

Expression profiling of peripheral blood miRNA using RNAseq technology in dairy cows with *Escherichia coli*-induced mastitis

Zhuo-Ma Luoreng^{1, 2}, Xing-Ping Wang^{1, 2}, Chugang Mei¹ and Lin-Sen Zan^{1,*}

¹ College of Animal Science and Technology, National Beef Cattle Improvement Center, Northwest A&F University, Yangling Shaanxi, China;

² Key Laboratory of Zoology in Hunan Higher Education, College of Life Science, Hunan University of Arts and Science, Changde Hunan, China.

* Corresponding author. zanlinsen@163.com; Tel: +86-29-87091923.

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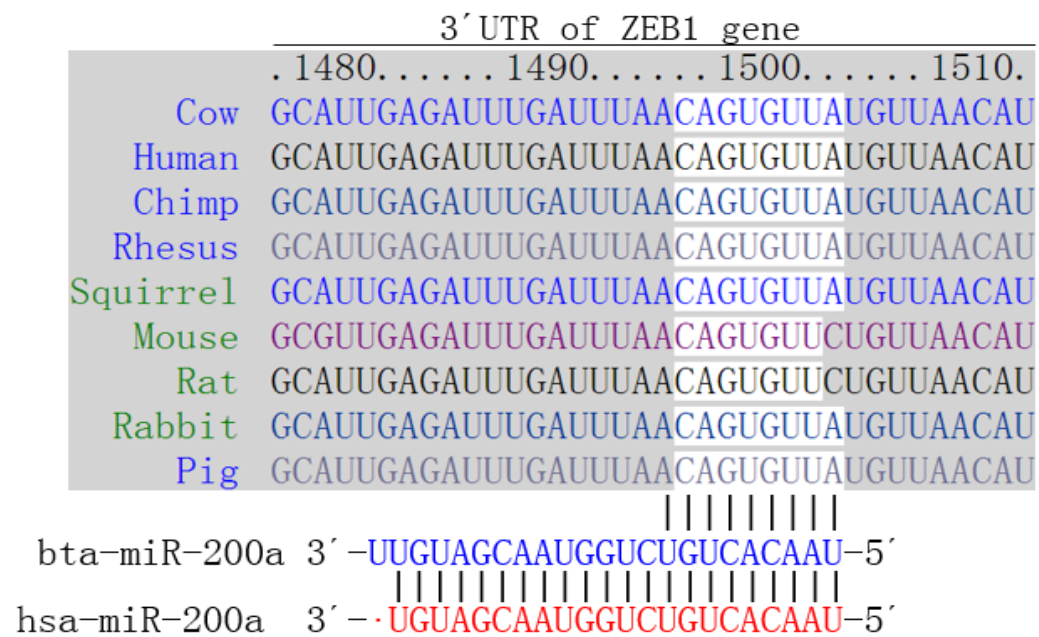


Figure S1 Conservative analysis of bta-miR-200a among different species and prediction of ZEB1 target genes

Table S1 The list of primers used for the qPCR validation

microRNA name	Sequence accession number	Primer sequence (5'→3')
bta-miR-200a	MIMAT0003822	GGGGTAACACTGTCTGGTAACGATG
bta-miR-205	MIMAT0003545	GTCCTTCATTCCACCGGAGTCTG
bta-miR-122	MIMAT0003849	GGGTGGAGTGTGACAATGGTGTTT
bta-miR-214	MIMAT0003825	ACAGCAGGCACAGACAGGCAGT
bta-miR-145	MIMAT0003542	AGTCCAGTTTTCCCAGGAATCCC
conservative_15_7229	-	GGGGGTGAAAAGTTAGTTTGGGTT
bta-miR-342	MIMAT0003846	TCTCACACAGAAATCGCACCCAT
bta-miR-326	MIMAT0009286	CCTCTCGGCCCTTCCTCCAG
conservative_X_30752	-	CCCTGTGGCCTAGTGGTTAGGATT
bta-miR-331-3p	MIMAT0004339	CCCCCTGGGCCTATCCTAGAA

Table S2 The number of the known and novel miRNA detected by RNAseq

Samples	Known-miRNAs	Novel-miRNAs	Total
0 d	513	1597	2110
1 d	500	1467	1967
3 d	484	1406	1890
5 d	480	1370	1850
7 d	370	1070	1440
Total	628	1788	2416

Table S3 The expression level (TPM) of the most abundant miRNAs

miRNA ID	BE0	BE1	BE3	BE5	BE7
bta-miR-486	150510.3229	150893.0611	112921.0136	126257.277	138342.6275
bta-miR-451	131565.5805	161225.6791	243239.166	127508.3267	138038.3478
bta-miR-92a	74916.67953	63752.91663	43007.97123	71269.37197	65422.37428
bta-let-7f	70904.34711	68249.1957	57174.0416	87197.19368	75932.26683
bta-miR-25	67427.36572	54611.97065	41230.02103	56160.78259	55489.44485
bta-let-7i	60829.48402	57921.59639	50792.55195	68162.86587	55472.37674
bta-let-7g	51460.54483	49146.93842	46890.68742	60764.66934	48872.70715
bta-miR-26a	42617.6676	40747.55714	37804.27764	42854.18925	48434.11765
bta-miR-21-5p	34399.52597	40543.13996	55483.89779	49861.62348	48090.9267
bta-miR-191	24882.73572	21256.09076	15849.40012	23419.45069	20764.2714
bta-let-7a-5p	21994.56307	19770.04004	15545.78664	24883.75092	26466.23963
bta-miR-185	17433.67455	18702.26177	15565.62502	17755.31723	18757.24442
bta-miR-103	16479.67781	17490.06565	15984.12861	14616.32144	13678.16065
bta-miR-101	15345.72808	17717.62864	24179.62257	17892.75844	21156.73636
bta-miR-423-3p	15232.16463	13387.49003	9700.364543	14118.54009	14797.44267
bta-miR-93	13427.76251	13430.11127	11974.10177	11834.61372	8587.90133
bta-miR-148a	12492.43498	14595.49144	13466.37929	14882.34304	17552.01227
bta-miR-30d	10273.57636	10371.56886	9880.031272	11264.96125	10137.13719
bta-miR-16b	8827.076696	8253.015884	9747.459135	7280.839848	5223.55314
bta-miR-20a	8493.854027	9608.206649	9977.153085	9422.894595	6606.171727
bta-miR-16a	7991.925429	7029.883559	7598.876216	6925.717751	5548.456824
bta-miR-199a-3p	7454.25212	6867.113853	6108.927547	6509.062161	7199.390181
bta-miR-151-3p	6834.798555	6502.998094	6166.976375	6578.078127	8659.628035
bta-let-7b	5971.597936	5261.43901	4433.01562	5818.311777	5824.797669
bta-miR-99a-5p	5803.301819	5504.132912	5467.544064	5306.943833	7337.459007
bta-miR-186	5618.704292	5202.638173	6305.241266	5697.115408	4632.163413
bta-miR-142-5p	5316.99161	5954.98927	7087.218493	5708.732932	9547.169807
bta-miR-140	4553.238696	5440.238499	6048.722374	3611.474569	4862.278123
bta-let-7d	4396.326245	3985.198668	3174.485979	4394.279059	5492.985464
bta-miR-30e-5p	4391.681709	4340.40067	8082.070175	5628.690164	5693.73896
bta-miR-423-5p	4055.590357	3841.155343	3191.650491	3781.405464	3818.075475
bta-miR-17-5p	3863.980492	4170.589844	4100.938373	3782.488454	3028.573745
bta-miR-339a	3679.018688	4609.011884	5604.687654	3679.112185	5790.661447
bta-miR-128	3590.726975	3099.590641	2366.373841	4116.836844	5863.200919
bta-miR-30c	3577.339784	4324.146171	4817.017674	3819.507003	4249.350066
bta-miR-181a	3559.53573	2839.668468	2705.782664	2611.776821	2716.06476
bta-miR-339b	3553.160877	4446.391988	5537.668428	3625.159618	5872.141358
bta-miR-148b	3312.555715	3711.269162	3505.183165	3235.578764	3496.422859
bta-miR-221	2960.390625	2697.797403	2539.657786	2622.902077	2520.289463
bta-miR-27b	2814.998444	3065.358816	2642.64486	2549.849514	2894.365563
bta-miR-2284x	2346.947636	2003.348277	2029.983902	1936.975919	2241.510317
bta-miR-150	2145.866561	2344.767662	3471.716679	1759.464097	2240.799145
bta-miR-26b	2097.190006	1871.589458	1922.856644	1834.387279	2036.692984
bta-miR-7	2016.77579	1905.072228	2308.066251	2691.425775	1523.735291
bta-miR-98	1970.330433	1955.408741	1705.842006	2424.813455	2460.144691
bta-miR-15b	1844.336018	1577.285648	1253.440665	1112.427107	1186.233715
bta-miR-320a	1628.77492	1437.736655	1330.120321	1535.974449	1295.144519
bta-miR-425-5p	1479.603362	1379.235439	1543.943567	1152.596172	1199.136394
bta-miR-199b	1446.408592	1652.940229	2366.632602	1599.772375	1734.038802
unconservative_3_22065	1379.336033	1265.22923	1243.003952	1315.832223	1530.643812
bta-miR-22-3p	1308.028749	1142.309262	1336.848119	1129.164218	1731.905288
bta-miR-107	1279.888327	1224.031191	1280.093099	1062.412684	1161.850699

Table S4 DIE-miRNAs of peripheral blood at different times of mastitis caused by *E.coli*

Comparison	ID	PValue	FDR	log2FC	regulated
BE1_vs_BE3	conservative_8_28698	0.0000	0.0001	2.0781	up
	bta-miR-592	0.0000	0.0001	1.9039	up
	conservative_15_6824	0.0000	0.0000	1.7884	up
	unconservative_1_828	0.0003	0.0031	1.7341	up
	conservative_16_7575	0.0000	0.0001	1.5540	up
	conservative_21_15210	0.0000	0.0001	1.5540	up
	conservative_26_19461	0.0002	0.0021	1.4836	up
	bta-miR-144	0.0000	0.0000	1.3833	up
	unconservative_6_26259	0.0000	0.0000	1.3804	up
	unconservative_X_31822	0.0000	0.0000	1.3780	up
	unconservative_1_583	0.0003	0.0031	1.3255	up
	conservative_15_6626	0.0000	0.0000	1.3104	up
	conservative_GJ059782.1_31949	0.0000	0.0000	1.3104	up
	conservative_5_24955	0.0002	0.0021	1.2739	up
	unconservative_21_15048	0.0000	0.0001	1.2717	up
	unconservative_22_15497	0.0000	0.0001	1.2717	up
	unconservative_6_26329	0.0000	0.0001	1.2717	up
	bta-miR-324	0.0010	0.0089	1.1629	up
	bta-miR-147	0.0000	0.0000	1.1604	up
	bta-miR-19a	0.0000	0.0000	1.1217	up
	conservative_23_16675	0.0000	0.0000	1.0806	up
	conservative_8_28986	0.0001	0.0007	1.0742	up
	conservative_6_26445	0.0007	0.0067	1.0723	up
	bta-miR-19b	0.0000	0.0000	1.0637	up
	unconservative_1_1055	0.0001	0.0016	1.0418	up
	unconservative_10_1780	0.0001	0.0016	1.0418	up
	conservative_2_13801	0.0010	0.0089	1.0375	up
	conservative_1_1070	0.0000	0.0004	1.0252	up
	bta-miR-29d-5p	0.0000	0.0000	1.0240	up
	bta-miR-200a	0.0000	0.0000	-25.3476	down
	conservative_18_9441	0.0003	0.0034	-3.7026	down
	conservative_7_26926	0.0005	0.0046	-2.8840	down
	bta-miR-205	0.0000	0.0000	-2.6311	down
	bta-miR-2398	0.0001	0.0014	-1.8410	down
	bta-miR-2450a	0.0005	0.0047	-1.4663	down
	bta-miR-2331-5p	0.0006	0.0059	-1.3815	down
	conservative_9_29482	0.0009	0.0080	-1.3409	down
	unconservative_19_12123	0.0000	0.0002	-1.3371	down
	unconservative_19_12124	0.0000	0.0002	-1.3371	down
	conservative_22_16072	0.0002	0.0018	-1.2490	down
	bta-miR-2346	0.0004	0.0035	-1.2115	down
	conservative_14_5901	0.0000	0.0001	-1.1998	down
	conservative_20_14087	0.0000	0.0001	-1.1783	down
	conservative_21_14891	0.0000	0.0000	-1.1633	down
	bta-miR-2443	0.0002	0.0016	-1.1556	down
	bta-miR-2299-3p	0.0001	0.0006	-1.0558	down
	conservative_26_19293	0.0000	0.0006	-1.0189	down
BE1_vs_BE5	bta-miR-122	0.0000	0.0000	2.7407	up
	conservative_16_7575	0.0002	0.0023	1.3204	up
	conservative_21_15210	0.0002	0.0023	1.3204	up
	conservative_5_24955	0.0002	0.0023	1.3204	up
	conservative_2_12879	0.0000	0.0000	-3.6601	down
	conservative_18_9908	0.0000	0.0000	-3.5847	down
	conservative_16_8161	0.0000	0.0000	-3.5562	down

	conservative_X_30752	0.0000	0.0000	-3.0616	down
	conservative_19_10913	0.0000	0.0003	-2.8785	down
	conservative_15_7229	0.0001	0.0012	-1.8536	down
	bta-miR-331-3p	0.0000	0.0000	-1.5635	down
	bta-miR-345-5p	0.0001	0.0009	-1.4536	down
	conservative_29_20462	0.0001	0.0015	-1.3255	down
	conservative_GJ059766.1_31932	0.0001	0.0015	-1.3255	down
	bta-miR-326	0.0000	0.0000	-1.2634	down
	conservative_14_6599	0.0007	0.0080	-1.2576	down
	conservative_11_2879	0.0002	0.0030	-1.1441	down
	conservative_11_2880	0.0002	0.0030	-1.1441	down
	bta-miR-193b	0.0000	0.0001	-1.1346	down
	bta-miR-500	0.0001	0.0015	-1.0796	down
	conservative_29_21194	0.0002	0.0031	-1.0345	down
	conservative_20_14087	0.0001	0.0010	-1.0319	down
BE1_vs_BE7	bta-miR-214	0.0000	0.0000	4.1947	up
	bta-miR-122	0.0000	0.0000	3.6483	up
	bta-miR-96	0.0006	0.0058	3.0248	up
	bta-miR-205	0.0000	0.0000	2.7724	up
	bta-miR-182	0.0000	0.0000	2.6560	up
	bta-miR-200a	0.0000	0.0000	2.5841	up
	bta-miR-183	0.0000	0.0003	2.5773	up
	bta-miR-141	0.0009	0.0083	2.5552	up
	conservative_19_11018	0.0000	0.0000	2.0387	up
	bta-miR-143	0.0000	0.0000	1.8834	up
	conservative_16_7720	0.0005	0.0046	1.8321	up
	conservative_23_16138	0.0005	0.0046	1.8321	up
	bta-miR-199a-5p	0.0000	0.0000	1.7171	up
	bta-miR-10b	0.0000	0.0000	1.7110	up
	conservative_1_456	0.0001	0.0013	1.4397	up
	conservative_15_7037	0.0007	0.0072	1.4397	up
	conservative_19_11971	0.0002	0.0020	1.3617	up
	bta-miR-126-3p	0.0000	0.0000	1.3587	up
	conservative_3_21957	0.0003	0.0029	1.3573	up
	conservative_21_14623	0.0001	0.0015	1.3328	up
	conservative_16_7575	0.0002	0.0021	1.3272	up
	conservative_21_15210	0.0002	0.0021	1.3272	up
	bta-miR-3613a	0.0000	0.0000	1.2767	up
	bta-miR-126-5p	0.0006	0.0059	1.2698	up
	bta-miR-144	0.0000	0.0000	1.2485	up
	bta-miR-2388-5p	0.0001	0.0007	1.2255	up
	unconservative_3_22546	0.0001	0.0013	1.2084	up
	conservative_5_24955	0.0007	0.0063	1.2053	up
	unconservative_1_1055	0.0000	0.0004	1.2027	up
	unconservative_10_1780	0.0000	0.0004	1.2027	up
	conservative_7_26976	0.0000	0.0000	1.2005	up
	bta-miR-145	0.0000	0.0000	1.1645	up
	unconservative_15_7390	0.0000	0.0000	1.1380	up
	unconservative_4_23513	0.0000	0.0000	1.1380	up
	conservative_19_10913	0.0000	0.0000	-4.4183	down
	unconservative_1_583	0.0004	0.0039	-3.6477	down
	bta-miR-380-3p	0.0008	0.0075	-1.9387	down
	bta-miR-1388-3p	0.0002	0.0026	-1.1950	down
	conservative_29_20462	0.0005	0.0051	-1.1197	down
	conservative_23_16212	0.0001	0.0011	-1.0908	down
	conservative_4_23553	0.0000	0.0000	-1.0604	down
	bta-miR-331-3p	0.0000	0.0000	-1.0079	down

BE3_vs_BE5	bta-miR-223	0.0000	0.0000	-1.0026	down
	bta-miR-200a	0.0000	0.0000	25.1570	up
	conservative_17_9303	0.0004	0.0035	3.7750	up
	bta-miR-205	0.0000	0.0000	2.8075	up
	bta-miR-122	0.0000	0.0000	2.7342	up
	bta-miR-182	0.0000	0.0003	2.3064	up
	conservative_5_25375	0.0009	0.0073	1.7757	up
	conservative_10_2574	0.0006	0.0055	1.5694	up
	conservative_10_2578	0.0006	0.0055	1.5694	up
	conservative_19_11018	0.0000	0.0001	1.5576	up
	unconservative_25_18988	0.0004	0.0038	1.3201	up
	bta-miR-2397-5p	0.0000	0.0001	1.3142	up
	conservative_14_5901	0.0000	0.0001	1.2810	up
	bta-miR-125a	0.0000	0.0000	1.2681	up
	conservative_21_14891	0.0000	0.0002	1.1129	up
	unconservative_19_12123	0.0008	0.0065	1.0890	up
	unconservative_19_12124	0.0008	0.0065	1.0890	up
	conservative_15_6875	0.0003	0.0030	1.0333	up
	conservative_19_10913	0.0000	0.0000	-3.5815	down
	conservative_2_12879	0.0000	0.0000	-3.5681	down
	conservative_18_9908	0.0000	0.0000	-3.5266	down
	conservative_16_8161	0.0000	0.0000	-3.4837	down
	conservative_X_30752	0.0000	0.0000	-3.3583	down
	conservative_2_13305	0.0000	0.0001	-2.6672	down
	conservative_2_13306	0.0000	0.0001	-2.6672	down
	conservative_19_11021	0.0003	0.0030	-2.5459	down
	bta-miR-331-3p	0.0000	0.0000	-2.5008	down
	conservative_15_7229	0.0000	0.0000	-2.4531	down
	unconservative_19_11205	0.0009	0.0073	-2.3939	down
	conservative_11_2998	0.0009	0.0076	-2.1311	down
	bta-miR-324	0.0000	0.0002	-2.1310	down
	conservative_26_19461	0.0000	0.0003	-2.0892	down
	bta-miR-345-5p	0.0000	0.0000	-1.9683	down
	conservative_15_6626	0.0000	0.0000	-1.8795	down
	conservative_GJ059782.1_31949	0.0000	0.0000	-1.8795	down
	conservative_2_13801	0.0000	0.0002	-1.8448	down
	unconservative_12_4106	0.0000	0.0002	-1.8448	down
	bta-miR-326	0.0000	0.0000	-1.8380	down
	bta-miR-30b-5p	0.0000	0.0000	-1.8113	down
	conservative_12_4159	0.0003	0.0023	-1.7634	down
	bta-miR-592	0.0001	0.0010	-1.6351	down
	bta-miR-500	0.0000	0.0000	-1.5621	down
	bta-miR-29d-5p	0.0000	0.0000	-1.5403	down
	conservative_14_6599	0.0001	0.0006	-1.5253	down
	bta-miR-193b	0.0000	0.0000	-1.4872	down
	bta-miR-1246	0.0000	0.0000	-1.3829	down
	bta-miR-29c	0.0000	0.0000	-1.3743	down
	conservative_23_16728	0.0000	0.0000	-1.3699	down
	conservative_GJ059766.1_31932	0.0001	0.0009	-1.3656	down
	conservative_X_31314	0.0000	0.0000	-1.3452	down
	conservative_18_10335	0.0000	0.0000	-1.3412	down
	bta-miR-210	0.0000	0.0000	-1.3371	down
	bta-miR-138	0.0000	0.0001	-1.2731	down
	conservative_24_17568	0.0000	0.0000	-1.2686	down
	conservative_1_201	0.0000	0.0000	-1.2405	down
	bta-miR-2903	0.0000	0.0001	-1.2060	down
	conservative_5_24889	0.0000	0.0000	-1.2034	down

BE3_vs_BE7	conservative_19_10772	0.0000	0.0000	-1.1621	down
	conservative_8_28770	0.0003	0.0028	-1.1448	down
	conservative_X_30913	0.0005	0.0040	-1.1311	down
	conservative_11_3520	0.0000	0.0002	-1.1223	down
	bta-miR-23a	0.0000	0.0000	-1.1205	down
	conservative_5_24983	0.0012	0.0096	-1.1140	down
	bta-let-7a-3p	0.0000	0.0000	-1.1046	down
	bta-miR-144	0.0000	0.0000	-1.0948	down
	conservative_1_1070	0.0001	0.0007	-1.0571	down
	conservative_25_18603	0.0000	0.0000	-1.0571	down
	bta-miR-1388-3p	0.0001	0.0005	-1.0436	down
	bta-miR-106b	0.0000	0.0000	-1.0295	down
	bta-miR-652	0.0000	0.0000	-1.0156	down
	bta-miR-200a	0.0000	0.0000	27.9317	up
	bta-miR-196a	0.0000	0.0005	23.5394	up
	bta-miR-205	0.0000	0.0000	5.4034	up
	bta-miR-214	0.0000	0.0000	4.9903	up
	bta-miR-183	0.0000	0.0000	4.6948	up
	bta-miR-182	0.0000	0.0000	3.9551	up
	unconservative_4_23546	0.0007	0.0056	3.6949	up
	bta-miR-122	0.0000	0.0000	3.6418	up
	conservative_19_11018	0.0000	0.0000	2.6748	up
	conservative_21_14623	0.0000	0.0000	2.5216	up
	bta-miR-10b	0.0000	0.0000	2.4381	up
	bta-miR-143	0.0000	0.0000	2.3977	up
	bta-miR-455-5p	0.0004	0.0036	2.1621	up
	bta-miR-199a-5p	0.0000	0.0000	1.9875	up
	bta-miR-2398	0.0003	0.0029	1.8212	up
	bta-miR-2450a	0.0001	0.0009	1.7309	up
	bta-miR-126-3p	0.0000	0.0000	1.6756	up
	conservative_3_21957	0.0001	0.0009	1.6232	up
	conservative_10_2574	0.0005	0.0042	1.6148	up
	conservative_10_2578	0.0005	0.0042	1.6148	up
	conservative_21_14891	0.0000	0.0000	1.5581	up
	bta-miR-2388-5p	0.0000	0.0001	1.5581	up
	bta-miR-126-5p	0.0002	0.0019	1.5358	up
	bta-miR-145	0.0000	0.0000	1.5308	up
	bta-miR-2285h	0.0000	0.0000	1.5163	up
	unconservative_19_12123	0.0000	0.0001	1.5047	up
	unconservative_19_12124	0.0000	0.0001	1.5047	up
	conservative_29_20691	0.0013	0.0099	1.4206	up
	bta-miR-125a	0.0000	0.0000	1.3799	up
	unconservative_4_23629	0.0000	0.0000	1.3674	up
	bta-miR-100	0.0000	0.0000	1.3308	up
	bta-miR-200b	0.0006	0.0052	1.3293	up
	bta-miR-2397-3p	0.0005	0.0041	1.3236	up
	bta-miR-128	0.0000	0.0000	1.3090	up
	conservative_11_3848	0.0012	0.0093	1.2868	up
	conservative_21_14574	0.0002	0.0020	1.2718	up
	bta-miR-2443	0.0001	0.0009	1.2672	up
	conservative_16_7888	0.0006	0.0048	1.2362	up
	conservative_7_26976	0.0000	0.0000	1.2127	up
	conservative_14_5908	0.0008	0.0067	1.1955	up
	bta-miR-2320-3p	0.0000	0.0001	1.1931	up
	bta-miR-200c	0.0000	0.0000	1.1305	up
	bta-miR-2397-5p	0.0001	0.0014	1.1293	up
	bta-miR-1468	0.0000	0.0000	1.1224	up

	conservative_20_14087	0.0001	0.0007	1.0987	up
	conservative_11_2764	0.0000	0.0000	1.0870	up
	conservative_11_2759	0.0000	0.0000	1.0846	up
	unconservative_19_10937	0.0009	0.0072	1.0186	up
	unconservative_5_24349	0.0009	0.0072	1.0186	up
	unconservative_8_28952	0.0009	0.0072	1.0186	up
	unconservative_9_30254	0.0009	0.0072	1.0186	up
	conservative_26_19299	0.0000	0.0003	1.0111	up
	conservative_26_19301	0.0000	0.0003	1.0111	up
	conservative_14_5901	0.0003	0.0030	1.0099	up
	conservative_19_10913	0.0000	0.0000	-5.1213	down
	unconservative_1_583	0.0000	0.0000	-4.9732	down
	bta-miR-545-3p	0.0012	0.0090	-3.4642	down
	conservative_19_11021	0.0001	0.0012	-3.0857	down
	bta-miR-592	0.0000	0.0000	-3.0492	down
	unconservative_12_4106	0.0000	0.0002	-1.9514	down
	bta-miR-331-3p	0.0000	0.0000	-1.9452	down
	bta-miR-1388-3p	0.0000	0.0000	-1.8378	down
	bta-miR-324	0.0002	0.0016	-1.7231	down
	bta-miR-153	0.0005	0.0044	-1.6706	down
	bta-miR-29d-5p	0.0000	0.0000	-1.6424	down
	conservative_15_7229	0.0000	0.0002	-1.6004	down
	bta-miR-19b	0.0000	0.0000	-1.5992	down
	bta-miR-671	0.0011	0.0085	-1.5711	down
	bta-miR-500	0.0000	0.0000	-1.4643	down
	bta-miR-138	0.0000	0.0000	-1.3853	down
	bta-miR-30b-5p	0.0000	0.0000	-1.3789	down
	conservative_19_10772	0.0000	0.0000	-1.3549	down
	bta-miR-491	0.0001	0.0015	-1.3202	down
	bta-miR-326	0.0000	0.0000	-1.3098	down
	conservative_15_6626	0.0000	0.0000	-1.2735	down
	conservative_GJ059782.1_31949	0.0000	0.0000	-1.2735	down
	bta-miR-19a	0.0000	0.0000	-1.2160	down
	bta-miR-342	0.0000	0.0000	-1.1542	down
	bta-miR-1246	0.0000	0.0000	-1.1491	down
	conservative_8_28770	0.0005	0.0041	-1.0994	down
	conservative_3_22576	0.0000	0.0002	-1.0696	down
	unconservative_21_15048	0.0002	0.0023	-1.0313	down
	unconservative_6_26329	0.0002	0.0023	-1.0313	down
	bta-miR-193b	0.0000	0.0001	-1.0166	down
	conservative_6_26060	0.0001	0.0006	-1.0033	down
BE5_vs_BE7	bta-miR-196a	0.0001	0.0012	23.5394	up
	bta-miR-214	0.0000	0.0000	3.8003	up
	conservative_2_12879	0.0000	0.0000	3.3893	up
	conservative_18_9908	0.0000	0.0000	3.2874	up
	conservative_16_8161	0.0000	0.0000	3.2275	up
	conservative_X_30752	0.0000	0.0000	2.9992	up
	bta-miR-200a	0.0000	0.0000	2.7747	up
	bta-miR-205	0.0000	0.0000	2.5959	up
	conservative_11_2998	0.0001	0.0010	2.5048	up
	bta-miR-199a-5p	0.0000	0.0000	2.2441	up
	bta-miR-455-5p	0.0010	0.0091	1.9712	up
	bta-miR-143	0.0000	0.0000	1.8969	up
	unconservative_3_22546	0.0000	0.0000	1.8684	up
	bta-miR-182	0.0000	0.0000	1.6487	up
	bta-miR-10b	0.0000	0.0000	1.5939	up
	bta-miR-126-5p	0.0002	0.0026	1.5859	up

conservative_14_6599	0.0003	0.0032	1.4079	up
bta-miR-126-3p	0.0000	0.0000	1.3862	up
conservative_1_456	0.0005	0.0051	1.3084	up
conservative_7_26976	0.0000	0.0000	1.2756	up
bta-miR-345-5p	0.0007	0.0068	1.2677	up
bta-miR-100	0.0000	0.0000	1.2153	up
conservative_21_14623	0.0008	0.0071	1.1608	up
unconservative_19_11543	0.0011	0.0095	1.1233	up
conservative_19_10681	0.0001	0.0010	1.1180	up
conservative_19_11018	0.0000	0.0000	1.1171	up
bta-miR-2285h	0.0000	0.0001	1.0972	up
bta-miR-1842	0.0000	0.0000	1.0842	up
conservative_21_14574	0.0010	0.0087	1.0809	up
bta-let-7a-3p	0.0000	0.0000	1.0686	up
bta-miR-22-5p	0.0000	0.0000	1.0660	up
conservative_18_10497	0.0003	0.0033	1.0454	up
conservative_18_10498	0.0003	0.0033	1.0454	up
conservative_19_10752	0.0005	0.0047	1.0454	up
conservative_2_13447	0.0011	0.0095	1.0453	up
conservative_22_16076	0.0005	0.0051	1.0173	up
unconservative_1_583	0.0000	0.0000	-4.4782	down
conservative_26_19324	0.0000	0.0006	-1.1771	down
conservative_3_22576	0.0000	0.0001	-1.1423	down
conservative_15_6875	0.0004	0.0039	-1.0702	down

Table S5 The sequences of the novel DIE- miRNAs in peripheral blood

Name	Mature sequence	Pre-miRNA sequence
>conservative_1_1070	aaaaccugaaugaacuuuuu	auguggcauuccguuaaaguauuagacugaccaaauggucauuacagguuuuuccaugagauuuuugggcaaaaccugaaugaacuuuuucuccaauccaaauacuuaauaaa
>conservative_1_1109	uggaggugaugaacuggc	acguuacacucaccggaggggcugggaggugaugaacuggcuaaccggggcugaugggcugggcuccacuuacagcucgggguuugucucuuucccgugaugcggggug
>conservative_1_201	ucccugcccuccaggagccca	cccugauuuauugggcuaauaggcaugggguuuugugccagucacgaggugaacacugguuaauaggcugaucccugcccuccaggagcccaggcccagagcaggacugc
>conservative_1_456	uauaaaguaggaagcacu	uuaaaugccucaacaacucuaauaaaguagggaagcacuaauuuuccauuuuuguaaaugagggaaguugaggguugaaaaaggguuaaguaacuuugcuugagagaaaaccug
>conservative_10_2574	aggugaggggcccaggcgucugu	ccucgccuggggaagccaggugggaaacacaggcgccucggccucuuuccugagggaucugauuaagaaaguccaggugaggggcccaggcgucuguaugucuccugggaccacag
>conservative_11_2759	ucacagugacccggucucc	gacucagcacgaagcccugggggccucggggcuuugcugacgggaacggccaccgaggggcugcuguguaauugucacagugacccggucuccuccgggcuugcucaagggg
>conservative_11_2764	aacgaagacuucagggcagcu	uauuagaacacaucacgaacaacgaagacuucagggcagcuggaaagucagggaucugcucuuagagccuuacaguggaaaaugucaagaagguaucagaacugggcuuuu
>conservative_11_2879	ugccucuccgccaccuccaccu	gccuccuccuccuccuuuaccccgccguuucggcagcggcgggaggcgggcgguugcggaagcggguuguccugccucuccgccaccuccaccucggccuauccccgggcug
>conservative_11_2880	ugccucuccgccaccuccaccu	ggugcgggcagcggguugucccugccucuccgccaccuccaccucggccuauccccgggcugggcgggcgugggcgggggagggggacaguaguuguaagacgucgccccugccuc
>conservative_11_2998	ucacucaguccugucugacucu	cagccuauugggaccgcaaaugucgggacacaaucagagcgccuaacacuuuucacugcaaaaagauguuacgugcuaaagucacucaguccugucugacucuuuugcgaucccuaug
>conservative_11_3520	uaccuguccuccaggagcua	ggcaaccagggguggaaagcaccagucuuuuccugugaugcaagcuuagauaggugcggaauaggacacuaauaccuguccuccaggagcuaagguguccagggggucaggcaga
>conservative_11_3848	cgcuacaaaaguaauaauugu	cgcgggcgcgcuccgugccgggcugcugacagcgcauuauuacucacgguaacgaguuuugaagugucacagcgcguaacaaaaguaauaauuguccgucaccagcagaggugc
>conservative_12_4159	augcaguuuuuccuugacca	cuuuuucucuaugugaaauagaccuuuacuuugcagggaagguaauuguaauagcaggauuacugaaauaacauagcaguuuuuccuuugaccauauaggguuuccacugaaaca
>conservative_13_5158	ucgcauguggaaaugucugcuucuc	guucaaaaaauauguguuuggcucgcauguggaaaugucugcuuucacuuuccuuuggaagcagggaauacguccauaacaugcuaacuuaaaaaggaguuucaggggcugccaa
>conservative_14_5901	ugccgcgcuguuuuccugggugu	gaggaaaagaaggggaggcagucuccggagagggggcgucggggacacgggcugucggcagggucguucugagccugccgcgcuguuuuccugggugucuguccuccuccgucu
>conservative_14_5908	uagaagaucguuuggguuuu	gaaguuauauuuggguuuggcuagaagaucguuuggguuuuuuauuguaaccauguuauagaacuuuugggccaaccugauauuuugucuaugggcuuugaaccccaaguuaua
>conservative_14_6255	cuuccaguuaauagcucuguu	auacggaaaauuuggggcuugggagaaaauacagagcuaauuauuuggcagaauucuuuuuuuuuuuuccugucucuccaguuauaagcucuguuuacuuuccaaggauuuuga
>conservative_14_6599	ugaaaaguugguuuggguuuuu	cuuguuacugucagguuuggcugaaaaguugguuuuggguuuuuuccguuaaggugguuuggaaaaccaacaacuuuuccggccagucgauuuuaggacugaccuuaguuaccu
>conservative_15_6626	ucagccuuagcaucaguucu	guggccaaaaguacaggaguuuucagccuuagcauacaguucuuuccaauagaaaacgaggacugauucuuuuggggaugggacugguuuggauctuuuugcaguccaagggucaaaaag
>conservative_15_6824	aaaaccugaaugaacuuuu	gaaguuauacuggguuuaccaaaggguuacuuuugggguuuucccguaaagauguuuacaaaaaacucgaaugaacuuuucggccaaccaguuaccuuuugugguuuuuacuuu
>conservative_15_6875	gcuccuuauuucacuuuccugg	cugcccgcuccucucagauuuugccggggacgggaaaucgaaagugaaauaagggaacuggcugcugacagcuccuuauuuucacuuuuccuggcugcugcaaaaggugagug
>conservative_15_7037	augcugucccguccucuaagg	gguaagauugugagggcugggagcagguuuugcuuuggggagaggguuuggggagcagagcaggcgugcaccgagcagucuguccguccuaaggagucagcgacguaugggg
>conservative_15_7229	ugaaaaguuauguuuggguuuuu	gaggcuuguaguuggguuuggcugaaaaguuauguuuggguuuuuuccauaaugggaaaauccgaaugaacuuuuuuggccaaccccauguaacuuuucccauuuacacgacuca
>conservative_16_7575	aaaaauccgaacgaacuuuuug	uuuucugggauacaggaauucuaauugaguuggucagaagaucuuuuggggucuuucuguaagauguaauuggaaaaauccgaacgaacuuuuuggcuaccccaaaacugaaacu
>conservative_16_7720	aaaaacccaaagcaacuuuuug	ugggacuuauuuguuuuggucuaaaaguucgcuuaggguuuuuccguuaagaccuuuaggaaaaacccaacgaacuuuuuggccaauccaauacaucuccaaccugggugucaa
>conservative_16_7888	uaaaaguucguuuggguuuuu	gcagagauuuggguuuggccauaaaaguucguuuggguuuuuucuguaaagaugguuugggaaaaauccaauagaacuuucugaccaacccaaugaauuuguuuaaagcuuagaa
>conservative_16_8161	ucccuguggucuaugggguuaagacu	aaaguuagagagggaacuuucccugugguucuauggguuuagacuauuugccuuccaauagcaggugguugaagguuuugauaccugguuugggcagugaaagaucccacuggccucuuuggc
>conservative_17_8741	uaaaaccgagcuccuuuguuag	uggcgaggagaagccagugagcucaccagaccccacgaggaguuuuggauuuucccugaaaagagcaacugggguaaaaccgagcuccuuuguuaggccugggagccaccgcca
>conservative_17_9303	ggcgaaguagucuccggaccugg	agucggcgcccgaccucggcgaauguaguacuccggaccugggucuuugaagucuccaggaccgggagcugcuucugcacauagaggucgcuagcggagcgagcgugcuuacc
>conservative_18_10335	ucccuguccuccgggagcua	agacagaaggagcagacaucccuguccuccgggagcuaaacacuaaaggugggggagggacaguaagacaagaaggauaauagcagauaucuagucuguuuuaugcugagau
>conservative_18_10497	gccugcccuccaggagcucc	ggagucaguccugccaccugcccgccuccaggagcuccuaccagugugggggaccagucuaaggcucgggaugggcccaaggggcccuugcugucucucuuuuuguccu
>conservative_18_10498	gccugcccuccaggagcucc	aaaccgaugacaugccagcuccauggugggugagcgccgggacccagaggggagucaguccugccaccugcccgccuccaggagcuccuaccagugugggggaccagu
>conservative_18_9441	caagacggacagaggugugugca	ugaaccugggcgacaggccuccucacaccucugacgucucuccuguaagacgagcugggagccacugcugcaagacggacagaggugugugcaggcucgucgagccuca
>conservative_18_9908	ucccuguggucuaugggguuaagacu	auuaggcgugcauaggggacuucccuguggucauggguuuagacuccacacuuaccugcaggggggugcgggguuuugagcccuguccagggaacuaagauccugcaugcuuuuga
>conservative_19_10681	gaaccagauugucagcucu	cuguuacugucaguguguguaagagcugacaguuuugguuccuuguaucuguuagccacuuuguuuuaagggaaccagauugucagcucuaacaacacugaugacugau

>conservative_19_10752	ggcuggguccgaaggguggua	ccucacggugccuagagcaggggucgguccgaagggggguauccggaagacacagaaauuugggaguccgugggaccagaucauacgcuuaacgggugcugugacuuaaagau
>conservative_19_10772	gagcacuguuucgugaccugcuggu	gaguaaaagaaagucuuuuggggagcacuguuucgugaccugcugggucugccugugggcugggcgggguuccauuccggugccaauagcagcuccagcaccacgugacugacugccuggg
>conservative_19_10913	uucccccugcaucugcaugccagg	auggauuccugacuuuuggaucuggggugcuggguaagcaguggggagagagcagaguuauaugggucuuugagccuuccccugcaucugcaugccagggugcuggggcauuaggg
>conservative_19_11018	ugcgaccucagaccagac	uugcuaagcugucaugaaggcugcgaccucagaccagacacacuuuaggggcugcuugggcuggggguagggggaaucaugcacagcauguaauagcaggugggcaggguucuga
>conservative_19_11021	agaaaguucauucaggguuuuu	guacaguuauugcauauauauauuugaguuugggcagaaguucauucaggguuuuuuccacaccauauauauaggaaaaccgaaacuaacuuuugagcgcaauccaauacauucuuuu
>conservative_19_11971	acuggacuugggagucaga	cauuuguaugugaaagagcacuggacuugggagucagacuuccugggguucaaguccugggcucugccacuagcugugggguuagugaccuuagaguaaaauacagggaca
>conservative_2_12630	ugccugccugagcgucgcc	cccccaucacugggcagcugugccugccugagcgucggcgccgucugccaggagggaagcccagccaggggcagagcugucaggguacacaccugugugaagugagauaggagca
>conservative_2_12817	gcguuugguugguauagugguagc	gguauguaauuccuguguuuuacaggaccuacuuauucuuucacucaucacuuuaacucagcaugugcugggugcguuugguugguauagugguagcguaagaccuucaacauuguc
>conservative_2_12879	uuccugugggucuaguaguaggacu	ccacgucggccucacucaugccaguguuucuguccuaccucuggggcuuuaaaaacauaccuacccuggggaauuccugugguucauaguuuaggacucugagcucucacugccaa
>conservative_2_13305	gcauggggugguucagugguagaag	aagcaucacuucauugggugcaugggugguuucagugguagaagucuuugccugccacucaggagguccgaauiuuuuuccugggcccagugcagcccgaguguccccuuuugggggg
>conservative_2_13306	gcauggggugguuucagugguagaag	aggcccucaggggauccaaccccccuuugagagaugccacugacauuuuggaaagcaucacuucauugguugcauggggugguuucagugguagaagucuuugccugccacucaggag
>conservative_2_13447	gaaaguuuugucggauuuuua	uaauuuguaauugaguuugggcagaaguuuugucggauuuuuucauaccaccuuuuugggaaaaaacugcaacuaacuuuuuaccacacuaauauuagacaaugugauuauugu
>conservative_2_13801	uuccuguccucgggagcuga	ggacacccaggcccccauccuguccucgggagcugaccaccagcagggaauagggacauagggauccggggcuuaggggagcuggguccugcuaaccuuugugaccaugggg
>conservative_20_14087	ccugucugagcguccug	gggggcuccggggcgguccaggccugucugagcguccugggcgucgcccugcacacgcgcccagaggccgucugcccagggaauaaugggccacaccuuuuguaugguu
>conservative_21_14562	aaaaucugaacaaacuuuugg	uucuccauguuugaauggcaaaauguuuugcuuugggguuuuucaagauugggaaaaaacugaaacaaacuuuugggccaccucucugcaugcucuaagcgaugggguccagucc
>conservative_21_14574	cgccugccugagccucgcu	ugggccacgacccccgucgcccgcucgagccucgucgggaagucuuaccaggcugucgugaugggagggaccgacugccccgcgaacgucgguacagggaucaugggg
>conservative_21_14623	uuccacucggcaggcuguca	ccgccuccugccuccaggagcgccccgcccaccgcauccugccugggucggagccgcgggggagcucgagguuccacucggcaggcugucacacguaaugucacaauucg
>conservative_21_14891	cccguuucucugcgcgccggcu	ggcuuuaggcgggagccggcucccgucucuccucagucggccgcggguagcgggacgaucggcccgcgucgcccguuucucugcgcgccgggucgcuagcugcucucucu
>conservative_21_15210	aaaaaucggaacgaacuuuug	uaccugagacaagacagaaacauagugggguuugggcaaaaaguuuugucggguuuuuuccacacagcuuccggaaaaaucggaacgaacuuuuggcuuaggccagcacuugcuua
>conservative_21_15268	gagcucacagacugauguua	gcgccucugggcuccagggaugugugcccaccccuugcacagauggaaacgucgagucuaagggggagaaaggagcucacagacugauguuuagugggugggcaaaagcuuugugug
>conservative_22_16072	uuccuaccucggacaauuc	aaaaggaaagugcaaacagggaacagggaauucugagaaagucugagggggagggagcucagauagcaagcucuuuccuaccucggacaauucagccaggaggaaccacucc
>conservative_22_16076	gcccuguccucgggagcucc	guuuugcugagcaccugcccugugcugggggccacacuaaggcgaugggggacacgggggugaacaggacaggggccucguccuccgggagcuccagggcuagggagaaaggauag
>conservative_23_16138	aaaaaccaaacgaacuuuug	cauaauauauuuggguuugggcuaaaaaguuucuuuugggguuuggccauaagacauuacggaaaaaccaaacgaacuuuugggcagcccaauuagaugaauugucacauuuggu
>conservative_23_16212	aaaaaggucguuugggguuuucg	auguuaauuccggguuugggcaaaaaggucguuuuugggguuuucguguaacagcuuauuagaagaaccgaaacaaacuuucugggcacaaccaauaacuuuucugcauaacacaua
>conservative_23_16675	uugcaugacucugagaguaagu	augggacauucuggggacacaguuuuaaggaggcacuugcuuuuacagggaccugcaagucugguccaauuugcaugacucugagaguaagugccuccuuaaaaucgug
>conservative_23_16728	ucccuguccuccaagagcuug	uuagaagcaagggaguggggguccuguccuccaagagcuugcagucucuuugggcuuccaggacgggguaaggcugcuggggaaggagagaagccaccccaauuugaaaccac
>conservative_24_17568	ucccugcccuccaggagcccc	aauacgacccccaccuagguccugcccuccaggagccccugggugccugggacaaagauagcaguuuagguuuuugggggcauaggagaagggggacccagagaccaggcuugg
>conservative_25_18552	uccaaguaauucaggauagu	ucauaaagacauggaaaccguccaaguaauucaggauaguuccuuggggacuucuuugguugugcagugggcuuaggcccccacacuccaauagcaggggccaggguuccauc
>conservative_25_18603	ucccuguccuccaggaggccu	aagcccagaguccuccacuccuguccuccaggaggccugugggccaugugccugcugucuggggucugcuuugcccucuggguccaucugagguuugggggccauagaccugg
>conservative_26_19293	ucgagccugacagauacaca	cccgagcugcugugagcaggggcagugggccccucugugaccugccaggcacugccuugaaauccccuaaggucgagccugacagauacacacgggacuugaccugggagc
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