.26	0.37
hsa-miR-519b	MI0003151	0.26	0.51
hsa-miR-600	MI0003613	0.26	0.64
hsa-miR-519a*	MI0003178	0.27	1.09
hsa-miR-302a	MI0000738	0.27	0.87
hsa-miR-576	MI0003583	0.27	0.89
hsa-miR-656	MI0003678	0.27	0.47

hsa-miR-485-5p	MI0002469	0.27	0.24
hsa-miR-548c	MI0003630	0.27	0.40
hsa-miR-31	MI0000089	0.27	0.41
hsa-miR-153	MI0000464	0.27	0.78
hsa-miR-885-5p	MI0005560	0.27	1.63
hsa-miR-593*	MI0003605	0.28	0.40
hsa-miR-607	MI0003620	0.29	0.37
hsa-miR-527	MI0003179	0.29	0.69
hsa-miR-378	MI0000786	0.29	0.80
hsa-miR-20a*	MI0000076	0.29	0.29
hsa-miR-920	MI0005712	0.29	0.57
hsa-miR-222	MI0000299	0.29	0.44
hsa-miR-147	MI0000262	0.29	0.52
hsa-miR-660	MI0003684	0.29	0.25
hsa-miR-17-3p	MI0000071	0.29	0.36
hsa-let-7a	MI0000062	0.30	0.85
hsa-miR-924	MI0005716	0.30	0.24
hsa-miR-517*	MI0003174	0.30	0.48
hsa-miR-92a-1*	MI0000093	0.31	0.76
hsa-miR-512-5p	MI0003141	0.31	0.78
hsa-miR-213	MI0000289	0.31	0.73
hsa-miR-767-5p	MI0003763	0.31	0.50
hsa-miR-190	MI0000486	0.31	0.41
hsa-miR-936	MI0005758	0.32	0.33
hsa-miR-374	MI0000782	0.32	1.12
hsa-miR-583	MI0003590	0.32	0.69
hsa-miR-152	MI0000462	0.33	1.06
hsa-miR-509-5p	MI0005530	0.33	0.84
hsa-miR-300	MI0005525	0.34	0.40
hsa-miR-92b	MI0003560	0.34	0.68
hsa-miR-520c	MI0003158	0.34	0.54
hsa-miR-590-3p	MI0003602	0.34	0.66
hsa-miR-30c-2*	MI0000254	0.35	1.31
hsa-miR-541	MI0005539	0.35	0.86
hsa-miR-148b	MI0000811	0.36	0.37
hsa-miR-199b-3p	MI0000282	0.36	0.54
hsa-miR-556	MI0003562	0.37	1.73
hsa-miR-614	MI0003627	0.37	0.76
hsa-let-7c	MI0000064	0.37	1.31
hsa-miR-23b*	MI0000439	0.37	1.06
hsa-miR-1237	MI0006327	0.37	0.45
hsa-miR-124a	MI0000444	0.37	0.68
hsa-miR-105*	MI0000112	0.37	0.11
hsa-miR-486	MI0002470	0.37	0.59
hsa-miR-1228	MI0006318	0.38	0.63
hsa-miR-487	MI0002471	0.39	0.50
hsa-miR-454-3p	MI0003820	0.39	0.62
hsa-let-7b	MI0000063	0.39	0.16
hsa-miR-379*	MI0000787	0.39	1.10
hsa-miR-362	MI0000762	0.39	0.65
hsa-miR-194	MI0000488	0.40	0.53
hsa-miR-520g	MI0003166	0.40	0.50
hsa-miR-591	MI0003603	0.40	1.42
hsa-miR-32*	MI0000090	0.40	0.34
hsa-miR-601	MI0003614	0.40	0.96
hsa-miR-490	MI0003125	0.40	1.37
hsa-miR-521	MI0003176	0.40	0.97
hsa-miR-183*	MI0000273	0.41	1.00
hsa-miR-511	MI0003128	0.41	1.08

hsa-miR-30b	MI0000441	0.41	0.57
hsa-miR-34b	MI0000742	0.41	0.75
hsa-let-7i	MI0000434	0.41	1.78
hsa-miR-342	MI0000805	0.42	1.02
hsa-miR-214	MI0000290	0.42	0.68
hsa-miR-337-5p	MI0000806	0.42	0.81
hsa-miR-587	MI0003595	0.42	0.47
hsa-miR-130b*	MI0000748	0.43	1.11
hsa-miR-671-3p	MI0003760	0.43	0.39
hsa-miR-331-5p	MI0000812	0.43	0.91
hsa-miR-543	MI0005565	0.44	1.16
hsa-miR-488	MI0003123	0.44	0.80
hsa-miR-769-5p	MI0003834	0.44	0.22
hsa-miR-597	MI0003609	0.44	0.48
hsa-miR-133a	MI0000451	0.44	1.01
hsa-miR-518a-5p	MI0003173	0.44	0.87
hsa-miR-519c	MI0003148	0.44	0.90
hsa-miR-498	MI0003142	0.45	0.72
hsa-miR-449b	MI0003673	0.45	0.46
hsa-miR-519a	MI0003178	0.45	0.58
hsa-miR-181a	MI0000269	0.45	0.30
hsa-miR-892b	MI0005538	0.46	1.39
hsa-miR-374b	MI0005566	0.46	0.78
hsa-miR-489	MI0003124	0.46	0.88
hsa-miR-367	MI0000775	0.46	1.12
hsa-miR-133a	MI0000450	0.47	1.08
hsa-miR-22*	MI0000078	0.47	0.16
hsa-miR-30c	MI0000254	0.47	1.50
hsa-miR-501-3p	MI0003185	0.47	0.58
hsa-miR-451	MI0001729	0.47	0.48
hsa-miR-935	MI0005757	0.47	0.73
hsa-miR-200c*	MI0000650	0.48	1.00
hsa-miR-571	MI0003578	0.48	1.67
hsa-miR-302d	MI0000774	0.48	0.84
hsa-miR-98	MI0000100	0.48	1.03
hsa-miR-149*	MI0000478	0.48	0.97
hsa-miR-136	MI0000475	0.48	0.37
hsa-miR-26b*	MI0000084	0.48	1.18
hsa-miR-187	MI0000274	0.49	0.75
hsa-miR-545	MI0003516	0.49	0.34
hsa-miR-220b	MI0005529	0.50	0.20
hsa-miR-518c*	MI0003159	0.50	0.15
hsa-let-7d	MI0000065	0.50	0.86
hsa-miR-499	MI0003183	0.51	0.13
hsa-miR-596	MI0003608	0.51	0.39
hsa-miR-127	MI0000472	0.51	1.19
hsa-let-7d*	MI0000065	0.51	1.17
hsa-miR-15b*	MI0000438	0.51	2.11
hsa-let-7g	MI0000433	0.51	0.49
hsa-miR-424	MI0001446	0.52	0.52
hsa-miR-519e	MI0003145	0.52	1.24
hsa-miR-9*	MI0000466	0.52	0.64
hsa-miR-1238	MI0006328	0.52	0.27
hsa-miR-549	MI0003679	0.53	1.05
hsa-miR-148a*	MI0000253	0.53	0.95
hsa-miR-518f*	MI0003154	0.53	0.79
hsa-miR-1228*	MI0006318	0.53	0.71
hsa-miR-508-5p	MI0003195	0.54	1.84
hsa-miR-513a-3p	MI0003192	0.54	1.33

hsa-miR-124a	MI0000443	0.54	0.95
hsa-miR-545*	MI0003516	0.54	0.84
hsa-let-7a	MI0000060	0.54	0.76
hsa-miR-24	MI0000080	0.55	0.89
hsa-miR-431	MI0001721	0.56	1.35
hsa-miR-563	MI0003569	0.56	0.55
hsa-miR-27b	MI0000440	0.56	1.40
hsa-miR-770-5p	MI0005118	0.57	0.57
hsa-miR-29b-2*	MI0000107	0.57	0.88
hsa-miR-514	MI0003198	0.57	1.49
hsa-miR-518f	MI0003154	0.58	0.91
hsa-miR-30a-5p	MI0000088	0.58	0.91
hsa-miR-331	MI0000812	0.58	0.77
hsa-miR-551b*	MI0003575	0.58	0.66
hsa-miR-517b	MI0003165	0.58	1.50
hsa-miR-941	MI0005765	0.59	0.71
hsa-miR-603	MI0003616	0.60	1.01
hsa-miR-105	MI0000112	0.60	1.12
hsa-miR-431*	MI0001721	0.60	1.10
hsa-miR-708*	MI0005543	0.60	0.23
hsa-miR-302c	MI0000773	0.61	1.47
hsa-miR-744*	MI0005559	0.61	0.47
hsa-miR-215	MI0000291	0.61	0.52
hsa-miR-16-1*	MI0000070	0.62	1.07
hsa-miR-188-3p	MI0000484	0.62	1.30
hsa-miR-1236	MI0006326	0.62	0.30
hsa-miR-521	MI0003163	0.63	0.26
hsa-miR-509-3p	MI0005717	0.63	0.21
hsa-miR-768-3p	MI0005117	0.63	0.60
hsa-miR-323-5p	MI0000807	0.63	0.35
hsa-miR-106b*	MI0000734	0.64	0.67
hsa-miR-1229	MI0006319	0.64	0.36
hsa-miR-10a	MI0000266	0.64	0.87
hsa-miR-30d	MI0000255	0.64	0.59
hsa-miR-27a	MI0000085	0.65	0.80
hsa-miR-492	MI0003131	0.65	1.15
hsa-miR-185	MI0000482	0.65	1.09
hsa-miR-647	MI0003662	0.66	0.80
hsa-miR-302c*	MI0000773	0.66	0.56
hsa-miR-222*	MI0000299	0.66	0.86
hsa-miR-339-3p	MI0000815	0.66	1.50
hsa-miR-518c	MI0003159	0.66	0.47
hsa-miR-942	MI0005767	0.67	0.23
hsa-let-7a*	MI0000060	0.67	0.65
hsa-miR-526b*	MI0003150	0.68	0.41
hsa-miR-497	MI0003138	0.68	0.24
hsa-miR-182*	MI0000272	0.68	0.95
hsa-miR-645	MI0003660	0.69	0.42
hsa-miR-646	MI0003661	0.69	1.32
hsa-miR-518b	MI0003156	0.70	1.17
hsa-miR-19b	MI0000075	0.70	0.39
hsa-let-7g*	MI0000433	0.70	0.88
hsa-miR-561	MI0003567	0.71	0.80
hsa-miR-221*	MI0000298	0.71	0.86
hsa-miR-136*	MI0000475	0.71	1.17
hsa-miR-491-3p	MI0003126	0.71	1.31
hsa-miR-455	MI0003513	0.72	0.89
hsa-miR-132	MI0000449	0.73	0.65
hsa-miR-651	MI0003666	0.74	0.89

hsa-miR-296-3p	MI0000747	0.74	0.37
hsa-miR-25*	MI0000082	0.74	1.34
hsa-miR-598	MI0003610	0.74	0.47
hsa-miR-24-2*	MI0000081	0.74	0.48
hsa-miR-335	MI0000816	0.75	0.91
hsa-miR-1	MI0000651	0.77	0.89
hsa-miR-579	MI0003586	0.77	1.45
hsa-miR-1	MI0000437	0.77	0.45
hsa-miR-299-5p	MI0000744	0.78	0.12
hsa-miR-631	MI0003645	0.78	2.14
hsa-miR-10b*	MI0000267	0.78	0.40
hsa-miR-409-5p	MI0001735	0.78	0.49
hsa-miR-32	MI0000090	0.78	0.39
hsa-miR-129*	MI0000252	0.79	0.43
hsa-miR-20b*	MI0001519	0.79	0.75
hsa-miR-559	MI0003565	0.80	0.77
hsa-miR-361-3p	MI0000760	0.80	0.64
hsa-miR-556-3p	MI0003562	0.80	1.51
hsa-miR-93*	MI0000095	0.80	0.89
hsa-miR-940	MI0005762	0.82	0.67
hsa-miR-512-3p	MI0003141	0.83	0.41
hsa-miR-708	MI0005543	0.83	0.51
hsa-miR-525	MI0003152	0.83	1.18
hsa-miR-876-3p	MI0005542	0.83	0.24
hsa-miR-514	MI0003200	0.84	0.39
hsa-miR-432	MI0003133	0.85	0.74
hsa-miR-550	MI0003601	0.85	1.11
hsa-miR-216b	MI0005569	0.85	0.52
hsa-miR-27b*	MI0000440	0.86	0.28
hsa-miR-19b-1*	MI0000074	0.87	1.93
hsa-miR-654-3p	MI0003676	0.87	0.13
hsa-let-7e	MI0000066	0.89	0.39
hsa-miR-514	MI0003199	0.89	0.68
hsa-miR-944	MI0005769	0.91	0.31
hsa-miR-132*	MI0000449	0.91	1.16
hsa-miR-518a-5p	MI0003170	0.92	1.41
hsa-miR-605	MI0003618	0.92	1.05
hsa-miR-155*	MI0000681	0.93	0.73
hsa-miR-134	MI0000474	0.93	0.84
hsa-miR-361	MI0000760	0.93	0.14
hsa-miR-29b-1*	MI0000105	0.93	0.80
hsa-miR-452*	MI0001733	0.93	1.02
hsa-miR-518a	MI0003173	0.93	0.60
hsa-miR-1231	MI0006321	0.94	0.54
hsa-miR-105	MI0000111	0.94	0.62
hsa-miR-411*	MI0003675	0.97	0.35
hsa-let-7b*	MI0000063	0.97	2.41
hsa-miR-516-3p	MI0003180	0.98	0.95
hsa-miR-149	MI0000478	0.99	0.93
hsa-miR-922	MI0005714	1.00	0.67
hsa-miR-374b*	MI0005566	1.01	0.33
hsa-let-7f	MI0000068	1.01	0.68
hsa-miR-934	MI0005756	1.03	0.51
hsa-miR-181a-2*	MI0000269	1.03	0.55
hsa-miR-515-3p	MI0003144	1.04	1.06
hsa-miR-10a*	MI0000266	1.05	0.53
hsa-miR-106a*	MI0000113	1.06	1.07
hsa-miR-128	MI0000727	1.06	0.46
hsa-miR-485-3p	MI0002469	1.06	0.16

hsa-miR-1227	MI0006316	1.07	1.09
hsa-miR-518d	MI0003171	1.07	0.63
hsa-miR-324-5p	MI0000813	1.07	1.41
hsa-miR-515-5p	MI0003147	1.08	0.88
hsa-miR-659	MI0003683	1.09	0.64
hsa-miR-211	MI0000287	1.10	0.43
hsa-miR-557	MI0003563	1.11	0.68
hsa-let-7f-1*	MI0000067	1.11	1.01
hsa-miR-377	MI0000785	1.13	1.80
hsa-miR-135a	MI0000452	1.13	1.29
hsa-miR-142-3p	MI0000458	1.14	1.63
hsa-miR-555	MI0003561	1.15	1.27
hsa-miR-548a	MI0003612	1.15	0.51
hsa-miR-214*	MI0000290	1.17	0.62
hsa-miR-526c	MI0003148	1.18	0.19
hsa-miR-518a	MI0003170	1.19	0.95
hsa-miR-323	MI0000807	1.19	0.84
hsa-miR-192*	MI0000234	1.21	0.73
hsa-let-7e*	MI0000066	1.23	0.76
hsa-miR-15a*	MI0000069	1.23	1.23
hsa-miR-335*	MI0000816	1.25	0.95
hsa-miR-612	MI0003625	1.25	1.30
hsa-miR-509-3p	MI0005530	1.26	1.10
hsa-miR-524*	MI0003160	1.27	0.23
hsa-miR-512-5p	MI0003140	1.31	1.31
hsa-miR-424*	MI0001446	1.32	1.64
hsa-miR-513a-3p	MI0003191	1.32	1.21
hsa-miR-193b	MI0003137	1.32	1.04
hsa-miR-155	MI0000681	1.33	0.71
hsa-miR-384	MI0001145	1.35	1.52
hsa-miR-29c	MI0000735	1.39	0.42
hsa-miR-96*	MI0000098	1.40	0.95
hsa-miR-544	MI0003515	1.42	0.34
hsa-miR-188	MI0000484	1.50	0.42
hsa-miR-101	MI0000739	1.50	1.14
hsa-let-7f-2*	MI0000068	1.53	0.32
hsa-miR-365	MI0000767	1.54	1.52
hsa-miR-367*	MI0000775	1.54	0.55
hsa-miR-154	MI0000480	1.55	0.32
hsa-miR-135a	MI0000453	1.58	1.43
hsa-miR-221	MI0000298	1.61	0.72
hsa-miR-34b*	MI0000742	1.71	1.27
hsa-miR-135a*	MI0000452	1.84	1.62
hsa-miR-376a*	MI0000784	1.87	0.42
hsa-miR-219-1-3p	MI0000296	1.92	1.24
hsa-miR-510	MI0003197	1.99	1.40
hsa-miR-1233	MI0006323	2.04	1.81
hsa-miR-499-3p	MI0003183	2.09	1.33
hsa-miR-101	MI0000103	2.25	2.60
hsa-miR-921	MI0005713	2.47	1.81
hsa-miR-938	MI0005760	2.52	3.26
hsa-miR-891b	MI0005534	2.57	1.20
hsa-miR-208	MI0000251	2.70	1.03
hsa-miR-630	MI0003644	2.84	3.94
hsa-miR-208b	MI0005570	3.12	1.56
hsa-miR-526b	MI0003150	3.27	2.95
hsa-miR-493-3p	MI0003132	3.47	4.81
hsa-miR-520d*	MI0003164	3.83	2.48
hsa-miR-542-3p	MI0003686	3.85	1.23

Table S2. Top Canonical Pathways affected by miR-542-3p in U2OS cells

Name	p-value	Ratio
p53 signaling	1.51E-12	21/96 (0.219)
Breast cancer regulation by Stathmin 1	6.80E-08	23/208(0.111)
Germ cell-Sertoli Cell junction Signaling	8.86E-07	19/167(0.114)
Biosynthesis of steroids	2.83E-06	7/121(0.058)
ERK/MAPK signaling	8.67E-06	19/204(0.093)

Table S3. Components of p53 signaling pathway that were significantly affected by miR-542-3p in U2OS cells

Gene	Fold Change (\log_2)
BIRC5 (survivin)	-2.95
PCNA	-1.06
Cdk2	-0.98
cyclin K	0.8
Pcaf	0.87
THBS1	0.89
Slug	0.92
SERPINB5	0.93
Cyclin G1	0.96
Cyclin D2	0.99
GADD45	1.01
Bax	1.12
p21CIP1	1.16
PIDD	1.26
Fas	1.31
DRAM1	1.35
ADCK3	1.46
p53R2	1.59
PIG3	1.66
TEAP	1.95
TIGAR	1.96

Table S4. Components of ribosome that were modulated by miR-542-3p in U2OS cells

Gene	Fold Change (log ₂)
RPL22	-1.93
RPS28	-1.85
RPS23	-1.83
RPL13A	-1.02
RPS29	-0.97
RPL28	-0.85