

**Table S1. EBV-regulated miRNAs during primary B cell outgrowth.** Exiqon v10.0 miRNA microarray data was analyzed using statistical analysis of microarrays (SAM) as described in the Methods section. Those miRNAs whose expression changed between any two groups of B, Prolif, or LCL with a false discovery rate less than or equal to 5% generated the universe of EBV-regulated miRNAs shown below. EBV-induced or EBV-repressed miRNAs were those which increased or decreased, respectively, in either B to Prolif, Prolif to LCL, or B to LCL with a p-value <0.05. Proliferation-defining miRNAs were those whose expression was significantly different (p<0.05) between the Prolif sample and the B and LCL samples combined. The asterisks refer to star strands of miRNAs. Often both guide and star strands would be detected, but occasionally only the star strand met statistical significance.

**EBV-induced cellular miRNAs (ranked by B to LCL fold-change)**

Cellular miRNA Name	B to Prolif		Prolif to LCL		B to LCL	
	Fold Increased	p-value	Fold Increased	p-value	Fold Increased	p-value
hsa-miR-155*	48.39	0.000	1.66	0.298	80.50	0.007
hsa-miR-597	63.32	0.001	0.68	0.732	43.12	0.048
hsa-miR-542-5p	0.91	0.487	26.21	0.042	23.77	0.047
hsa-miR-886-5p	7.73	0.000	2.09	0.114	16.18	0.007
hsa-miR-519e	22.83	0.002	0.41	0.128	9.40	0.011
hsa-miR-299-3p	11.48	0.124	0.76	0.800	8.68	0.001
hsa-miR-21*	2.04	0.018	3.70	0.001	7.55	0.001
hsa-miR-605	4.88	0.010	1.49	0.617	7.27	0.098
hsa-miR-34a	2.18	0.032	3.28	0.007	7.13	0.004
hsa-miR-193b	4.42	0.002	1.61	0.012	7.11	0.001
hsa-miR-886-3p	3.95	0.000	1.68	0.205	6.62	0.018
hsa-miR-181b	2.07	0.244	3.14	0.128	6.51	0.038
hsa-miR-155	2.81	0.005	2.12	0.014	5.97	0.001
hsa-miR-146a	1.55	0.159	3.79	0.026	5.85	0.008
hsa-miR-181a*	1.21	0.386	4.61	0.163	5.57	0.141
hsa-miR-146b-5p	1.48	0.266	3.20	0.025	4.73	0.011
hsa-miR-18b	10.22	0.035	0.45	0.100	4.61	0.058
hsa-miR-198	0.36	0.035	12.33	0.014	4.39	0.035
hsa-miR-18a	7.79	0.064	0.56	0.151	4.37	0.098
hsa-miR-301a	22.25	0.000	0.19	0.082	4.24	0.106
hsa-miR-508-5p	2.72	0.021	1.47	0.552	3.99	0.121
hsa-miR-596	1.48	0.351	2.67	0.142	3.96	0.070
hsa-miR-30c-1*	0.75	0.402	4.91	0.080	3.70	0.096
hsa-miR-583	1.09	0.710	3.37	0.025	3.67	0.016
hsa-miR-138	0.79	0.484	4.58	0.013	3.60	0.011
hsa-miR-933	3.40	0.001	1.06	0.704	3.58	0.001

hsa-miR-675	0.37	0.079	9.59	0.009	3.58	0.042
hsa-miR-21	2.22	0.059	1.55	0.068	3.43	0.018
hsa-miR-220b	7.72	0.001	0.44	0.061	3.36	0.020
hsa-miR-302c*	3.14	0.096	0.98	0.975	3.09	0.036
hsa-miR-494	3.30	0.006	0.93	0.728	3.07	0.008
hsa-miR-326	0.80	0.293	3.71	0.093	2.96	0.144
hsa-miR-589	7.10	0.152	0.41	0.063	2.93	0.342
hsa-miR-337-3p	6.76	0.002	0.39	0.015	2.62	0.017
hsa-miR-193b*	0.95	0.816	2.75	0.015	2.62	0.017
hsa-miR-16-2*	0.87	0.460	2.95	0.033	2.57	0.064
hsa-miR-363*	3.11	0.000	0.82	0.235	2.56	0.006
hsa-miR-7	5.91	0.012	0.35	0.013	2.06	0.048
hsa-miR-106b*	6.73	0.008	0.29	0.008	1.98	0.034
hsa-miR-17*	5.76	0.001	0.33	0.134	1.92	0.290
hsa-miR-425	4.65	0.008	0.40	0.174	1.86	0.296
hsa-miR-659	0.46	0.046	3.31	0.012	1.52	0.231

**EBV-repressed cellular miRNAs (ranked by B to LCL fold-change)**

Cellular miRNA Name	B to Prolif		Prolif to LCL		B to LCL	
	Fold Decreased	p-value	Fold Decreased	p-value	Fold Decreased	p-value
hsa-miR-223	14.48	0.011	2.86	0.021	41.44	0.002
hsa-miR-154	19.41	0.002	1.49	0.529	28.86	0.011
hsa-miR-100	4.31	0.004	3.42	0.009	14.77	0.001
hsa-let-7b	9.15	0.003	1.56	0.214	14.31	0.001
hsa-miR-28-5p	3.95	0.104	3.35	0.116	13.26	0.019
hsa-miR-150	11.18	0.000	1.18	0.614	13.18	0.004
hsa-miR-10b	5.05	0.003	2.32	0.113	11.70	0.007
hsa-miR-199a-3p	5.23	0.004	1.99	0.070	10.42	0.002
hsa-miR-497	3.35	0.011	2.96	0.016	9.91	0.000
hsa-miR-126*	5.24	0.004	1.81	0.074	9.50	0.001
hsa-miR-99a	2.97	0.018	3.06	0.028	9.09	0.007
hsa-let-7g	5.16	0.002	1.72	0.242	8.86	0.015
hsa-miR-199a-5p	4.91	0.003	1.75	0.127	8.58	0.003
hsa-miR-151-5p	3.68	0.128	2.31	0.202	8.49	0.040
hsa-miR-145	4.93	0.009	1.70	0.141	8.37	0.003
hsa-miR-199b-5p	4.33	0.003	1.79	0.192	7.74	0.009
hsa-miR-10a	4.23	0.007	1.59	0.392	6.73	0.031
hsa-miR-335	5.19	0.002	1.27	0.698	6.59	0.064
hsa-miR-125b	4.96	0.010	1.30	0.689	6.44	0.056
hsa-miR-342-3p	1.88	0.061	3.42	0.154	6.43	0.066
hsa-miR-101	3.86	0.003	1.56	0.183	6.04	0.004

hsa-miR-26a	3.73	0.000	1.58	0.192	5.89	0.011
hsa-miR-144	4.61	0.006	1.27	0.508	5.85	0.009
hsa-miR-143	4.24	0.005	1.33	0.535	5.63	0.025
hsa-miR-99b	2.69	0.031	2.03	0.053	5.45	0.000
hsa-miR-768-5p	4.41	0.072	1.22	0.045	5.39	0.056
hsa-miR-152	2.41	0.010	2.11	0.062	5.09	0.007
hsa-miR-452	2.74	0.127	1.77	0.030	4.85	0.058
hsa-miR-202	3.19	0.048	1.38	0.440	4.40	0.013
hsa-miR-26b	3.06	0.000	1.43	0.206	4.36	0.011
hsa-miR-196a*	2.17	0.007	1.99	0.007	4.32	0.001
hsa-miR-145*	2.16	0.015	1.98	0.079	4.28	0.011
hsa-miR-190	2.16	0.023	1.97	0.032	4.27	0.001
hsa-miR-29c*	2.31	0.131	1.80	0.006	4.16	0.053
hsa-miR-768-3p	3.07	0.001	1.35	0.094	4.14	0.001
hsa-miR-126	4.78	0.004	0.85	0.719	4.08	0.038
hsa-miR-193a-3p	3.80	0.008	1.00	0.995	3.81	0.024
hsa-miR-455-5p	2.13	0.143	1.77	0.137	3.78	0.039
hsa-miR-140-5p	3.07	0.098	1.22	0.554	3.74	0.057
hsa-miR-133b	1.72	0.079	2.17	0.027	3.74	0.007
hsa-miR-133a	1.44	0.167	2.59	0.046	3.73	0.035
hsa-miR-195	1.59	0.193	2.30	0.030	3.65	0.016
hsa-miR-486-5p	2.32	0.060	1.57	0.207	3.65	0.018
hsa-miR-140-3p	2.78	0.088	1.30	0.170	3.63	0.044
hsa-miR-708	1.76	0.058	2.04	0.045	3.60	0.001
hsa-miR-143*	1.54	0.158	2.34	0.064	3.59	0.037
hsa-miR-144*	1.36	0.172	2.59	0.055	3.54	0.043
hsa-miR-196a	1.73	0.087	2.04	0.043	3.53	0.012
hsa-miR-455-3p	1.51	0.161	2.33	0.079	3.51	0.046
hsa-let-7i	2.74	0.007	1.27	0.314	3.49	0.012
hsa-miR-335*	2.81	0.002	1.23	0.539	3.47	0.034
hsa-miR-30e*	3.77	0.041	0.91	0.829	3.44	0.025
hsa-miR-29c	3.08	0.013	1.07	0.762	3.31	0.009
hsa-miR-151-3p	1.40	0.014	2.33	0.014	3.27	0.005
hsa-miR-15a	1.32	0.111	2.22	0.047	2.94	0.028
hsa-miR-147	1.19	0.117	2.36	0.022	2.80	0.020
hsa-miR-424	4.14	0.007	0.68	0.398	2.80	0.085
hsa-miR-23a	3.18	0.015	0.81	0.558	2.58	0.062
hsa-miR-130a	3.79	0.007	0.27	0.007	1.03	0.911

**Proliferation-defining miRNAs (ranked by B to Prolif fold-change)**

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hsa-miR-589	7.10	0.152	0.41	0.063	2.93	0.342
hsa-miR-337-3p	6.76	0.002	0.39	0.015	2.62	0.017
hsa-miR-106b*	6.73	0.008	0.29	0.008	1.98	0.034
hsa-miR-7	5.91	0.012	0.35	0.013	2.06	0.048
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hsa-miR-425	4.65	0.008	0.40	0.174	1.86	0.296
hsa-miR-363*	3.11	0.000	0.82	0.235	2.56	0.006
hsa-miR-659	0.46	0.046	3.31	0.012	1.52	0.231
hsa-miR-675	0.37	0.079	9.59	0.009	3.58	0.042
hsa-miR-198	0.36	0.035	12.33	0.014	4.39	0.035
hsa-miR-130a	0.26	0.007	3.68	0.007	0.97	0.911
hsa-miR-424	0.24	0.007	1.48	0.398	0.36	0.085