

Table S2 miRNA-reg of clusters

**SUPPLEMENTAL TABLE S2**

Correlation of expression of miRNAs identified and assayed in the iPS-derived neuronal cells with predicted target genes in each gene cluster from Fig. 5

Gene Cluster	miR	Enrichment p value	Correlation estimate	Adjusted	
				corr p value	Source
1	hsa-miR-96-5p	7.42E-05	-0.762666	0.013433	PicTar
	hsa-miR-590-3p	9.55E-05	0.5110724	0.143177	TargetScan
	hsa-miR-1271-5p	0.000388	-0.370493	0.297861	TargetScan
	hsa-miR-96-5p	0.000388	-0.762666	0.013433	TargetScan
	hsa-miR-218-5p	0.0004139	0.3713612	0.297861	TargetScan
	hsa-miR-130a-3p	0.003469	0.6967341	0.031496	PicTar
	hsa-miR-340-3p	0.004069	-0.943405	4.99E-05	TargetScan
	hsa-miR-340-5p	0.004069	0.7531593	0.014057	TargetScan
	hsa-miR-130b-3p	0.004069	0.7652058	0.013433	PicTar
	hsa-miR-130b-5p	0.004069	-0.657548	0.043926	PicTar
	hsa-miR-129-5p	0.005572	-0.57802	0.090475	TargetScan
	hsa-miR-181c-5p	0.00562	0.0385143	0.905406	TargetScan
	hsa-miR-181a-2-3p	0.00562	-0.648667	0.044994	TargetScan
	hsa-miR-181a-3p	0.00562	-0.928995	0.000101	TargetScan
	hsa-miR-181a-5p	0.00562	-0.174908	0.67045	TargetScan
	hsa-miR-181d	0.00562	-0.552599	0.107014	TargetScan
	hsa-miR-181b-3p	0.00562	-0.096156	0.799574	TargetScan
	hsa-miR-181b-5p	0.00562	-0.446227	0.218886	TargetScan
	hsa-miR-186-5p	0.006293	-0.146101	0.709629	PicTar
	hsa-miR-182-5p	0.006992	-0.388132	0.297861	PicTar
hsa-miR-204-5p	0.007355	0.2708666	0.473358	PicTar	
hsa-miR-9-3p	0.009041	0.9705853	3.96E-06	TargetScan	
hsa-miR-9-5p	0.009041	0.6675004	0.042493	TargetScan	
hsa-miR-138-5p	0.009041	0.7926051	0.012649	PicTar	
2	hsa-miR-330-3p	5.69E-06	-0.581719	0.20164	PicTar
	hsa-miR-30e-5p	5.69E-06	-0.758657	0.04229	PicTar
	hsa-miR-30c-1-3p	8.98E-06	0.033414	0.91789	PicTar
	hsa-miR-30c-2-3p	8.98E-06	0.504531	0.20164	PicTar
	hsa-miR-30c-5p	8.98E-06	0.472369	0.20164	PicTar
	hsa-miR-30b-3p	8.98E-06	0.077495	0.9009	PicTar
	hsa-miR-30b-5p	8.98E-06	-0.495324	0.20164	PicTar
	hsa-miR-30a-5p	8.98E-06	-0.212028	0.70618	PicTar
	hsa-miR-30d-3p	8.98E-06	0.516185	0.20164	PicTar
	hsa-miR-30d-5p	8.98E-06	-0.184965	0.70618	PicTar
3	hsa-miR-340-3p	5.27E-07	-0.553203	0.1081	TargetScan
	hsa-miR-340-5p	5.27E-07	0.976299	1.91E-06	TargetScan
	hsa-miR-139-5p	1.18E-05	-0.916503	0.0002	TargetScan

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hsa-miR-218-5p	4.70E-05	-0.228779	0.51529	TargetScan
hsa-miR-23b-3p	4.70E-05	-0.901911	0.00032	TargetScan
hsa-miR-23a-3p	4.70E-05	-0.899804	0.00034	TargetScan
hsa-miR-331-3p	6.74E-05	0.438131	0.21945	PicTar
hsa-miR-331-5p	6.74E-05	0.597375	0.08344	PicTar
hsa-miR-128	6.74E-05	-0.793403	0.0055	TargetScan
hsa-miR-141-3p	6.74E-05	-0.034628	0.92407	TargetScan
hsa-miR-200a-3p	6.74E-05	-0.490814	0.16146	TargetScan
hsa-miR-222-3p	6.74E-05	-0.937768	6.68E-05	TargetScan
hsa-miR-221-3p	6.74E-05	-0.851355	0.00149	TargetScan
hsa-miR-221-5p	6.74E-05	-0.978394	1.81E-06	TargetScan
hsa-miR-27a-3p	6.92E-05	-0.891332	0.00046	PicTar
hsa-miR-27a-5p	6.92E-05	-0.693027	0.02797	PicTar
hsa-miR-27b-3p	8.40E-05	-0.285345	0.44325	PicTar
hsa-miR-27b-5p	8.40E-05	-0.825409	0.00297	PicTar
hsa-miR-218-5p	0.0001106	-0.228779	0.51529	PicTar
hsa-miR-27b-3p	0.0001106	-0.285345	0.44325	TargetScan
hsa-miR-27b-5p	0.0001106	-0.825409	0.00297	TargetScan
hsa-miR-27a-3p	0.0001106	-0.891332	0.00046	TargetScan
hsa-miR-27a-5p	0.0001106	-0.693027	0.02797	TargetScan
hsa-miR-1271-5p	0.0001213	-0.572611	0.09489	TargetScan
hsa-miR-96-5p	0.0001213	-0.538605	0.11919	TargetScan
hsa-miR-196a-5p	0.0001213	0.939246	6.68E-05	miRTarbase
hsa-miR-141-3p	0.0001397	-0.034628	0.92407	PicTar
hsa-miR-96-5p	0.0006286	-0.538605	0.11919	PicTar
hsa-miR-136-3p	0.0006635	0.931589	8.85E-05	PicTar
hsa-miR-129-5p	0.0006646	-0.80516	0.00431	TargetScan
hsa-miR-26b-3p	0.0006907	-0.503373	0.15517	TargetScan
hsa-miR-26b-5p	0.0006907	-0.907029	0.00028	TargetScan
hsa-miR-26a-2-3p	0.0006907	0.231797	0.51529	TargetScan
hsa-miR-26a-5p	0.0006907	-0.859981	0.00125	TargetScan
hsa-miR-330-3p	0.0007595	-0.290725	0.44253	PicTar
hsa-miR-101-3p	0.0007595	0.230821	0.51529	TargetScan
hsa-miR-129-5p	0.0007595	-0.80516	0.00431	PicTar
hsa-miR-181c-5p	0.0007595	-0.568503	0.09527	TargetScan
hsa-miR-181a-2-3p	0.0007595	-0.233622	0.51529	TargetScan
hsa-miR-181a-3p	0.0007595	-0.914972	0.0002	TargetScan
hsa-miR-181a-5p	0.0007595	-0.619812	0.06785	TargetScan
hsa-miR-181d	0.0007595	-0.883602	0.00061	TargetScan
hsa-miR-181b-3p	0.0007595	-0.577972	0.09171	TargetScan
hsa-miR-181b-5p	0.0007595	-0.256558	0.49426	TargetScan
hsa-miR-204-5p	0.0007952	0.338719	0.35537	PicTar
hsa-miR-214-3p	0.001034	-0.962702	1.08E-05	TargetScan

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hsa-miR-214-5p	0.001034	-0.86998	0.00095	TargetScan
hsa-miR-125b-1-3p	0.001172	0.370887	0.31683	PicTar
hsa-miR-125b-5p	0.001172	-0.48714	0.16313	PicTar
hsa-miR-182-5p	0.001246	-0.347687	0.34717	PicTar
hsa-miR-221-3p	0.001332	-0.851355	0.00149	PicTar
hsa-miR-221-5p	0.001332	-0.978394	1.81E-06	PicTar
hsa-miR-200b-3p	0.001703	0.013471	0.96686	TargetScan
hsa-miR-200c-3p	0.001703	0.824454	0.00297	TargetScan
hsa-miR-342-3p	0.001821	-0.03765	0.92407	TargetScan
hsa-miR-217	0.001827	0.591828	0.08445	TargetScan
hsa-miR-32-5p	0.002386	0.379838	0.30473	PicTar
hsa-miR-185-5p	0.002468	0.589267	0.08502	TargetScan
hsa-miR-34a-5p	0.003063	0.594903	0.08344	PicTar
hsa-miR-26a-2-3p	0.003369	0.231797	0.51529	PicTar
hsa-miR-26a-5p	0.003369	-0.859981	0.00125	PicTar
hsa-miR-222-3p	0.003369	-0.937768	6.68E-05	PicTar
hsa-miR-32-5p	0.003369	0.379838	0.30473	TargetScan
hsa-miR-25-3p	0.003369	-0.498312	0.15899	TargetScan
hsa-miR-92a-1-5p	0.003369	-0.062245	0.88983	TargetScan
hsa-miR-92a-3p	0.003369	0.474252	0.1772	TargetScan
hsa-miR-92b-3p	0.003369	0.351844	0.34717	TargetScan
hsa-miR-363-3p	0.003369	0.811878	0.00398	TargetScan
hsa-miR-182-5p	0.003369	-0.347687	0.34717	TargetScan
hsa-miR-125a-3p	0.003376	-0.697788	0.02732	PicTar
hsa-miR-125a-5p	0.003376	-0.778246	0.00743	PicTar
hsa-miR-302a-3p	0.003517	-0.705678	0.02487	TargetScan
hsa-miR-302b-3p	0.003517	0.074309	0.87016	TargetScan
hsa-miR-302d-3p	0.003517	-0.708731	0.02432	TargetScan
hsa-miR-214-3p	0.003717	-0.962702	1.08E-05	PicTar
hsa-miR-214-5p	0.003717	-0.86998	0.00095	PicTar
hsa-miR-454-3p	0.004793	0.810268	0.00402	TargetScan
hsa-miR-454-5p	0.004793	0.059365	0.88983	TargetScan
hsa-miR-130a-3p	0.004793	0.452039	0.20217	TargetScan
hsa-miR-301b	0.004793	0.294104	0.44074	TargetScan
hsa-miR-301a-3p	0.004793	0.392051	0.29108	TargetScan
hsa-miR-301a-5p	0.004793	0.939103	6.68E-05	TargetScan
hsa-miR-130b-3p	0.004793	0.950614	3.58E-05	TargetScan
hsa-miR-130b-5p	0.004793	-0.117643	0.76907	TargetScan
hsa-miR-19b-3p	0.005611	0.768344	0.00886	TargetScan
hsa-miR-19a-3p	0.005611	0.854768	0.00143	TargetScan
hsa-miR-181c-5p	0.006783	-0.568503	0.09527	PicTar
hsa-miR-181a-2-3p	0.006895	-0.233622	0.51529	PicTar
hsa-miR-181a-3p	0.006895	-0.914972	0.0002	PicTar

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	hsa-miR-181a-5p	0.006895	-0.619812	0.06785	PicTar
	hsa-miR-181b-3p	0.006895	-0.577972	0.09171	PicTar
	hsa-miR-181b-5p	0.006895	-0.256558	0.49426	PicTar
	hsa-miR-204-5p	0.007446	0.338719	0.35537	TargetScan
	hsa-miR-26b-3p	0.007766	-0.503373	0.15517	PicTar
	hsa-miR-26b-5p	0.007766	-0.907029	0.00028	PicTar
	hsa-miR-34c-5p	0.008526	0.459981	0.19384	TargetScan
	hsa-miR-34a-5p	0.008526	0.594903	0.08344	TargetScan
	hsa-miR-23b-3p	0.008581	-0.901911	0.00032	PicTar
	hsa-miR-107	0.008931	0.490417	0.16146	TargetScan
	hsa-miR-107	0.009059	0.490417	0.16146	PicTar
	hsa-miR-136-3p	0.009935	0.931589	8.85E-05	TargetScan
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4	hsa-miR-20a-5p	0.001694	-0.022331	0.94508	TargetScan
	hsa-miR-106a-5p	0.001694	-0.177675	0.93195	TargetScan
	hsa-miR-17-5p	0.001694	-0.022866	0.94508	TargetScan
	hsa-miR-93-3p	0.001694	-0.169196	0.93195	TargetScan
	hsa-miR-93-5p	0.001694	-0.322188	0.6142	TargetScan
	hsa-miR-20b-5p	0.001694	-0.108762	0.94508	TargetScan
	hsa-miR-106b-3p	0.001694	-0.408841	0.52753	TargetScan
	hsa-miR-106b-5p	0.001694	0.649884	0.31026	TargetScan
	hsa-miR-34c-5p	0.0019	0.02272	0.94508	PicTar
	hsa-miR-34c-5p	0.004391	0.02272	0.94508	TargetScan
	hsa-miR-34a-5p	0.004391	0.407631	0.52753	TargetScan
	hsa-miR-34a-5p	0.005321	0.407631	0.52753	PicTar
	hsa-miR-1271-5p	0.007104	-0.568103	0.37781	TargetScan
	hsa-miR-96-5p	0.007104	-0.330935	0.6142	TargetScan
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5	hsa-miR-200b-3p	0.003944	-0.059457	0.85437	PicTar
	hsa-miR-200c-3p	0.003944	-0.637219	0.05167	PicTar
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6	hsa-miR-330-3p	5.69E-06	-0.149106	0.71525	PicTar
	hsa-miR-30e-5p	5.69E-06	0.153124	0.71525	PicTar
	hsa-miR-30c-1-3p	8.98E-06	0.59758	0.20086	PicTar
	hsa-miR-30c-2-3p	8.98E-06	0.168932	0.71525	PicTar
	hsa-miR-30c-5p	8.98E-06	0.269662	0.66109	PicTar
	hsa-miR-30b-3p	8.98E-06	0.447731	0.34799	PicTar
	hsa-miR-30b-5p	8.98E-06	0.622092	0.20086	PicTar
	hsa-miR-30a-5p	8.98E-06	-0.420045	0.34799	PicTar
	hsa-miR-30d-3p	8.98E-06	0.038971	0.90429	PicTar
	hsa-miR-30d-5p	8.98E-06	-0.483428	0.34799	PicTar
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7	hsa-let-7g-5p	2.05E-06	-0.729939	0.00704	PicTar

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	hsa-let-7f-5p	2.05E-06	-0.952921	3.37E-06	PicTar
	hsa-let-7a-5p	2.54E-06	-0.932076	1.35E-05	PicTar
	hsa-let-7b-5p	3.89E-06	-0.987149	1.08E-08	PicTar
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8	hsa-miR-218-5p	0.008504	0.939068	5.97E-06	TargetScan
9	hsa-miR-330-3p	5.69E-06	-0.192677	0.74824	PicTar
	hsa-miR-30e-5p	5.69E-06	-0.627535	0.14462	PicTar
	hsa-miR-30c-1-3p	8.98E-06	-0.063371	0.84488	PicTar
	hsa-miR-30c-2-3p	8.98E-06	0.173428	0.74824	PicTar
	hsa-miR-30c-5p	8.98E-06	0.169433	0.74824	PicTar
	hsa-miR-30b-3p	8.98E-06	0.112831	0.80777	PicTar
	hsa-miR-30b-5p	8.98E-06	-0.917938	0.00026	PicTar
	hsa-miR-30a-5p	8.98E-06	-0.339503	0.64379	PicTar
	hsa-miR-30d-3p	8.98E-06	0.394421	0.64379	PicTar
	hsa-miR-30d-5p	8.98E-06	0.312989	0.64379	PicTar
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10	hsa-miR-9-3p	3.54E-05	0.265191	0.46231	TargetScan
	hsa-miR-9-5p	3.54E-05	0.257567	0.46231	TargetScan
	hsa-miR-30b-3p	3.54E-05	0.400616	0.37057	PicTar
	hsa-miR-30b-5p	3.54E-05	0.459575	0.31829	PicTar
	hsa-miR-30c-1-3p	3.54E-05	0.514854	0.30235	PicTar
	hsa-miR-30c-2-3p	3.54E-05	0.492353	0.30235	PicTar
	hsa-miR-30c-5p	3.54E-05	0.63336	0.12359	PicTar
	hsa-miR-30a-5p	3.54E-05	-0.277453	0.46231	PicTar
	hsa-miR-30d-3p	3.54E-05	0.264025	0.46231	PicTar
	hsa-miR-30d-5p	3.54E-05	-0.696447	0.08335	PicTar
	hsa-miR-30e-5p	3.54E-05	-0.361047	0.41919	PicTar
	hsa-miR-124-3p	0.0004176	0.034399	0.91548	TargetScan
	hsa-miR-200b-3p	0.001493	0.108799	0.76019	TargetScan
	hsa-miR-200c-3p	0.001493	0.71592	0.08335	TargetScan
	hsa-miR-410	0.001493	0.689961	0.08335	TargetScan
	hsa-miR-214-3p	0.001906	-0.740528	0.08335	PicTar
	hsa-miR-214-5p	0.001906	-0.448506	0.31829	PicTar
	hsa-miR-29a-3p	0.002222	-0.265716	0.46231	TargetScan
	hsa-miR-30b-3p	0.003907	0.400616	0.37057	TargetScan
	hsa-miR-30b-5p	0.003907	0.459575	0.31829	TargetScan
	hsa-miR-30e-3p	0.003907	-0.133908	0.72343	TargetScan
	hsa-miR-30e-5p	0.003907	-0.361047	0.41919	TargetScan
	hsa-miR-30a-3p	0.003907	0.28996	0.46231	TargetScan
	hsa-miR-30a-5p	0.003907	-0.277453	0.46231	TargetScan
	hsa-miR-30d-3p	0.003907	0.264025	0.46231	TargetScan
	hsa-miR-30d-5p	0.003907	-0.696447	0.08335	TargetScan

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	hsa-miR-30c-1-3p	0.003907	0.514854	0.30235	TargetScan
	hsa-miR-30c-2-3p	0.003907	0.492353	0.30235	TargetScan
	hsa-miR-30c-5p	0.003907	0.63336	0.12359	TargetScan
	hsa-miR-129-5p	0.006007	-0.443018	0.31829	TargetScan
	hsa-miR-9-3p	0.00663	0.265191	0.46231	PicTar
	hsa-miR-9-5p	0.00663	0.257567	0.46231	PicTar
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11	hsa-miR-330-3p	5.69E-06	0.563038	0.2832	PicTar
	hsa-miR-30e-5p	5.69E-06	0.208421	0.64457	PicTar
	hsa-miR-30c-1-3p	8.98E-06	-0.444782	0.29478	PicTar
	hsa-miR-30c-2-3p	8.98E-06	-0.310386	0.46593	PicTar
	hsa-miR-30c-5p	8.98E-06	-0.477412	0.29129	PicTar
	hsa-miR-30b-3p	8.98E-06	-0.343861	0.45629	PicTar
	hsa-miR-30b-5p	8.98E-06	-0.487383	0.29129	PicTar
	hsa-miR-30a-5p	8.98E-06	0.137324	0.70523	PicTar
	hsa-miR-30d-3p	8.98E-06	-0.122179	0.70523	PicTar
	hsa-miR-30d-5p	8.98E-06	0.573684	0.2832	PicTar
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12	hsa-miR-330-3p	5.69E-06	-0.817351	0.00265	PicTar
	hsa-miR-30e-5p	5.69E-06	-0.966323	3.22E-06	PicTar
	hsa-miR-30c-1-3p	8.98E-06	0.572236	0.06483	PicTar
	hsa-miR-30c-2-3p	8.98E-06	0.81227	0.00265	PicTar
	hsa-miR-30c-5p	8.98E-06	0.894198	0.00044	PicTar
	hsa-miR-30b-3p	8.98E-06	0.594428	0.0593	PicTar
	hsa-miR-30b-5p	8.98E-06	-0.348684	0.26665	PicTar
	hsa-miR-30a-5p	8.98E-06	-0.848862	0.0016	PicTar
	hsa-miR-30d-3p	8.98E-06	0.736214	0.01055	PicTar
	hsa-miR-30d-5p	8.98E-06	-0.516486	0.09508	PicTar