

Supplementary Materials

Plasma and Tissue Specific miRNA Expression Pattern and Functional Analysis Associated to Colorectal Cancer Patients

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Table S1. Differentially expressed miRNAs were analyzed in COAD versus normal tissue based on TCGA data. The threshold value for upregulated and downregulated genes was a fold change ≥ 1.5 and p -value ≤ 0.05 .

Systematic Name	FC (abs)	Regulation	p
hsa-mir-486	-69.17818	down	2.20E-34
hsa-mir-139	-42.967876	down	0
hsa-mir-328	-41.69208	down	0
hsa-mir-197	-31.175646	down	0
hsa-mir-129-1	-25.215168	down	8.51E-42
hsa-mir-133a-1	-23.520296	down	6.88E-17
hsa-mir-1224	-21.101189	down	1.32E-30
hsa-mir-642	-20.974354	down	1.95E-24
hsa-mir-1976	-20.189072	down	1.40E-45
hsa-mir-149	-20.158945	down	6.87E-25
hsa-mir-766	-19.219688	down	8.40E-45
hsa-mir-504	-18.5475	down	0
hsa-mir-150	-18.411493	down	3.74E-19
hsa-mir-1180	-17.228813	down	3.06E-23
hsa-mir-125a	-17.013721	down	0
hsa-mir-1306	-16.964342	down	3.71E-39
hsa-mir-145	-15.507499	down	1.48E-23
hsa-mir-490	-15.239713	down	2.56E-12
hsa-mir-574	-15.110625	down	4.45E-33
hsa-let-7d	-12.95204	down	0
hsa-mir-375	-12.896943	down	1.35E-13
hsa-mir-193a	-11.601966	down	1.18E-25
hsa-let-7b	-11.516078	down	0
hsa-mir-181a-1	-11.288839	down	2.36E-33
hsa-mir-92b	-10.94404	down	6.58E-23
hsa-mir-1296	-10.22103	down	8.94E-23
hsa-mir-378	-9.980089	down	7.81E-25
hsa-mir-193b	-9.6425	down	4.98E-22
hsa-mir-99b	-9.268363	down	9.06E-31
hsa-mir-125b-1	-9.176319	down	9.88E-16
hsa-mir-423	-9.1388445	down	1.06E-37
hsa-mir-1226	-8.494278	down	8.18E-29
hsa-let-7c	-8.370713	down	3.69E-12
hsa-mir-296	-8.16921	down	2.14E-10
hsa-mir-326	-8.118997	down	2.20E-17
hsa-mir-485	-8.062454	down	1.74E-22
hsa-mir-2110	-7.7612824	down	3.38E-26
hsa-mir-874	-7.568354	down	1.14E-15
hsa-mir-433	-7.1413856	down	9.05E-28
hsa-mir-1307	-7.0567975	down	4.28E-17
hsa-mir-484	-6.93172	down	2.52E-23
hsa-mir-671	-6.5911164	down	2.17E-26
hsa-mir-324	-6.4117045	down	1.08E-21
hsa-mir-205	-6.3746424	down	4.97E-05

hsa-mir-1249	-6.288611	down	5.85E-25
hsa-mir-1468	-6.1595893	down	1.88E-16
hsa-mir-605	-6.03544	down	3.24E-35
hsa-mir-15b	-5.841153	down	2.72E-19
hsa-mir-767	-5.7812295	down	5.37E-05
hsa-mir-589	-5.7689524	down	8.01E-27
hsa-mir-744	-5.6886044	down	8.23E-14
hsa-mir-187	-5.6664586	down	1.49E-10
hsa-mir-432	-5.5770664	down	4.11E-15
hsa-mir-92a-2	-5.5019746	down	5.26E-13
hsa-mir-1826	-5.4880443	down	5.19E-04
hsa-mir-937	-5.3118467	down	6.06E-12
hsa-mir-1266	-5.041714	down	6.02E-08
hsa-mir-885	-5.0058317	down	0
hsa-mir-133b	-4.928623	down	3.87E-06
hsa-mir-140	-4.795257	down	1.53E-20
hsa-mir-483	-4.780864	down	0.018092668
hsa-mir-132	-4.7191024	down	1.19E-18
hsa-mir-1228	-4.71424	down	4.51E-22
hsa-mir-339	-4.669636	down	5.31E-10
hsa-mir-200c	-4.651522	down	1.05E-11
hsa-mir-615	-4.6386333	down	4.06E-08
hsa-mir-652	-4.508768	down	5.19E-15
hsa-mir-342	-4.4253483	down	2.97E-10
hsa-mir-760	-4.4200187	down	7.35E-14
hsa-mir-370	-4.247514	down	2.53E-13
hsa-mir-501	-4.187298	down	3.74E-09
hsa-mir-320a	-4.0551715	down	2.17E-07
hsa-mir-487a	-3.9696276	down	2.04E-16
hsa-mir-887	-3.915102	down	7.15E-14
hsa-mir-431	-3.6844723	down	1.51E-10
hsa-mir-219-1	-3.680956	down	3.46E-11
hsa-mir-1538	-3.6361578	down	4.03E-34
hsa-mir-323	-3.6258848	down	3.86E-09
hsa-mir-361	-3.5730257	down	1.75E-12
hsa-mir-331	-3.5566528	down	6.50E-08
hsa-mir-204	-3.4982772	down	7.58E-04
hsa-mir-505	-3.3903127	down	1.92E-10
hsa-mir-877	-3.318865	down	2.23E-07
hsa-mir-1229	-3.2131255	down	3.09E-15
hsa-mir-127	-3.0669692	down	1.83E-09
hsa-let-7a-1	-3.065293	down	5.75E-11
hsa-mir-935	-3.0461838	down	0.00287151
hsa-mir-1254	-3.0458095	down	1.06E-13
hsa-mir-891a	-3.0390332	down	3.27E-06
hsa-mir-218-1	-3.0222836	down	2.19E-22
hsa-mir-1301	-3.018671	down	6.48E-08
hsa-mir-886	-2.9895837	down	2.85E-04
hsa-mir-363	-2.942934	down	1.41E-04
hsa-mir-1975	-2.906888	down	0.001363733
hsa-mir-365-1	-2.8796299	down	7.53E-07
hsa-mir-1295	-2.8428178	down	1.19E-23
hsa-mir-320c-1	-2.7553587	down	5.63E-17
hsa-mir-1271	-2.7515128	down	3.35E-06
hsa-mir-28	-2.7353003	down	3.07E-20
hsa-mir-181b-1	-2.6932461	down	9.31E-07
hsa-mir-664	-2.665683	down	4.86E-08
hsa-mir-330	-2.6462743	down	2.39E-05
hsa-mir-455	-2.6429012	down	0.002250523
hsa-mir-1275	-2.6178226	down	0.001932895
hsa-mir-1274b	-2.5617502	down	0.003962798
hsa-mir-1248	-2.5306215	down	9.26E-05
hsa-mir-30d	-2.5143723	down	4.86E-08
hsa-mir-625	-2.4814641	down	0.001394254
hsa-mir-1227	-2.471171	down	6.12E-25

hsa-mir-346	-2.462659	down	2.14E-35
hsa-let-7e	-2.4142275	down	3.02E-05
hsa-mir-500	-2.3832695	down	8.10E-05
hsa-mir-1287	-2.380573	down	4.03E-07
hsa-mir-1270	-2.3523426	down	5.28E-10
hsa-mir-214	-2.3501306	down	3.48E-04
hsa-mir-191	-2.2996209	down	1.32E-05
hsa-mir-1292	-2.2644854	down	2.80E-09
hsa-mir-940	-2.176189	down	0.00138487
hsa-mir-939	-2.1097183	down	4.76E-06
hsa-mir-320b-2	-2.0855532	down	0.004718452
hsa-mir-497	-2.062978	down	5.21E-04
hsa-mir-409	-2.0508657	down	1.45E-04
hsa-mir-632	-1.9552885	down	1.61E-07
hsa-mir-663b	-1.9491395	down	0.006409941
hsa-mir-658	-1.8801347	down	7.12E-08
hsa-mir-30c-2	-1.8182406	down	0.001374953
hsa-mir-550-2	-1.7813472	down	0.00847958
hsa-mir-377	-1.7410277	down	0.006318152
hsa-mir-491	-1.7368131	down	0.003009533
hsa-mir-639	-1.7293487	down	8.54E-04
hsa-mir-1181	-1.6956798	down	1.06E-04
hsa-mir-410	-1.6169846	down	0.035125908
hsa-mir-543	-1.6152669	down	0.002571987
hsa-mir-383	-1.6124716	down	0.009697244
hsa-mir-23b	-1.5909384	down	0.015085858
hsa-mir-146b	-1.5897484	down	0.01843226
hsa-mir-1291	-1.5848768	down	0.021788832
hsa-let-7i	-1.5837309	down	3.02E-04
hsa-mir-1234	-1.5805634	down	1.76E-17
hsa-mir-106b	-1.5497692	down	0.006169519
hsa-mir-24-1	-1.5300697	down	0.024964344
hsa-mir-138-1	-1.5150045	down	0.0032865
hsa-mir-374a	140.92953	up	0
hsa-mir-142	65.22522	up	1.82E-30
hsa-mir-19b-2	63.5723	up	0
hsa-mir-135b	60.82974	up	1.00E-23
hsa-mir-21	52.989597	up	0
hsa-mir-19a	45.7885	up	2.60E-27
hsa-mir-577	40.05445	up	6.27E-13
hsa-mir-424	30.184464	up	8.15E-33
hsa-mir-29b-1	30.046535	up	2.06E-38
hsa-mir-101-1	29.692446	up	0
hsa-mir-542	28.222824	up	0
hsa-mir-582	27.83786	up	8.70E-39
hsa-mir-708	24.78667	up	3.67E-36
hsa-mir-144	23.961945	up	7.08E-24
hsa-mir-141	22.687477	up	4.10E-37
hsa-mir-20a	22.144264	up	1.93E-30
hsa-mir-590	21.505735	up	1.94E-26
hsa-mir-153-2	20.456884	up	6.87E-17
hsa-mir-592	19.946692	up	8.58E-10
hsa-mir-335	19.592241	up	5.06E-34
hsa-mir-182	18.78644	up	3.18E-31
hsa-mir-452	17.161093	up	5.54E-30
hsa-mir-215	16.743689	up	3.05E-11
hsa-mir-552	16.048706	up	1.84E-09
hsa-mir-203	14.982542	up	8.11E-17
hsa-mir-379	14.027545	up	3.30E-36
hsa-mir-16-1	13.9177475	up	7.24E-24
hsa-mir-96	12.935062	up	3.83E-25
hsa-mir-889	12.8214655	up	6.96E-39
hsa-mir-98	12.206911	up	0
hsa-mir-136	11.756475	up	1.66E-17
hsa-mir-1-2	11.736584	up	4.75E-11

hsa-mir-374b	11.382514	up	1.24E-35
hsa-mir-628	11.372878	up	6.20E-11
hsa-mir-126	10.745708	up	2.87E-25
hsa-mir-217	10.295042	up	2.40E-14
hsa-mir-148a	9.867116	up	4.41E-20
hsa-mir-152	9.414362	up	7.31E-43
hsa-mir-301a	9.122609	up	9.49E-12
hsa-mir-450b	8.92358	up	6.22E-21
hsa-mir-429	8.92357	up	1.53E-16
hsa-mir-15a	8.417794	up	2.86E-28
hsa-mir-660	8.408914	up	7.37E-20
hsa-mir-32	7.9090858	up	7.04E-20
hsa-mir-454	7.865963	up	5.96E-27
hsa-mir-369	6.793081	up	2.11E-20
hsa-mir-17	6.714736	up	4.21E-16
hsa-mir-143	6.711155	up	3.83E-11
hsa-mir-30b	6.6690645	up	2.29E-16
hsa-mir-106a	6.2725577	up	3.07E-05
hsa-mir-411	6.2438	up	3.42E-15
hsa-mir-218-2	6.183688	up	6.93E-13
hsa-mir-7-1	6.1583357	up	3.69E-15
hsa-mir-10a	5.919755	up	1.32E-12
hsa-mir-199b	5.7847676	up	2.82E-10
hsa-mir-653	5.6058817	up	7.58E-07
hsa-mir-376c	5.4012823	up	2.63E-13
hsa-mir-337	5.3318877	up	1.32E-16
hsa-mir-192	5.2031627	up	1.62E-07
hsa-mir-598	5.127586	up	1.79E-09
hsa-mir-183	4.7046022	up	6.93E-10
hsa-mir-33a	4.453369	up	2.64E-05
hsa-mir-340	4.3543253	up	2.83E-16
hsa-mir-29c	4.2929397	up	3.25E-09
hsa-mir-421	4.2544603	up	4.89E-11
hsa-mir-95	4.1945605	up	3.55E-07
hsa-mir-495	4.146432	up	6.16E-16
hsa-mir-451	4.125477	up	4.40E-05
hsa-mir-223	4.0699043	up	9.68E-06
hsa-mir-24-2	3.9893742	up	5.30E-25
hsa-mir-31	3.9565177	up	0.005236639
hsa-mir-199a-2	3.7405434	up	4.16E-07
hsa-mir-188	3.7089033	up	2.01E-06
hsa-mir-27a	3.6482308	up	2.51E-10
hsa-mir-196a-1	3.6381824	up	1.30E-04
hsa-mir-450a-1	3.4919376	up	3.65E-09
hsa-mir-33b	3.4794478	up	7.89E-05
hsa-mir-338	3.4540892	up	1.69E-04
hsa-mir-26b	3.4343598	up	3.21E-11
hsa-mir-651	3.3484898	up	3.87E-08
hsa-mir-18a	3.2894936	up	5.87E-05
hsa-let-7f-1	3.2703521	up	7.14E-17
hsa-mir-194-1	3.245227	up	1.03E-07
hsa-mir-196b	3.2206805	up	0.003327127
hsa-mir-10b	3.2112288	up	3.02E-09
hsa-mir-190	3.1710253	up	3.17E-09
hsa-mir-30e	3.1080387	up	1.08E-15
hsa-mir-34a	3.0841117	up	5.19E-08
hsa-mir-224	2.9725883	up	1.64E-04
hsa-mir-301b	2.9368408	up	2.57E-05
hsa-mir-103-2	2.8811517	up	2.95E-05
hsa-mir-146a	2.8789024	up	1.24E-04
hsa-mir-151	2.7641008	up	1.22E-09
hsa-mir-496	2.6916192	up	7.60E-08
hsa-mir-26a-2	2.6861076	up	2.59E-11
hsa-mir-22	2.6556854	up	1.04E-13
hsa-mir-493	2.6089272	up	2.84E-08

hsa-mir-584	2.5641572	up	0.002599256
hsa-mir-508	2.5492427	up	0.025842048
hsa-mir-627	2.5214627	up	1.41E-05
hsa-mir-1977	2.500068	up	0.010464604
hsa-let-7g	2.4424646	up	8.04E-11
hsa-mir-376a-1	2.4373012	up	1.19E-06
hsa-mir-147b	2.410581	up	0.004115132
hsa-mir-1245	2.3560169	up	1.23E-06
hsa-mir-655	2.35559	up	1.61E-06
hsa-mir-181d	2.3057535	up	0.003218368
hsa-mir-1277	2.285632	up	2.55E-05
hsa-mir-376b	2.2767627	up	1.71E-05
hsa-mir-549	2.2236876	up	3.74E-05
hsa-mir-185	2.2018151	up	3.18E-07
hsa-mir-494	2.1872504	up	8.39E-06
hsa-mir-556	2.165163	up	9.81E-05
hsa-mir-576	2.1492126	up	8.88E-04
hsa-mir-412	2.1008253	up	0.012250098
hsa-mir-186	2.0487375	up	6.23E-05
hsa-mir-130a	2.014791	up	0.001836359
hsa-mir-499	1.8538002	up	0.011716682
hsa-mir-545	1.8008773	up	3.92E-04
hsa-mir-570	1.746147	up	8.08E-04
hsa-mir-643	1.7392558	up	1.64E-04
hsa-mir-548f-1	1.7317908	up	0.013023482
hsa-mir-758	1.7260778	up	0.008539054
hsa-mir-1308	1.7176796	up	0.013787789
hsa-mir-23a	1.7013396	up	4.70E-04
hsa-mir-107	1.6853368	up	4.09E-04
hsa-mir-380	1.6485493	up	4.16E-04
hsa-mir-216a	1.6447345	up	0.00721922
hsa-mir-200a	1.6173214	up	0.023149977
hsa-mir-559	1.6038537	up	0.002255896
hsa-mir-656	1.5602485	up	0.001615316
hsa-mir-25	1.5594497	up	0.009705679
hsa-mir-580	1.5435183	up	0.001934664
hsa-mir-382	1.5420406	up	0.013450535

Table S2. Differentially expressed miRNAs were analyzed in READ cancer versus normal tissue based on TCGA data. The threshold value for upregulated and downregulated genes was a fold change ≥ 1.5 and p -value ≤ 0.05 .

Systematic Name	FC (abs)	Regulation	p
hsa-mir-490	-135.98697	down	6.59E-13
hsa-mir-328	-134.68758	down	4.40E-37
hsa-mir-139	-80.28687	down	1.06E-30
hsa-mir-504	-76.078545	down	0
hsa-mir-486	-70.63095	down	1.51E-14
hsa-mir-133a-1	-64.6055	down	3.18E-13
hsa-mir-149	-59.165817	down	5.27E-20
hsa-mir-129-1	-56.821983	down	2.61E-31
hsa-mir-1224	-55.13707	down	5.54E-30
hsa-mir-197	-47.221104	down	3.44E-27
hsa-mir-574	-46.144466	down	4.35E-23
hsa-mir-766	-42.3317	down	3.27E-30
hsa-mir-145	-36.196594	down	1.82E-15
hsa-mir-193a	-30.22148	down	3.59E-18
hsa-mir-125a	-29.290022	down	8.03E-23
hsa-mir-1306	-27.28638	down	2.49E-20
hsa-mir-1180	-26.601833	down	4.06E-12
hsa-let-7d	-24.964872	down	1.05E-34
hsa-mir-150	-23.079159	down	1.77E-12
hsa-mir-1296	-21.62183	down	3.60E-16
hsa-mir-92b	-19.150013	down	2.37E-12

hsa-mir-1249	-18.639511	down	9.40E-22
hsa-mir-99b	-18.635223	down	1.98E-22
hsa-mir-125b-1	-15.973903	down	2.26E-08
hsa-mir-1976	-15.401709	down	5.95E-17
hsa-mir-485	-14.917463	down	1.50E-14
hsa-mir-605	-14.679367	down	1.30E-23
hsa-mir-193b	-14.586462	down	6.73E-11
hsa-mir-1226	-12.453842	down	6.76E-17
hsa-mir-326	-11.861671	down	1.06E-11
hsa-let-7b	-11.739235	down	1.37E-18
hsa-mir-433	-11.2762165	down	5.68E-17
hsa-mir-133b	-10.657723	down	1.09E-06
hsa-mir-375	-10.57266	down	6.03E-05
hsa-let-7c	-10.388263	down	2.04E-05
hsa-mir-760	-9.92051	down	1.02E-12
hsa-mir-296	-9.388603	down	1.38E-04
hsa-mir-370	-9.000886	down	2.03E-13
hsa-mir-378	-8.737416	down	3.01E-09
hsa-mir-432	-8.663443	down	2.25E-09
hsa-mir-2110	-8.566132	down	7.78E-11
hsa-mir-205	-8.013963	down	0.001158812
hsa-mir-363	-7.9215703	down	1.39E-06
hsa-mir-181a-1	-7.5249705	down	2.84E-09
hsa-mir-589	-7.2122483	down	1.42E-11
hsa-mir-423	-7.169264	down	1.15E-11
hsa-mir-874	-6.751404	down	1.76E-05
hsa-mir-1468	-6.6051564	down	5.74E-09
hsa-mir-324	-5.883902	down	4.73E-10
hsa-mir-431	-5.862475	down	3.98E-08
hsa-mir-885	-5.8277392	down	1.74E-11
hsa-mir-937	-5.8269687	down	1.45E-05
hsa-mir-744	-5.642323	down	9.82E-07
hsa-mir-187	-5.6009455	down	2.28E-05
hsa-mir-92a-2	-5.2479057	down	3.31E-06
hsa-mir-383	-5.2167277	down	1.09E-09
hsa-mir-346	-5.172708	down	1.88E-31
hsa-mir-331	-5.1329236	down	3.10E-04
hsa-mir-671	-4.994799	down	4.12E-10
hsa-mir-1229	-4.9548635	down	3.95E-10
hsa-mir-484	-4.899485	down	5.18E-07
hsa-mir-877	-4.6133723	down	6.59E-05
hsa-mir-365-1	-4.584179	down	6.02E-06
hsa-mir-323	-4.5467825	down	1.15E-05
hsa-mir-1538	-4.4786053	down	1.94E-27
hsa-mir-891a	-4.400809	down	2.98E-05
hsa-mir-505	-4.2703285	down	4.56E-06
hsa-mir-1228	-4.2165804	down	2.68E-08
hsa-mir-320c-1	-4.0962973	down	2.64E-11
hsa-mir-20b	-4.0940976	down	0.001262076
hsa-mir-339	-4.0692787	down	2.16E-05
hsa-mir-1307	-3.9854705	down	9.67E-05
hsa-mir-140	-3.7967339	down	2.10E-06
hsa-mir-1271	-3.618777	down	1.26E-04
hsa-mir-887	-3.5285904	down	2.61E-06
hsa-mir-342	-3.491284	down	3.90E-04
hsa-mir-15b	-3.4353487	down	4.73E-05
hsa-mir-214	-3.3951535	down	9.14E-04
hsa-mir-487a	-3.3621833	down	7.58E-06
hsa-mir-132	-3.224012	down	2.16E-05
hsa-mir-28	-3.1282322	down	7.89E-09
hsa-mir-127	-2.8960972	down	1.49E-04
hsa-mir-658	-2.8960013	down	5.57E-10
hsa-mir-663b	-2.8168721	down	0.003313308
hsa-mir-135a-1	-2.7820208	down	3.24E-06
hsa-mir-1292	-2.759025	down	3.55E-05

hsa-mir-455	-2.751464	down	0.016525857
hsa-mir-501	-2.7253783	down	0.014389883
hsa-mir-1301	-2.684648	down	0.001770045
hsa-mir-1234	-2.5178773	down	3.95E-30
hsa-mir-939	-2.4398868	down	8.76E-05
hsa-mir-1287	-2.4396005	down	0.002906155
hsa-mir-632	-2.3584	down	6.96E-05
hsa-mir-1237	-2.326263	down	1.88E-22
hsa-mir-18b	-2.3011756	down	0.001028637
hsa-mir-361	-2.292101	down	0.002301976
hsa-mir-202	-2.2430816	down	2.53E-05
hsa-mir-1227	-2.2043328	down	9.34E-10
hsa-mir-30d	-2.183335	down	0.003102631
hsa-mir-497	-2.1412995	down	0.0128487
hsa-mir-491	-2.1318836	down	0.006817964
hsa-mir-377	-1.980699	down	0.017571513
hsa-mir-1181	-1.9599565	down	4.43E-04
hsa-mir-487b	-1.9505255	down	0.008613803
hsa-mir-218-1	-1.8999251	down	2.46E-04
hsa-mir-106b	-1.8719217	down	0.011739618
hsa-mir-138-1	-1.727772	down	0.014360772
hsa-mir-770	-1.7002965	down	7.84E-07
hsa-mir-329-2	-1.6802279	down	0.006776016
hsa-mir-1910	-1.5881958	down	1.66E-07
hsa-mir-1908	-1.5731761	down	9.39E-09
hsa-mir-1914	-1.5566725	down	0.001414808
hsa-mir-552	125.86824	up	2.73E-15
hsa-mir-135b	92.44072	up	3.89E-12
hsa-mir-424	87.797104	up	4.46E-19
hsa-mir-215	74.0141	up	3.09E-08
hsa-mir-142	73.418945	up	3.29E-17
hsa-mir-19b-2	68.83364	up	3.83E-20
hsa-mir-374a	67.5058	up	2.60E-27
hsa-mir-577	63.387184	up	2.07E-08
hsa-mir-19a	60.3911	up	8.56E-13
hsa-mir-21	54.890163	up	0
hsa-mir-20a	46.65114	up	9.34E-22
hsa-mir-144	42.5793	up	7.57E-12
hsa-mir-335	41.66285	up	6.43E-22
hsa-mir-452	38.607204	up	1.10E-18
hsa-mir-141	36.88312	up	1.42E-23
hsa-mir-429	35.916325	up	2.97E-16
hsa-mir-16-1	33.6399	up	9.60E-19
hsa-mir-203	33.5487	up	7.20E-13
hsa-mir-192	30.339136	up	2.72E-16
hsa-mir-126	29.031384	up	1.72E-21
hsa-mir-542	28.02535	up	1.38E-19
hsa-mir-29b-1	27.505907	up	1.02E-17
hsa-mir-592	27.477612	up	8.84E-07
hsa-mir-590	26.95451	up	5.12E-19
hsa-mir-148a	26.470291	up	5.77E-16
hsa-mir-182	24.657486	up	1.95E-14
hsa-mir-15a	24.0329	up	9.63E-23
hsa-mir-98	24.021187	up	8.69E-22
hsa-mir-101-1	23.364975	up	1.00E-21
hsa-mir-379	21.32783	up	2.48E-21
hsa-mir-374b	20.26702	up	3.46E-21
hsa-mir-194-1	17.759962	up	9.22E-16
hsa-mir-1-2	17.396029	up	3.00E-06
hsa-mir-660	16.94982	up	1.77E-17
hsa-mir-889	16.367073	up	6.09E-20
hsa-mir-628	15.807961	up	2.10E-07
hsa-mir-224	15.315301	up	5.17E-11
hsa-mir-17	14.323981	up	2.19E-15
hsa-mir-153-2	14.219922	up	1.28E-07

hsa-mir-196a-1	12.448104	up	7.73E-07
hsa-mir-10a	12.150859	up	6.33E-10
hsa-mir-217	12.046613	up	1.14E-06
hsa-mir-196b	11.582685	up	9.77E-05
hsa-mir-301a	11.0168915	up	6.16E-07
hsa-mir-95	10.984338	up	3.75E-08
hsa-mir-96	10.834814	up	1.67E-10
hsa-mir-454	10.746106	up	9.01E-18
hsa-mir-450b	10.014402	up	2.35E-09
hsa-mir-582	9.51795	up	1.33E-10
hsa-mir-183	9.238996	up	5.80E-08
hsa-mir-369	9.099438	up	1.45E-10
hsa-mir-411	9.001889	up	3.77E-09
hsa-mir-223	8.863569	up	5.08E-06
hsa-mir-508	8.845228	up	0.001173209
hsa-mir-708	8.785184	up	3.78E-08
hsa-let-7f-1	8.779806	up	1.09E-09
hsa-mir-152	8.365665	up	4.48E-15
hsa-mir-32	7.9362955	up	8.08E-08
hsa-mir-7-1	7.756975	up	7.40E-08
hsa-mir-188	7.717349	up	8.94E-07
hsa-mir-451	7.3666644	up	3.86E-04
hsa-mir-10b	7.211374	up	4.30E-09
hsa-mir-31	7.122003	up	0.00565925
hsa-mir-34a	6.9761076	up	1.53E-08
hsa-mir-33a	6.971081	up	6.37E-05
hsa-mir-146a	6.138518	up	5.39E-05
hsa-mir-30b	6.1113443	up	3.06E-07
hsa-mir-151	6.0227947	up	3.14E-13
hsa-mir-199b	5.7899895	up	3.06E-05
hsa-mir-653	5.566485	up	1.03E-04
hsa-mir-103-2	5.565713	up	1.90E-05
hsa-mir-218-2	5.5261154	up	2.65E-05
hsa-mir-18a	5.462307	up	4.73E-04
hsa-mir-136	5.3182235	up	1.84E-05
hsa-mir-376c	5.22864	up	2.40E-06
hsa-mir-493	5.147699	up	1.37E-08
hsa-let-7g	4.9600925	up	1.14E-09
hsa-mir-24-2	4.919142	up	3.26E-12
hsa-mir-26b	4.8252816	up	5.89E-08
hsa-mir-29c	4.5677586	up	1.63E-05
hsa-mir-7-2	4.5404496	up	3.12E-04
hsa-mir-421	4.5337253	up	7.76E-05
hsa-mir-495	4.509793	up	1.13E-07
hsa-mir-27a	4.4260273	up	3.79E-06
hsa-mir-22	4.28322	up	1.65E-10
hsa-mir-186	4.23124	up	2.52E-09
hsa-mir-143	4.219866	up	2.92E-04
hsa-mir-200b	4.196607	up	3.01E-06
hsa-mir-26a-2	4.137692	up	3.06E-09
hsa-mir-33b	4.0763574	up	0.005779905
hsa-mir-425	4.065508	up	7.59E-04
hsa-mir-503	4.0478563	up	0.006464281
hsa-mir-181d	4.011771	up	9.89E-04
hsa-mir-651	3.996633	up	9.98E-06
hsa-mir-185	3.954062	up	3.96E-09
hsa-mir-190	3.8318734	up	1.48E-05
hsa-mir-450a-2	3.814068	up	4.54E-05
hsa-mir-155	3.749655	up	2.49E-04
hsa-mir-199a-2	3.7423735	up	5.95E-04
hsa-mir-200a	3.6802692	up	2.47E-04
hsa-mir-130a	3.6583018	up	2.48E-05
hsa-mir-107	3.6367493	up	4.38E-09
hsa-mir-338	3.5948071	up	0.010991716
hsa-mir-7-3	3.572123	up	0.002919351

hsa-mir-340	3.545447	up	3.07E-06
hsa-mir-301b	3.5284646	up	0.001478936
hsa-mir-627	3.3326344	up	8.22E-05
hsa-mir-30e	3.2756462	up	3.80E-07
hsa-mir-381	2.8574576	up	3.26E-04
hsa-mir-1277	2.7795572	up	3.51E-04
hsa-mir-376b	2.7681174	up	4.91E-04
hsa-mir-655	2.7593389	up	3.42E-04
hsa-mir-337	2.7227244	up	2.09E-04
hsa-mir-576	2.7083774	up	0.002856645
hsa-mir-376a-1	2.650357	up	3.30E-04
hsa-mir-496	2.5329292	up	0.003536142
hsa-mir-1245	2.3480031	up	0.002196955
hsa-mir-556	2.3231072	up	0.006246795
hsa-mir-549	2.3110714	up	0.011851881
hsa-mir-29a	2.275791	up	0.002045545
hsa-mir-758	2.2667346	up	0.005095392
hsa-mir-25	2.1846185	up	0.003145347
hsa-mir-23a	1.9521618	up	0.011320274
hsa-mir-570	1.901412	up	0.012359721
hsa-mir-624	1.8810266	up	0.00555362
hsa-mir-643	1.7392855	up	0.012790618
hsa-mir-380	1.7313354	up	0.007913949

Table S3. Differentially expressed miRNAs were analyzed in CRC cancer versus normal tissue based on TCGA data. The threshold value for upregulated and downregulated genes was a fold change ≥ 1.5 and p -value ≤ 0.05 .

Systematic Name	FC (abs)	Regulation	p
hsa-miR-129-1	-4.858034	down	0
hsa-miR-504	-4.7633567	down	0
hsa-miR-1224	-4.7087784	down	0
hsa-miR-490	-3.7090964	down	7.81E-15
hsa-miR-642	-3.4915624	down	9.04E-18
hsa-miR-1226	-3.4715407	down	8.96E-41
hsa-miR-1249	-3.2612455	down	2.54E-36
hsa-miR-433	-3.2496326	down	8.00E-39
hsa-miR-605	-3.179483	down	0
hsa-miR-2110	-2.8325794	down	3.50E-21
hsa-miR-485	-2.8254273	down	5.03E-20
hsa-miR-766	-2.7934394	down	3.71E-30
hsa-miR-760	-2.7578673	down	1.37E-25
hsa-miR-767	-2.7436526	down	2.46E-08
hsa-miR-205	-2.739815	down	6.83E-10
hsa-miR-1296	-2.6734877	down	1.50E-17
hsa-miR-296	-2.64368	down	1.74E-09
hsa-miR-483	-2.6117496	down	1.85E-05
hsa-miR-1228	-2.6051078	down	4.97E-37
hsa-miR-1306	-2.6021512	down	4.30E-24
hsa-miR-326	-2.5510483	down	4.50E-14
hsa-miR-1976	-2.5414922	down	4.42E-26
hsa-miR-328	-2.5343375	down	6.24E-41
hsa-miR-149	-2.5233283	down	2.10E-19
hsa-miR-937	-2.5119572	down	2.37E-12
hsa-miR-1180	-2.4826884	down	2.38E-15
hsa-miR-133b	-2.419263	down	3.17E-08
hsa-miR-885	-2.372808	down	0
hsa-miR-487a	-2.3506322	down	1.34E-21
hsa-miR-1468	-2.291185	down	1.84E-13
hsa-miR-125b-2	-2.2844684	down	6.33E-09
hsa-miR-139	-2.251541	down	0
hsa-miR-887	-2.2088375	down	8.52E-15
hsa-miR-204	-2.207423	down	1.59E-06
hsa-miR-187	-2.1849632	down	1.79E-11

hsa-miR-1229	-2.1762161	down	6.20E-36
hsa-miR-486	-2.138717	down	1.53E-25
hsa-miR-363	-2.1325169	down	1.33E-07
hsa-miR-432	-2.129805	down	2.46E-12
hsa-miR-133a-2	-2.076548	down	1.10E-13
hsa-miR-1538	-2.073734	down	0
hsa-miR-877	-2.0561497	down	6.97E-09
hsa-miR-323	-2.0124588	down	2.50E-09
hsa-miR-891a	-2.009999	down	9.87E-11
hsa-miR-1271	-1.9774262	down	2.92E-08
hsa-miR-671	-1.9576324	down	3.41E-19
hsa-miR-1275	-1.8874406	down	4.15E-05
hsa-miR-1270	-1.884741	down	4.46E-31
hsa-miR-320c-1	-1.873387	down	0
hsa-miR-935	-1.8306041	down	4.12E-04
hsa-miR-370	-1.8170676	down	2.19E-13
hsa-miR-1254	-1.7977576	down	1.29E-20
hsa-miR-574	-1.7972102	down	2.25E-32
hsa-miR-615	-1.7908909	down	4.36E-07
hsa-miR-874	-1.7782515	down	1.68E-10
hsa-miR-218-1	-1.7708175	down	0
hsa-miR-939	-1.7590865	down	4.61E-10
hsa-miR-105-2	-1.7466513	down	0.002273916
hsa-miR-193b	-1.719887	down	6.08E-18
hsa-miR-346	-1.7060112	down	0
hsa-miR-1292	-1.6991967	down	1.26E-19
hsa-miR-383	-1.6690658	down	4.24E-12
hsa-miR-197	-1.6630012	down	0
hsa-miR-431	-1.6581236	down	5.92E-11
hsa-miR-92b	-1.6517613	down	1.37E-22
hsa-miR-1266	-1.6463609	down	1.64E-05
hsa-miR-1301	-1.6365737	down	5.30E-07
hsa-miR-1248	-1.6362013	down	1.76E-04
hsa-miR-663b	-1.6209098	down	3.81E-05
hsa-miR-193a	-1.5834945	down	8.72E-28
hsa-miR-1274b	-1.5763532	down	0.003775847
hsa-miR-219-1	-1.5725294	down	2.62E-05
hsa-miR-632	-1.5692668	down	7.78E-24
hsa-miR-324	-1.556021	down	5.21E-21
hsa-miR-125a	-1.5363654	down	0
hsa-miR-20b	-1.5359448	down	0.004503305
hsa-miR-150	-1.5326179	down	5.94E-20
hsa-miR-365-1	-1.5111432	down	2.19E-07
hsa-miR-744	-1.5052631	down	8.71E-14
hsa-miR-135b	5.9248714	up	0
hsa-miR-19a	5.448208	up	0
hsa-miR-577	5.0403543	up	1.31E-35
hsa-miR-19b-2	4.7023287	up	0
hsa-miR-590	4.478734	up	0
hsa-miR-144	4.373971	up	0
hsa-miR-424	4.232565	up	0
hsa-miR-592	3.966677	up	4.23E-17
hsa-miR-153-2	3.82902	up	7.93E-40
hsa-miR-708	3.670745	up	0
hsa-miR-889	3.6557608	up	0
hsa-miR-101-2	3.557317	up	0
hsa-miR-628	3.5299652	up	6.44E-27
hsa-miR-374a	3.5115545	up	0
hsa-miR-96	3.505476	up	0
hsa-miR-1-2	3.219226	up	1.60E-27
hsa-miR-542	3.1603498	up	0
hsa-miR-301a	3.1394703	up	3.34E-22
hsa-miR-217	3.1058514	up	7.24E-35
hsa-miR-454	3.0999076	up	2.80E-45
hsa-miR-98	3.0937862	up	0

hsa-miR-552	3.090351	up	2.25E-24
hsa-miR-450b	3.073356	up	3.66E-31
hsa-miR-452	3.0206714	up	0
hsa-miR-369	2.8473043	up	2.78E-42
hsa-miR-136	2.7963743	up	3.15E-39
hsa-miR-411	2.7473662	up	1.24E-22
hsa-miR-374b	2.6867683	up	0
hsa-miR-660	2.679474	up	0
hsa-miR-335	2.526943	up	0
hsa-miR-218-2	2.509361	up	1.89E-23
hsa-miR-495	2.4881825	up	1.09E-27
hsa-miR-376c	2.452837	up	7.97E-16
hsa-miR-32	2.4112337	up	2.00E-44
hsa-miR-95	2.3634226	up	1.30E-16
hsa-miR-29b-1	2.3240824	up	0
hsa-miR-653	2.2456872	up	9.96E-08
hsa-miR-142	2.2234454	up	0
hsa-miR-188	2.2178683	up	3.40E-11
hsa-miR-421	2.177643	up	7.40E-12
hsa-miR-20a	2.1504717	up	0
hsa-miR-582	2.1463692	up	0
hsa-miR-215	2.1386993	up	6.95E-31
hsa-miR-15a	2.1372988	up	0
hsa-miR-190	2.114514	up	3.01E-15
hsa-miR-31	2.084972	up	1.35E-04
hsa-miR-598	2.0749962	up	3.47E-12
hsa-let-7f-1	2.0264852	up	2.76E-36
hsa-miR-106a	2.0253804	up	3.65E-09
hsa-miR-33b	2.0148382	up	2.55E-06
hsa-miR-340	1.9595792	up	3.84E-29
hsa-miR-7-1	1.9589001	up	3.74E-34
hsa-miR-337	1.9362608	up	2.85E-31
hsa-miR-1977	1.8962864	up	6.47E-07
hsa-miR-493	1.8850685	up	3.66E-23
hsa-miR-508	1.8649338	up	1.21E-04
hsa-miR-7-2	1.8547143	up	2.84E-06
hsa-miR-103-2	1.8396531	up	1.13E-12
hsa-miR-16-1	1.8114393	up	0
hsa-miR-429	1.7983998	up	4.12E-42
hsa-miR-450a-2	1.7933439	up	4.47E-07
hsa-miR-651	1.7899704	up	9.32E-07
hsa-miR-26a-1	1.7781942	up	0.001317235
hsa-miR-7-3	1.7778119	up	1.64E-05
hsa-miR-141	1.7770268	up	0
hsa-miR-33a	1.7433052	up	1.67E-10
hsa-miR-379	1.7290301	up	0
hsa-miR-152	1.728595	up	0
hsa-miR-18a	1.661251	up	4.63E-09
hsa-miR-301b	1.6407888	up	2.43E-04
hsa-miR-496	1.6023065	up	1.22E-05
hsa-miR-224	1.582061	up	2.48E-12
hsa-miR-627	1.5594852	up	1.75E-04
hsa-miR-576	1.5593785	up	2.31E-07
hsa-miR-126	1.5329307	up	0
hsa-miR-181d	1.5215815	up	1.41E-05
hsa-miR-147b	1.5213158	up	0.004936536

Table S4. Differentially expressed miRNAs were analyzed in plasma colon cancer patients versus healthy controls. The threshold value for upregulated and downregulated genes was a fold change ≥ 1.5 and p -value ≤ 0.05 .

Systematic_Name	FC (abs)	Regulation	p
hsa-miR-195-5p	-19.084541	down	6.69E-15
hsa-miR-96-5p	-17.871162	down	7.25E-17

hsa-miR-363-3p	-17.0228	down	4.95E-07
hsa-miR-4741	-15.618946	down	9.97E-09
hsa-miR-642b-3p	-14.030791	down	1.21E-06
hsa-miR-374a-5p	-12.953635	down	6.50E-08
hsa-miR-192-5p	-12.524868	down	1.77E-09
hsa-miR-151a-5p	-12.284961	down	2.13E-08
hsa-miR-660-5p	-12.08418	down	6.03E-08
hsa-miR-134-5p	-11.779961	down	1.47E-07
hsa-miR-301a-3p	-11.585538	down	5.73E-10
hsa-miR-6068	-11.114471	down	1.24E-05
hsa-miR-18a-5p	-11.00917	down	6.07E-09
hsa-miR-30b-5p	-10.96	down	1.44E-06
hsa-miR-126-5p	-10.817145	down	1.27E-09
hsa-miR-4728-5p	-10.660697	down	6.34E-17
hsa-miR-151b	-10.577785	down	3.83E-09
hsa-miR-590-5p	-10.264501	down	1.38E-07
hsa-miR-6728-5p	-9.927017	down	7.78E-08
hsa-miR-148a-3p	-9.923865	down	1.81E-06
hsa-miR-5739	-9.6984415	down	1.32E-05
hsa-miR-425-5p	-9.599833	down	4.94E-05
hsa-miR-3135b	-9.34744	down	2.74E-07
hsa-miR-142-5p	-9.205788	down	6.80E-05
hsa-miR-27b-3p	-9.011637	down	8.58E-06
hsa-miR-215-5p	-8.917941	down	2.83E-10
hsa-miR-1227-5p	-8.911604	down	9.05E-07
hsa-miR-371b-5p	-8.890483	down	2.09E-04
hsa-miR-186-5p	-8.877	down	9.09E-08
hsa-miR-148b-3p	-8.662281	down	8.12E-09
hsa-miR-575	-8.462271	down	1.97E-07
hsa-miR-4530	-8.448288	down	0.002184228
hsa-miR-642a-3p	-8.283251	down	0.005282057
hsa-miR-324-3p	-8.146081	down	2.03E-08
hsa-miR-4788	-8.133066	down	6.17E-10
hsa-miR-4534	-8.124963	down	5.27E-04
hsa-miR-7-5p	-8.020097	down	2.11E-11
hsa-miR-5787	-8.016673	down	0.00282615
hsa-miR-6791-5p	-7.9281197	down	7.65E-04
hsa-miR-4634	-7.9260564	down	4.83E-05
hsa-miR-3138	-7.6574693	down	8.34E-09
hsa-miR-331-3p	-7.551329	down	3.39E-09
hsa-miR-4442	-7.527234	down	7.49E-06
hsa-miR-6085	-7.512024	down	1.05E-05
hsa-miR-4443	-7.369146	down	6.40E-04
hsa-miR-4739	-7.366848	down	5.27E-06
hsa-miR-30c-5p	-7.317877	down	2.99E-08
hsa-miR-26b-5p	-7.309291	down	2.83E-04
hsa-miR-6789-5p	-7.2860436	down	1.23E-08
hsa-miR-183-5p	-7.085235	down	1.05E-13
hsa-miR-374b-5p	-6.9002233	down	3.86E-09
hsa-miR-18b-5p	-6.844817	down	9.97E-09
hsa-miR-7108-5p	-6.841108	down	1.42E-04
hsa-miR-8072	-6.722614	down	0.001054136
hsa-miR-98-5p	-6.7059298	down	2.56E-16
hsa-miR-5585-3p	-6.674031	down	7.27E-09
hsa-miR-572	-6.480188	down	1.77E-07
hsa-miR-128-3p	-6.4210453	down	2.11E-12
hsa-miR-3195	-6.395294	down	7.95E-09
hsa-miR-23b-3p	-6.2139225	down	1.23E-05
hsa-miR-630	-6.2048616	down	0.021493422
hsa-miR-6786-5p	-6.180855	down	1.71E-05
hsa-miR-5703	-6.180663	down	0.020989262
hsa-miR-6869-5p	-6.153493	down	0.013190362
hsa-miR-6875-5p	-6.092739	down	4.08E-08
hsa-miR-939-5p	-6.036088	down	2.99E-07
hsa-miR-3679-5p	-6.0327153	down	0.001908814

hsa-miR-6752-5p	-5.923568	down	3.93E-04
hsa-miR-718	-5.911115	down	2.64E-04
hsa-miR-188-5p	-5.8806696	down	3.42E-13
hsa-miR-1471	-5.8774614	down	2.46E-07
hsa-miR-6850-5p	-5.8709145	down	0.011368866
hsa-miR-6780b-5p	-5.8104053	down	4.86E-08
hsa-miR-4459	-5.7814665	down	0.017793614
hsa-miR-454-3p	-5.7681375	down	2.44E-14
hsa-miR-4651	-5.7668676	down	1.25E-13
hsa-miR-5006-5p	-5.750572	down	1.56E-06
hsa-miR-199a-5p	-5.7422247	down	4.67E-04
hsa-miR-144-5p	-5.700877	down	2.15E-09
hsa-miR-3940-5p	-5.677904	down	3.45E-05
hsa-miR-140-5p	-5.6675124	down	4.98E-07
hsa-miR-6749-5p	-5.618565	down	0.009301984
hsa-miR-1183	-5.497882	down	8.80E-08
hsa-miR-8063	-5.4752316	down	1.17E-06
hsa-miR-7641	-5.4738154	down	2.48E-04
hsa-miR-146a-5p	-5.334993	down	8.21E-04
hsa-miR-3188	-5.332079	down	1.62E-07
hsa-miR-638	-5.2982693	down	0.014095136
hsa-miR-130b-3p	-5.2672663	down	1.66E-04
hsa-miR-342-3p	-5.1831193	down	0.001545311
hsa-miR-6763-5p	-5.144915	down	1.65E-05
hsa-miR-1202	-5.112082	down	0.006015135
hsa-miR-6893-5p	-5.0950265	down	1.37E-10
hsa-miR-150-3p	-5.0198402	down	4.19E-08
hsa-miR-4484	-5.0191875	down	1.16E-07
hsa-miR-340-5p	-4.9916167	down	4.23E-09
hsa-miR-1207-5p	-4.966287	down	0.012024546
hsa-miR-6829-5p	-4.956853	down	1.50E-10
hsa-miR-3196	-4.953924	down	1.57E-05
hsa-miR-548q	-4.855887	down	6.94E-11
hsa-miR-4463	-4.8432555	down	7.50E-04
hsa-miR-424-5p	-4.806207	down	1.28E-05
hsa-miR-3648	-4.7944536	down	1.03E-10
hsa-miR-1915-3p	-4.7243605	down	0.016082237
hsa-miR-125a-5p	-4.711557	down	2.55E-08
hsa-miR-3652	-4.687598	down	3.71E-06
hsa-miR-4271	-4.6779494	down	1.36E-07
hsa-miR-532-5p	-4.670084	down	5.11E-11
hsa-miR-4270	-4.488763	down	0.012020052
hsa-miR-671-5p	-4.4687114	down	1.77E-07
hsa-miR-6127	-4.415358	down	0.002855521
hsa-miR-10b-5p	-4.410356	down	4.98E-09
hsa-miR-6724-5p	-4.406721	down	0.009369723
hsa-miR-6800-5p	-4.393602	down	0.02623327
hsa-let-7d-3p	-4.388507	down	3.35E-04
hsa-miR-5195-3p	-4.352574	down	4.23E-06
hsa-miR-4327	-4.319587	down	1.51E-05
hsa-miR-484	-4.312819	down	3.51E-04
hsa-miR-210-3p	-4.240125	down	1.94E-06
hsa-miR-6812-5p	-4.2040324	down	0.001743548
hsa-miR-4721	-4.1983414	down	4.71E-09
hsa-miR-1225-5p	-4.171139	down	0.021552803
hsa-miR-3937	-4.1268516	down	1.15E-12
hsa-miR-3194-5p	-4.124269	down	1.31E-10
hsa-miR-6831-5p	-4.1073184	down	0.009396043
hsa-miR-3663-3p	-4.0961175	down	0.011477044
hsa-miR-345-3p	-4.077024	down	1.65E-09
hsa-miR-3667-5p	-4.059849	down	3.52E-05
hsa-miR-6858-5p	-4.037533	down	4.46E-09
hsa-miR-181a-5p	-4.024414	down	2.87E-04
hsa-miR-4745-5p	-4.015967	down	5.94E-10
hsa-miR-1914-3p	-3.9975688	down	8.70E-18

hsa-miR-4499	-3.9906962	down	2.26E-04
hsa-miR-6879-5p	-3.9535654	down	0.003344605
hsa-miR-3141	-3.8921163	down	0.006257298
hsa-miR-486-3p	-3.861394	down	7.13E-12
hsa-miR-335-5p	-3.8538697	down	3.49E-12
hsa-miR-6727-5p	-3.8398433	down	0.023623873
hsa-miR-6794-5p	-3.8389106	down	0.00273704
hsa-miR-2276-3p	-3.8282197	down	9.93E-09
hsa-miR-376a-3p	-3.7756028	down	7.74E-07
hsa-miR-4466	-3.7644992	down	0.029209772
hsa-miR-4787-5p	-3.756085	down	0.012493689
hsa-miR-584-5p	-3.7494311	down	5.30E-07
hsa-miR-937-5p	-3.7420526	down	2.52E-04
hsa-miR-6126	-3.707313	down	3.58E-08
hsa-miR-3610	-3.7047298	down	1.97E-13
hsa-miR-1268b	-3.6549137	down	2.13E-04
hsa-miR-7847-3p	-3.6157413	down	0.0357677
hsa-miR-6740-5p	-3.6133046	down	0.025256215
hsa-miR-16-2-3p	-3.5953636	down	0.001419533
hsa-miR-19a-3p	-3.5838585	down	0.004304006
hsa-miR-197-5p	-3.5818837	down	0.028940076
hsa-miR-8064	-3.5633283	down	4.90E-06
hsa-miR-6124	-3.514801	down	0.033647396
hsa-miR-29b-3p	-3.478355	down	0.007268644
hsa-miR-146b-5p	-3.4364433	down	1.04E-08
hsa-miR-135a-3p	-3.4224482	down	1.48E-04
hsa-miR-17-3p	-3.4116976	down	3.45E-04
hsa-miR-1249-5p	-3.373955	down	8.02E-07
hsa-miR-30e-5p	-3.3489783	down	0.01385989
hsa-miR-6086	-3.3278747	down	1.13E-05
hsa-miR-762	-3.3056538	down	0.014431517
hsa-miR-4778-5p	-3.2959955	down	0.00267932
hsa-miR-27a-3p	-3.2275836	down	0.030195076
hsa-miR-7845-5p	-3.21904	down	1.24E-07
hsa-miR-15b-5p	-3.204382	down	0.001744283
hsa-let-7g-5p	-3.1887221	down	0.001677265
hsa-miR-194-5p	-3.186671	down	2.10E-07
hsa-miR-378i	-3.1792	down	1.36E-04
hsa-miR-221-3p	-3.1278567	down	0.024818126
hsa-let-7c-5p	-3.1041744	down	0.01855364
hsa-miR-2861	-3.0810797	down	0.03618509
hsa-miR-6756-5p	-3.0367317	down	9.60E-04
hsa-miR-4707-3p	-3.0173829	down	5.37E-09
hsa-miR-20b-5p	-2.9449818	down	0.002139462
hsa-let-7f-5p	-2.8318105	down	0.02224775
hsa-miR-10a-5p	-2.8141494	down	1.80E-08
hsa-miR-4800-5p	-2.780537	down	0.019083614
hsa-miR-7106-5p	-2.7090771	down	0.01492428
hsa-miR-338-3p	-2.6697903	down	6.17E-04
hsa-miR-652-5p	-2.6586297	down	8.93E-11
hsa-miR-328-3p	-2.6507037	down	0.003074694
hsa-miR-198	-2.6403155	down	0.006110552
hsa-miR-125b-5p	-2.6154964	down	1.75E-04
hsa-miR-498	-2.556956	down	8.03E-06
hsa-miR-6073	-2.5482113	down	7.30E-06
hsa-miR-361-3p	-2.5060644	down	5.56E-11
hsa-miR-106b-5p	-2.4979243	down	0.016352372
hsa-let-7a-5p	-2.4907188	down	0.03822139
hsa-miR-6730-5p	-2.4802718	down	1.60E-11
hsa-miR-378a-3p	-2.4710562	down	2.70E-04
hsa-miR-30a-5p	-2.3956597	down	0.03168892
hsa-miR-6075	-2.3760273	down	1.43E-07
hsa-miR-4429	-2.3728902	down	3.18E-04
hsa-miR-365a-3p	-2.364505	down	3.29E-06
hsa-miR-3158-5p	-2.3610487	down	2.51E-12

hsa-miR-6820-5p	-2.3358476	down	3.76E-04
hsa-miR-34a-5p	-2.3222978	down	4.62E-04
hsa-miR-557	-2.2975543	down	5.81E-04
hsa-miR-497-5p	-2.2728772	down	7.18E-07
hsa-miR-623	-2.2431304	down	7.10E-04
hsa-miR-6790-5p	-2.2431083	down	3.62E-05
hsa-let-7i-5p	-2.2187643	down	1.23E-04
hsa-miR-222-3p	-2.1863503	down	0.036298715
hsa-miR-100-5p	-2.1320403	down	2.01E-06
hsa-miR-4481	-2.0843182	down	3.13E-10
hsa-miR-15a-5p	-2.0705006	down	2.32E-04
hsa-miR-25-3p	-2.0666978	down	0.003317509
hsa-miR-20a-5p	-2.0474055	down	0.001212804
hsa-miR-19b-3p	-2.0025215	down	0.001944795
hsa-miR-139-3p	-1.8184377	down	4.51E-09
hsa-miR-629-5p	-1.7804717	down	9.00E-05
hsa-miR-3960	-1.5608507	down	0.031699736
hsa-miR-1228-3p	30.148172	up	1.51E-10
hsa-miR-6069	27.87234	up	2.56E-10
hsa-miR-6800-3p	27.269981	up	2.59E-09
hsa-miR-1238-3p	27.049736	up	6.62E-10
hsa-miR-6737-3p	25.080816	up	1.15E-10
hsa-miR-4730	24.819586	up	1.78E-14
hsa-miR-6716-3p	24.539305	up	8.48E-14
hsa-miR-6508-5p	23.8303	up	5.85E-09
hsa-miR-4433a-5p	20.12776	up	1.30E-10
hsa-miR-451b	19.966757	up	2.79E-08
hsa-miR-5010-3p	19.232067	up	1.62E-08
hsa-miR-191-3p	19.044302	up	1.38E-08
hsa-miR-1234-3p	16.4659	up	1.02E-07
hsa-miR-3162-3p	16.097244	up	9.02E-11
hsa-miR-6797-3p	15.228248	up	3.81E-09
hsa-miR-1281	14.348885	up	1.99E-08
hsa-miR-4455	12.991922	up	3.94E-07
hsa-miR-4665-3p	11.097143	up	4.46E-07
hsa-miR-1825	11.092906	up	1.47E-06
hsa-miR-940	10.92399	up	6.13E-08
hsa-miR-574-5p	10.731104	up	4.42E-07
hsa-miR-1304-3p	9.837506	up	6.04E-05
hsa-miR-6851-3p	9.263779	up	2.47E-05
hsa-miR-4649-3p	9.22571	up	9.86E-07
hsa-miR-6751-3p	8.612906	up	7.93E-05
hsa-miR-4313	7.8738523	up	2.13E-04
hsa-miR-8485	6.791654	up	9.09E-05
hsa-miR-4725-5p	6.5970798	up	4.73E-04
hsa-miR-6870-3p	6.535795	up	4.09E-04
hsa-miR-32-3p	5.6060896	up	3.70E-04
hsa-miR-6813-3p	5.284001	up	9.57E-04
hsa-miR-7114-3p	5.0547495	up	5.93E-04
hsa-miR-4769-3p	4.8945293	up	5.45E-04
hsa-miR-4284	4.627779	up	0.017311715
hsa-miR-6834-3p	3.8669906	up	0.005754791
hsa-miR-3149	3.4039087	up	0.006676147
hsa-miR-1290	3.2591238	up	8.33E-04
hsa-miR-6861-3p	2.8124409	up	0.010480452
hsa-miR-483-3p	2.767849	up	0.036811158
hsa-miR-6515-3p	2.735245	up	0.01791451
hsa-miR-1246	2.6975517	up	1.28E-05

Table S5. Differentially expressed miRNAs were analyzed in plasma rectal cancer patients versus healthy controls. The threshold value for upregulated and downregulated genes was a fold change ≥ 1.5 and p -value ≤ 0.05 .

Systematic_Name	FC (abs)	Regulation	p
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hsa-miR-642b-3p	-17.698948	down	1.47E-06
hsa-miR-4741	-17.438139	down	7.05E-08
hsa-miR-8072	-16.954582	down	6.86E-07
hsa-miR-195-5p	-16.870594	down	4.58E-09
hsa-miR-134-5p	-15.255262	down	5.22E-08
hsa-miR-1227-5p	-14.240981	down	2.99E-08
hsa-miR-7108-5p	-14.102511	down	6.90E-08
hsa-miR-6728-5p	-14.047849	down	3.49E-09
hsa-miR-6850-5p	-13.927513	down	0.001009182
hsa-miR-142-5p	-13.260134	down	2.65E-05
hsa-miR-192-5p	-13.208113	down	7.88E-08
hsa-miR-4443	-12.575873	down	1.72E-04
hsa-miR-6791-5p	-12.162286	down	6.91E-05
hsa-miR-96-5p	-12.051468	down	1.45E-07
hsa-miR-374a-5p	-11.6988325	down	3.30E-06
hsa-miR-575	-11.611312	down	3.78E-09
hsa-miR-642a-3p	-11.417184	down	0.002989296
hsa-miR-425-5p	-11.215559	down	1.19E-04
hsa-miR-215-5p	-10.99455	down	3.25E-10
hsa-miR-6068	-10.839542	down	4.42E-05
hsa-miR-1202	-10.496189	down	7.10E-04
hsa-miR-3663-3p	-10.39162	down	7.32E-04
hsa-miR-186-5p	-10.336495	down	1.31E-07
hsa-miR-151b	-10.250122	down	6.31E-07
hsa-miR-4530	-10.217537	down	0.001127996
hsa-miR-4739	-9.975182	down	1.35E-06
hsa-miR-5787	-9.938442	down	0.001432164
hsa-miR-660-5p	-9.838545	down	4.02E-05
hsa-miR-144-3p	-9.739871	down	9.79E-05
hsa-miR-4270	-9.561591	down	0.001424078
hsa-miR-363-3p	-9.393585	down	2.50E-04
hsa-miR-30b-5p	-9.281387	down	2.96E-05
hsa-miR-371b-5p	-9.27924	down	1.44E-04
hsa-miR-126-5p	-9.248106	down	3.47E-06
hsa-miR-4788	-9.179674	down	1.21E-08
hsa-miR-6789-5p	-9.112293	down	9.14E-10
hsa-miR-1225-5p	-9.099518	down	0.002235186
hsa-miR-6749-5p	-9.080338	down	0.002189587
hsa-miR-4728-5p	-8.935863	down	2.09E-08
hsa-miR-6727-5p	-8.881601	down	0.002929077
hsa-miR-6786-5p	-8.806383	down	6.19E-08
hsa-miR-4463	-8.784044	down	7.57E-07
hsa-miR-5703	-8.719135	down	0.007174332
hsa-miR-3138	-8.674742	down	7.74E-09
hsa-miR-4534	-8.667723	down	6.05E-04
hsa-miR-148a-3p	-8.302392	down	3.57E-05
hsa-miR-331-3p	-8.24382	down	2.51E-08
hsa-miR-1207-5p	-8.105125	down	0.00282465
hsa-miR-18a-5p	-8.014106	down	3.27E-05
hsa-miR-26b-5p	-8.005609	down	0.00283016
hsa-miR-3135b	-7.968773	down	2.83E-04
hsa-miR-630	-7.815078	down	0.01052535
hsa-miR-638	-7.79626	down	0.004056337
hsa-miR-3195	-7.7535725	down	3.36E-09
hsa-miR-5006-5p	-7.744547	down	1.52E-09
hsa-miR-6763-5p	-7.740162	down	3.02E-07
hsa-miR-939-5p	-7.729882	down	1.52E-08
hsa-miR-374b-5p	-7.622873	down	2.56E-08
hsa-miR-6085	-7.592694	down	8.26E-06
hsa-miR-4763-3p	-7.4306207	down	0.00547572
hsa-miR-30d-5p	-7.341276	down	0.002968174
hsa-miR-8063	-7.2326727	down	2.23E-07
hsa-miR-301a-3p	-7.193112	down	9.35E-06
hsa-miR-4634	-6.9415817	down	2.55E-04
hsa-miR-3652	-6.9143744	down	3.32E-11

hsa-miR-128-3p	-6.899596	down	1.37E-11
hsa-miR-30c-5p	-6.8739023	down	1.23E-06
hsa-miR-572	-6.800901	down	1.10E-06
hsa-miR-328-5p	-6.7855115	down	0.009398649
hsa-miR-148b-3p	-6.721095	down	7.72E-06
hsa-miR-1471	-6.668908	down	1.20E-07
hsa-miR-4442	-6.579573	down	4.75E-05
hsa-miR-340-5p	-6.5751534	down	3.13E-11
hsa-miR-718	-6.5650353	down	2.40E-04
hsa-miR-6775-5p	-6.5413365	down	0.002351017
hsa-miR-5585-3p	-6.506056	down	5.27E-07
hsa-miR-188-5p	-6.5043764	down	2.47E-13
hsa-miR-4651	-6.5019174	down	3.69E-15
hsa-miR-27b-3p	-6.4907494	down	3.24E-04
hsa-miR-1915-3p	-6.462355	down	0.003776004
hsa-miR-6724-5p	-6.436633	down	0.001846714
hsa-miR-4484	-6.413649	down	1.69E-10
hsa-miR-1183	-6.3106236	down	2.49E-08
hsa-miR-4466	-6.267067	down	0.004932348
hsa-miR-3679-5p	-6.215233	down	0.003274665
hsa-miR-342-3p	-6.2028785	down	1.21E-04
hsa-miR-23b-3p	-6.16741	down	1.04E-04
hsa-let-7d-3p	-6.1399474	down	4.92E-06
hsa-miR-4499	-6.088096	down	1.92E-06
hsa-miR-3648	-6.080401	down	1.11E-11
hsa-miR-26a-5p	-6.0503063	down	0.008451654
hsa-miR-1268b	-6.016851	down	1.30E-06
hsa-miR-3188	-5.9901266	down	7.56E-08
hsa-miR-6893-5p	-5.9056025	down	9.92E-13
hsa-miR-151a-3p	-5.877762	down	4.19E-06
hsa-miR-6752-5p	-5.8430524	down	0.001357136
hsa-miR-3196	-5.8197455	down	2.34E-06
hsa-miR-454-3p	-5.793686	down	1.20E-08
hsa-miR-7-5p	-5.74208	down	3.30E-05
hsa-miR-5739	-5.6902986	down	6.16E-04
hsa-miR-4787-5p	-5.620427	down	0.001065759
hsa-miR-4721	-5.580764	down	2.46E-15
hsa-miR-6829-5p	-5.5240984	down	5.12E-11
hsa-miR-4327	-5.5043283	down	3.11E-07
hsa-miR-130b-3p	-5.5023494	down	1.87E-04
hsa-miR-5195-3p	-5.411947	down	2.08E-07
hsa-miR-150-3p	-5.4075403	down	1.71E-07
hsa-miR-548q	-5.400439	down	4.48E-11
hsa-miR-125a-5p	-5.347823	down	6.49E-08
hsa-miR-4271	-5.295589	down	2.69E-08
hsa-miR-6812-5p	-5.2812304	down	5.94E-05
hsa-miR-6869-5p	-5.2776175	down	0.030215487
hsa-miR-6124	-5.27679	down	0.008558582
hsa-miR-3940-5p	-5.2688847	down	8.79E-05
hsa-miR-1229-5p	-5.0768313	down	0.009309867
hsa-miR-183-5p	-5.051148	down	4.69E-06
hsa-miR-3667-5p	-5.045067	down	2.40E-06
hsa-miR-937-5p	-5.0117774	down	1.21E-05
hsa-miR-6780b-5p	-4.9605746	down	1.66E-04
hsa-miR-671-5p	-4.9200864	down	1.76E-07
hsa-miR-4459	-4.9040217	down	0.006731615
hsa-miR-6879-5p	-4.844546	down	3.84E-04
hsa-miR-7641	-4.825062	down	0.00478969
hsa-miR-3194-5p	-4.818217	down	3.57E-15
hsa-miR-6126	-4.8168564	down	5.04E-12
hsa-miR-6785-5p	-4.7778673	down	0.008942611
hsa-miR-7150	-4.759289	down	0.035733562
hsa-miR-6875-5p	-4.7458205	down	0.003345262
hsa-miR-8064	-4.740493	down	8.50E-09
hsa-miR-181a-5p	-4.721017	down	2.63E-04

hsa-miR-3656	-4.7097487	down	0.016498437
hsa-miR-6127	-4.6833744	down	0.002618671
hsa-miR-324-5p	-4.6811886	down	7.56E-07
hsa-miR-590-5p	-4.665492	down	0.003303035
hsa-miR-6858-5p	-4.665387	down	2.15E-11
hsa-miR-4745-5p	-4.6496744	down	4.92E-12
hsa-miR-30e-5p	-4.638218	down	0.009462235
hsa-miR-1914-3p	-4.6320653	down	1.23E-19
hsa-miR-27a-3p	-4.588405	down	0.008616984
hsa-miR-140-5p	-4.5777035	down	1.23E-04
hsa-miR-4687-3p	-4.534422	down	0.039401792
hsa-miR-6756-5p	-4.5099926	down	1.11E-05
hsa-miR-345-3p	-4.501176	down	1.12E-09
hsa-miR-135a-3p	-4.4671125	down	3.49E-05
hsa-miR-6794-5p	-4.4656944	down	4.16E-04
hsa-miR-19a-3p	-4.4238	down	0.013169073
hsa-miR-18b-5p	-4.3512444	down	7.64E-05
hsa-miR-199a-5p	-4.3336153	down	0.005794328
hsa-miR-1249-5p	-4.32165	down	4.57E-09
hsa-miR-584-5p	-4.3162	down	1.27E-08
hsa-miR-3937	-4.290447	down	1.14E-09
hsa-miR-2276-3p	-4.2245	down	5.19E-09
hsa-miR-10b-5p	-4.153251	down	2.57E-07
hsa-miR-532-5p	-4.112886	down	4.63E-06
hsa-miR-7845-5p	-4.1087456	down	7.89E-11
hsa-miR-210-3p	-4.0628104	down	3.96E-04
hsa-miR-320a	-4.047538	down	0.019352725
hsa-miR-6800-5p	-3.992329	down	0.014373192
hsa-miR-7106-5p	-3.9794679	down	7.69E-04
hsa-miR-762	-3.962642	down	0.007135358
hsa-miR-376a-3p	-3.7817614	down	2.87E-05
hsa-miR-6086	-3.7762034	down	1.37E-06
hsa-miR-484	-3.7688918	down	0.004909118
hsa-miR-146a-5p	-3.7541137	down	0.012143113
hsa-miR-30a-5p	-3.6294549	down	1.35E-04
hsa-miR-320b	-3.612441	down	0.038985133
hsa-miR-378i	-3.6068876	down	1.95E-05
hsa-miR-335-5p	-3.5446124	down	8.81E-08
hsa-miR-197-5p	-3.5375495	down	0.013917983
hsa-miR-146b-5p	-3.5189464	down	7.29E-07
hsa-miR-2861	-3.4493215	down	0.014101845
hsa-miR-198	-3.4323826	down	2.04E-04
hsa-miR-424-5p	-3.3857808	down	0.001470275
hsa-miR-106b-5p	-3.3380468	down	0.009031892
hsa-miR-194-5p	-3.3178694	down	5.41E-07
hsa-miR-2392	-3.2619255	down	0.020649794
hsa-miR-5001-5p	-3.2328167	down	0.027117865
hsa-miR-4707-3p	-3.2270503	down	8.88E-08
hsa-miR-338-3p	-3.1831071	down	4.55E-05
hsa-miR-7704	-3.1803765	down	0.031313114
hsa-miR-17-3p	-3.1761377	down	0.004250472
hsa-miR-652-5p	-3.1549861	down	2.76E-14
hsa-miR-3141	-3.1356945	down	0.015659565
hsa-miR-4778-5p	-3.1171834	down	0.008131617
hsa-miR-3665	-3.0952525	down	0.041360788
hsa-miR-3610	-3.0642486	down	2.63E-05
hsa-miR-557	-3.060216	down	8.06E-08
hsa-miR-98-5p	-2.997998	down	0.002315295
hsa-miR-498	-2.995054	down	1.46E-07
hsa-miR-125b-5p	-2.988829	down	1.35E-05
hsa-miR-4800-5p	-2.9831712	down	0.016404362
hsa-miR-6790-5p	-2.9542782	down	1.16E-16
hsa-miR-221-3p	-2.9496	down	0.03162353
hsa-miR-6075	-2.9324594	down	1.11E-13
hsa-miR-378a-3p	-2.9291847	down	7.36E-06

hsa-miR-34a-5p	-2.927698	down	1.11E-06
hsa-miR-623	-2.924685	down	3.93E-07
hsa-miR-6820-5p	-2.9161675	down	2.88E-07
hsa-miR-365a-3p	-2.8485901	down	4.35E-08
hsa-miR-6730-5p	-2.8261933	down	3.08E-11
hsa-miR-486-3p	-2.7457156	down	2.06E-04
hsa-miR-3158-5p	-2.69376	down	4.57E-14
hsa-miR-10a-5p	-2.6498177	down	6.24E-06
hsa-miR-4429	-2.6189446	down	9.07E-05
hsa-miR-15b-5p	-2.5906572	down	7.21E-04
hsa-miR-361-3p	-2.5072474	down	1.52E-07
hsa-miR-29b-3p	-2.4845538	down	0.036073163
hsa-miR-222-3p	-2.4703245	down	0.01965298
hsa-miR-497-5p	-2.4539943	down	1.01E-07
hsa-miR-4481	-2.3321133	down	1.57E-09
hsa-miR-100-5p	-2.313144	down	3.58E-06
hsa-miR-3960	-2.2312152	down	0.001537408
hsa-let-7g-5p	-2.1676872	down	0.022192793
hsa-miR-19b-3p	-2.1611707	down	0.008539365
hsa-miR-139-3p	-2.0268016	down	2.31E-09
hsa-miR-6779-5p	-2.014083	down	0.019162955
hsa-miR-20b-5p	-1.9796937	down	0.010479953
hsa-miR-629-5p	-1.8917848	down	8.69E-06
hsa-miR-15a-5p	-1.8419242	down	0.001552703
hsa-miR-20a-5p	-1.61354	down	0.02919387
hsa-miR-29c-3p	-1.5472715	down	0.016652932
hsa-miR-6508-5p	44.94544	up	6.03E-12
hsa-miR-6800-3p	42.488583	up	2.66E-11
hsa-miR-451b	40.17751	up	7.25E-12
hsa-miR-1228-3p	38.353195	up	7.91E-11
hsa-miR-1238-3p	34.811417	up	4.82E-11
hsa-miR-4730	34.731014	up	1.34E-11
hsa-miR-6069	34.25672	up	2.10E-10
hsa-miR-6716-3p	33.76955	up	3.28E-11
hsa-miR-5010-3p	31.934872	up	1.68E-10
hsa-miR-191-3p	31.08507	up	8.26E-11
hsa-miR-1234-3p	30.505447	up	1.99E-10
hsa-miR-6737-3p	29.85762	up	2.50E-10
hsa-miR-4455	28.234776	up	2.65E-09
hsa-miR-4433a-5p	24.42316	up	8.13E-10
hsa-miR-1281	24.314016	up	3.42E-09
hsa-miR-3162-3p	23.158672	up	9.54E-11
hsa-miR-574-5p	22.594849	up	7.79E-10
hsa-miR-6797-3p	21.93045	up	1.34E-09
hsa-miR-1825	20.717909	up	5.68E-09
hsa-miR-6751-3p	19.310602	up	1.27E-06
hsa-miR-4665-3p	15.921819	up	6.51E-09
hsa-miR-6813-3p	15.844627	up	1.86E-07
hsa-miR-8485	15.750625	up	2.02E-07
hsa-miR-940	15.240282	up	1.13E-08
hsa-miR-6851-3p	14.757802	up	2.81E-07
hsa-miR-3149	14.740364	up	4.66E-06
hsa-miR-4313	14.07879	up	1.94E-05
hsa-miR-32-3p	13.450186	up	1.32E-06
hsa-miR-6834-3p	11.825755	up	2.01E-05
hsa-miR-4769-3p	10.706	up	1.11E-05
hsa-miR-4725-5p	10.448515	up	2.11E-04
hsa-miR-4649-3p	10.081085	up	4.32E-05
hsa-miR-483-3p	10.046119	up	1.28E-05
hsa-miR-1304-3p	9.078493	up	1.94E-04
hsa-miR-6870-3p	9.036732	up	3.87E-05
hsa-miR-6515-3p	8.509136	up	1.23E-04
hsa-miR-7114-3p	7.2395573	up	2.39E-04
hsa-miR-4290	6.2279506	up	0.001038709
hsa-miR-6861-3p	5.682808	up	0.001392494

hsa-miR-1290	5.4939084	up	2.33E-04
hsa-miR-6739-5p	5.270004	up	1.19E-04
hsa-miR-1246	4.7447033	up	1.65E-06
hsa-miR-4284	4.4530253	up	0.008798013
hsa-miR-4749-3p	3.8275385	up	0.003176451
hsa-miR-1273g-3p	3.442122	up	0.001952466
hsa-miR-6819-3p	3.2139478	up	0.031974927
hsa-miR-548c-3p	2.5497031	up	0.018937416
hsa-miR-6766-3p	2.530503	up	0.026634071
hsa-miR-1224-3p	2.112045	up	0.014022677

Table S6. Differentially expressed miRNAs were analyzed in plasma colorectal cancer patients versus healthy controls. The threshold value for upregulated and downregulated genes was a fold change ≥ 1.5 and p -value ≤ 0.05 .

Systematic_Name	FC (abs)	Regulation	p
hsa-miR-195-5p	-18.817083	down	6.57E-17
hsa-miR-96-5p	-16.276388	down	2.54E-18
hsa-miR-4741	-16.049957	down	7.21E-10
hsa-miR-363-3p	-15.419561	down	9.54E-07
hsa-miR-642b-3p	-14.913443	down	1.99E-07
hsa-miR-134-5p	-13.088778	down	2.41E-09
hsa-miR-192-5p	-12.807455	down	9.69E-11
hsa-miR-374a-5p	-11.839737	down	1.20E-07
hsa-miR-660-5p	-11.375271	down	2.03E-07
hsa-miR-6068	-11.091023	down	4.17E-06
hsa-miR-6728-5p	-10.82846	down	6.99E-10
hsa-miR-425-5p	-10.548464	down	3.01E-05
hsa-miR-142-5p	-10.319482	down	3.09E-05
hsa-miR-30b-5p	-10.255639	down	8.51E-07
hsa-miR-151a-5p	-10.212569	down	9.21E-08
hsa-miR-215-5p	-10.07147	down	1.39E-14
hsa-miR-126-5p	-10.044064	down	1.81E-09
hsa-miR-1227-5p	-9.993745	down	1.30E-08
hsa-miR-151b	-9.945766	down	1.97E-09
hsa-miR-301a-3p	-9.706256	down	4.01E-09
hsa-miR-6791-5p	-9.649806	down	1.66E-04
hsa-miR-18a-5p	-9.370826	down	1.17E-07
hsa-miR-148a-3p	-9.130793	down	2.65E-06
hsa-miR-186-5p	-9.109111	down	1.06E-08
hsa-miR-642a-3p	-9.106543	down	0.003948664
hsa-miR-371b-5p	-9.037191	down	9.12E-05
hsa-miR-4534	-8.788887	down	2.58E-04
hsa-miR-8072	-8.701094	down	6.08E-05
hsa-miR-4728-5p	-8.697706	down	4.50E-17
hsa-miR-7108-5p	-8.57047	down	6.65E-06
hsa-miR-4443	-8.552064	down	2.72E-04
hsa-miR-4530	-8.535406	down	0.001600046
hsa-miR-5787	-8.417286	down	0.001988932
hsa-miR-575	-8.3517	down	2.95E-09
hsa-miR-27b-3p	-8.132425	down	1.01E-05
hsa-miR-6850-5p	-8.059588	down	0.003773439
hsa-miR-26b-5p	-8.017587	down	3.80E-04
hsa-miR-4788	-7.9594493	down	2.28E-11
hsa-miR-5739	-7.921967	down	2.98E-05
hsa-miR-4634	-7.9133234	down	1.81E-05
hsa-miR-3135b	-7.6615214	down	1.44E-06
hsa-miR-331-3p	-7.6080284	down	7.00E-11
hsa-miR-4739	-7.5708833	down	1.01E-06
hsa-miR-590-5p	-7.522014	down	1.49E-05
hsa-miR-148b-3p	-7.456761	down	3.13E-08
hsa-miR-3138	-7.438351	down	1.89E-10
hsa-miR-6789-5p	-7.3977494	down	5.61E-11
hsa-miR-6085	-7.253052	down	3.15E-06

hsa-miR-7-5p	-7.178249	down	1.89E-10
hsa-miR-6749-5p	-7.141727	down	0.004406519
hsa-miR-374b-5p	-7.032165	down	1.71E-11
hsa-miR-30c-5p	-7.006509	down	6.52E-09
hsa-miR-4442	-6.8117385	down	5.20E-06
hsa-miR-1202	-6.8062596	down	0.002387004
hsa-miR-5703	-6.7925115	down	0.013649669
hsa-miR-6786-5p	-6.572998	down	8.41E-07
hsa-miR-630	-6.5669317	down	0.0160374
hsa-miR-3195	-6.4262743	down	1.01E-10
hsa-miR-3663-3p	-6.298948	down	0.002452866
hsa-miR-128-3p	-6.2682095	down	3.41E-15
hsa-miR-183-5p	-6.2638874	down	7.16E-14
hsa-miR-718	-6.1670556	down	1.01E-04
hsa-miR-939-5p	-6.1567235	down	5.99E-09
hsa-miR-572	-6.143451	down	1.10E-08
hsa-miR-638	-6.0846047	down	0.007724057
hsa-miR-3679-5p	-6.0663605	down	0.001795867
hsa-miR-4270	-6.0591116	down	0.004546233
hsa-miR-5585-3p	-5.979514	down	1.48E-09
hsa-miR-23b-3p	-5.931212	down	9.71E-06
hsa-miR-6752-5p	-5.9222207	down	2.56E-04
hsa-miR-4463	-5.82371	down	4.17E-05
hsa-miR-1225-5p	-5.7989573	down	0.008056652
hsa-miR-18b-5p	-5.7592382	down	6.40E-08
hsa-miR-1207-5p	-5.6783795	down	0.007325315
hsa-miR-1471	-5.667467	down	8.00E-09
hsa-miR-5006-5p	-5.6112366	down	1.51E-08
hsa-miR-1915-3p	-5.538143	down	0.008179117
hsa-miR-6763-5p	-5.5240726	down	6.74E-07
hsa-miR-8063	-5.5046577	down	8.57E-08
hsa-miR-188-5p	-5.4637866	down	2.37E-17
hsa-miR-3940-5p	-5.455228	down	1.55E-05
hsa-miR-6869-5p	-5.454521	down	0.020603845
hsa-miR-342-3p	-5.4326143	down	5.38E-04
hsa-miR-6727-5p	-5.409926	down	0.008533103
hsa-miR-4651	-5.385709	down	6.31E-18
hsa-miR-4459	-5.376338	down	0.013653612
hsa-miR-454-3p	-5.3466787	down	1.26E-15
hsa-miR-130b-3p	-5.339442	down	7.91E-05
hsa-miR-3188	-5.2901726	down	4.60E-09
hsa-miR-1183	-5.266278	down	1.14E-09
hsa-miR-6724-5p	-5.1408005	down	0.004485659
hsa-miR-3652	-5.0073633	down	1.92E-08
hsa-miR-4484	-4.959791	down	3.91E-10
hsa-miR-340-5p	-4.958847	down	4.22E-11
hsa-miR-140-5p	-4.9532743	down	4.18E-06
hsa-miR-3196	-4.940166	down	2.50E-06
hsa-miR-6780b-5p	-4.9353385	down	5.51E-07
hsa-miR-98-5p	-4.8731217	down	6.04E-09
hsa-miR-4466	-4.7887235	down	0.012988478
hsa-miR-199a-5p	-4.7726145	down	0.001234816
hsa-miR-150-3p	-4.7547145	down	2.23E-09
hsa-miR-4763-3p	-4.709969	down	0.021727553
hsa-miR-6127	-4.6826367	down	0.001969452
hsa-miR-6893-5p	-4.6469536	down	6.91E-14
hsa-miR-548q	-4.6302056	down	1.93E-14
hsa-miR-125a-5p	-4.6221566	down	6.85E-11
hsa-miR-6829-5p	-4.5898786	down	8.70E-14
hsa-let-7d-3p	-4.5557494	down	9.23E-05
hsa-miR-146a-5p	-4.545061	down	0.002496355
hsa-miR-6800-5p	-4.518268	down	0.016603379
hsa-miR-4271	-4.5100737	down	3.17E-09
hsa-miR-6875-5p	-4.438074	down	2.08E-05
hsa-miR-324-5p	-4.4222517	down	4.73E-09

hsa-miR-532-5p	-4.402987	down	7.14E-12
hsa-miR-5195-3p	-4.365667	down	2.60E-07
hsa-miR-7641	-4.343594	down	0.001507537
hsa-miR-144-5p	-4.3235927	down	1.09E-05
hsa-miR-4499	-4.2906756	down	2.32E-05
hsa-miR-3648	-4.2686577	down	2.90E-14
hsa-miR-671-5p	-4.2634115	down	9.26E-09
hsa-miR-4327	-4.2425714	down	1.16E-06
hsa-miR-6812-5p	-4.196215	down	5.73E-04
hsa-miR-424-5p	-4.1724997	down	3.34E-05
hsa-miR-10b-5p	-4.1393824	down	2.41E-10
hsa-miR-19a-3p	-4.128786	down	0.004145203
hsa-miR-6775-5p	-4.12333	down	0.020697972
hsa-miR-210-3p	-4.1130724	down	3.12E-06
hsa-miR-3667-5p	-4.092896	down	2.88E-06
hsa-miR-6794-5p	-4.0526137	down	8.61E-04
hsa-miR-1268b	-4.0522842	down	2.28E-05
hsa-miR-484	-3.9926472	down	9.02E-04
hsa-miR-937-5p	-3.9748037	down	4.57E-05
hsa-miR-197-5p	-3.968531	down	0.016957127
hsa-miR-6124	-3.9442096	down	0.021335324
hsa-miR-181a-5p	-3.9428988	down	2.54E-04
hsa-miR-376c-3p	-3.9367557	down	3.87E-08
hsa-miR-6879-5p	-3.9321866	down	0.001633666
hsa-miR-345-3p	-3.8832836	down	1.82E-12
hsa-miR-3194-5p	-3.8685493	down	7.96E-14
hsa-miR-4721	-3.8504777	down	9.05E-12
hsa-miR-3937	-3.8199637	down	8.74E-17
hsa-miR-8064	-3.730656	down	2.57E-08
hsa-miR-6858-5p	-3.7172866	down	9.27E-12
hsa-miR-2276-3p	-3.7057345	down	1.40E-11
hsa-miR-376a-3p	-3.6979203	down	2.42E-08
hsa-miR-4745-5p	-3.6714063	down	6.50E-13
hsa-miR-135a-3p	-3.6567793	down	2.59E-05
hsa-miR-3141	-3.607383	down	0.007044534
hsa-miR-584-5p	-3.6054554	down	2.43E-08
hsa-miR-320a	-3.6046314	down	0.026258538
hsa-miR-335-5p	-3.5905132	down	1.61E-14
hsa-miR-1914-3p	-3.5813653	down	2.12E-22
hsa-miR-6126	-3.5677655	down	7.63E-11
hsa-miR-3656	-3.5512922	down	0.03379125
hsa-miR-762	-3.5477028	down	0.007860391
hsa-miR-7847-3p	-3.5377665	down	0.035498
hsa-miR-6831-5p	-3.5358574	down	0.01728924
hsa-miR-27a-3p	-3.510689	down	0.022960031
hsa-miR-486-3p	-3.454302	down	2.87E-11
hsa-miR-17-3p	-3.43685	down	2.66E-04
hsa-miR-146b-5p	-3.3099542	down	5.29E-10
hsa-miR-1249-5p	-3.2941897	down	4.93E-09
hsa-miR-2861	-3.293926	down	0.022118533
hsa-miR-6756-5p	-3.28809	down	1.50E-04
hsa-miR-29b-3p	-3.2052658	down	0.00967639
hsa-let-7e-5p	-3.197785	down	2.01E-05
hsa-miR-3610	-3.1922328	down	4.32E-12
hsa-miR-378i	-3.1648498	down	3.88E-05
hsa-miR-16-2-3p	-3.1548777	down	0.00455271
hsa-miR-7845-5p	-3.1460974	down	4.05E-10
hsa-miR-6086	-3.1291914	down	1.11E-06
hsa-miR-377-3p	-3.126262	down	4.52E-14
hsa-miR-194-5p	-3.1255758	down	1.32E-09
hsa-miR-500a-3p	-3.111047	down	3.56E-11
hsa-miR-320b	-3.1086102	down	0.039215714
hsa-miR-1185-1-3p	-3.0617254	down	8.89E-09
hsa-miR-6833-5p	-3.0580056	down	1.71E-04
hsa-miR-4778-5p	-3.056587	down	0.003259339

hsa-miR-221-3p	-3.0081816	down	0.025633406
hsa-miR-7106-5p	-3.0031521	down	0.004926544
hsa-miR-4476	-3.001603	down	6.84E-11
hsa-miR-1226-5p	-2.9840605	down	7.26E-15
hsa-let-7g-5p	-2.9649425	down	0.002565142
hsa-let-7f-5p	-2.9450636	down	0.036886238
hsa-let-7c-5p	-2.8964581	down	0.02764962
hsa-miR-106b-5p	-2.880392	down	0.009247184
hsa-miR-6723-5p	-2.8754272	down	2.79E-09
hsa-miR-4707-3p	-2.8653567	down	4.33E-12
hsa-miR-362-3p	-2.8307793	down	1.02E-31
hsa-miR-20b-5p	-2.8220801	down	0.001286004
hsa-miR-8087	-2.7844002	down	1.39E-12
hsa-miR-10a-5p	-2.7692397	down	2.13E-11
hsa-miR-198	-2.7467237	down	0.001696119
hsa-miR-338-3p	-2.7454107	down	8.60E-05
hsa-miR-125b-5p	-2.7241395	down	4.89E-06
hsa-miR-30a-5p	-2.7066905	down	0.008074927
hsa-miR-6819-5p	-2.6976192	down	2.18E-06
hsa-miR-6076	-2.697427	down	6.83E-06
hsa-miR-6889-5p	-2.6741095	down	1.08E-13
hsa-miR-4472	-2.6384926	down	1.33E-06
hsa-miR-498	-2.6317935	down	3.11E-08
hsa-miR-4689	-2.6007855	down	3.07E-10
hsa-miR-3945	-2.558	down	1.44E-09
hsa-miR-652-5p	-2.5550196	down	1.01E-14
hsa-miR-328-3p	-2.4896476	down	0.003918324
hsa-miR-4800-5p	-2.4697614	down	0.032500193
hsa-miR-32-5p	-2.4687228	down	1.24E-23
hsa-miR-34a-5p	-2.4650748	down	5.55E-06
hsa-miR-365a-3p	-2.4522202	down	1.33E-09
hsa-miR-6730-5p	-2.427055	down	7.16E-16
hsa-miR-936	-2.422345	down	1.15E-12
hsa-miR-557	-2.4170825	down	1.49E-05
hsa-miR-5196-5p	-2.414294	down	2.66E-09
hsa-miR-378a-3p	-2.4078681	down	9.16E-05
hsa-miR-361-3p	-2.404694	down	6.46E-13
hsa-miR-550a-3p	-2.401832	down	4.54E-08
hsa-miR-6738-5p	-2.391808	down	2.43E-10
hsa-miR-625-5p	-2.3885949	down	3.16E-08
hsa-miR-6806-5p	-2.357881	down	3.26E-11
hsa-miR-623	-2.3486319	down	1.44E-05
hsa-miR-1273f	-2.3472059	down	1.15E-07
hsa-miR-3911	-2.333487	down	3.70E-04
hsa-miR-6075	-2.3249643	down	1.57E-10
hsa-miR-550a-3-5p	-2.3247764	down	8.07E-14
hsa-miR-500b-5p	-2.3205512	down	1.26E-19
hsa-miR-3158-5p	-2.317846	down	1.14E-16
hsa-miR-6820-5p	-2.3088505	down	1.80E-05
hsa-miR-502-3p	-2.2820218	down	2.08E-08
hsa-miR-497-5p	-2.2775123	down	7.66E-10
hsa-miR-4429	-2.2772121	down	7.68E-05
hsa-miR-6790-5p	-2.275993	down	3.22E-07
hsa-miR-28-5p	-2.2643461	down	8.66E-12
hsa-miR-4318	-2.2464552	down	4.09E-10
hsa-miR-505-3p	-2.236741	down	5.58E-12
hsa-miR-1224-5p	-2.2265306	down	4.08E-08
hsa-miR-3156-5p	-2.2008436	down	6.54E-14
hsa-miR-6073	-2.1952627	down	1.40E-04
hsa-miR-19b-3p	-2.182291	down	0.001249115
hsa-miR-222-3p	-2.1678562	down	0.033816654
hsa-miR-6778-5p	-2.1623857	down	3.60E-07
hsa-miR-15b-3p	-2.1525402	down	5.76E-23
hsa-miR-4314	-2.1511378	down	1.93E-07
hsa-miR-4701-3p	-2.1483965	down	0.001433074

hsa-miR-29c-5p	-2.143977	down	3.15E-10
hsa-miR-196b-5p	-2.1385567	down	1.47E-20
hsa-miR-100-5p	-2.1351373	down	1.85E-09
hsa-miR-15a-5p	-2.1227117	down	4.08E-05
hsa-miR-495-3p	-2.1154683	down	6.24E-09
hsa-miR-22-5p	-2.0690458	down	3.23E-13
hsa-miR-624-5p	-2.0602736	down	7.98E-22
hsa-miR-4695-5p	-2.031634	down	9.59E-05
hsa-miR-6840-3p	-2.0093098	down	7.40E-10
hsa-let-7i-5p	-2.0085988	down	5.63E-04
hsa-miR-25-3p	-2.0036635	down	0.002725539
hsa-miR-4481	-1.997419	down	5.80E-14
hsa-miR-20a-5p	-1.992616	down	0.001618002
hsa-miR-6757-5p	-1.9623383	down	1.86E-10
hsa-miR-4673	-1.9251508	down	1.26E-09
hsa-miR-4734	-1.9112371	down	1.40E-08
hsa-miR-6802-5p	-1.8871756	down	4.04E-09
hsa-miR-99a-5p	-1.8753809	down	6.92E-08
hsa-miR-601	-1.8691542	down	1.76E-07
hsa-miR-1185-2-3p	-1.8633478	down	5.18E-08
hsa-miR-145-5p	-1.8623804	down	3.66E-04
hsa-miR-136-5p	-1.856118	down	9.59E-04
hsa-miR-139-3p	-1.8543397	down	8.61E-13
hsa-miR-5685	-1.8530449	down	9.10E-06
hsa-miR-629-5p	-1.8488889	down	8.91E-07
hsa-miR-6768-5p	-1.8224642	down	7.51E-11
hsa-miR-3960	-1.8120283	down	0.009938992
hsa-miR-7846-3p	-1.7743001	down	2.63E-04
hsa-miR-6809-5p	-1.7526833	down	0.029643845
hsa-miR-378d	-1.7186202	down	3.17E-09
hsa-miR-4496	-1.7063788	down	5.32E-07
hsa-miR-187-5p	-1.6826344	down	4.76E-07
hsa-miR-30e-3p	-1.6719811	down	4.26E-05
hsa-miR-8089	-1.6492912	down	1.69E-05
hsa-miR-3202	-1.6320455	down	0.001248828
hsa-miR-1343-5p	-1.6278356	down	5.91E-05
hsa-miR-4746-3p	-1.627519	down	1.04E-05
hsa-miR-4787-3p	-1.6266427	down	6.14E-04
hsa-miR-4767	-1.6191354	down	5.44E-09
hsa-miR-3137	-1.6032785	down	0.011920111
hsa-miR-4322	-1.6000853	down	5.57E-06
hsa-miR-6129	-1.5939972	down	3.26E-05
hsa-miR-8073	-1.5894003	down	1.87E-04
hsa-miR-196a-5p	-1.5715226	down	5.73E-07
hsa-miR-6784-5p	-1.5477245	down	2.89E-04
hsa-miR-654-3p	-1.5470378	down	9.51E-05
hsa-miR-487b-3p	-1.543488	down	0.002326863
hsa-miR-4253	-1.5357696	down	1.65E-04
hsa-miR-3923	-1.5347615	down	2.28E-06
hsa-miR-3198	-1.5345788	down	5.26E-04
hsa-miR-4317	-1.5343933	down	9.93E-09
hsa-miR-133b	-1.5296113	down	7.33E-05
hsa-miR-6071	-1.5261133	down	6.58E-05
hsa-miR-513a-5p	-1.5219287	down	0.011546293
hsa-miR-224-5p	-1.5217549	down	5.49E-06
hsa-miR-6741-5p	-1.5131516	down	0.026460359
hsa-miR-1228-3p	32.27718	up	3.42E-12
hsa-miR-4730	30.422903	up	2.83E-17
hsa-miR-6716-3p	29.729202	up	1.68E-16
hsa-miR-6800-3p	29.503895	up	9.18E-11
hsa-miR-6508-5p	28.357412	up	8.31E-11
hsa-miR-6069	28.025434	up	1.00E-11
hsa-miR-1238-3p	27.997011	up	1.77E-11
hsa-miR-451b	27.348436	up	6.54E-11
hsa-miR-6737-3p	24.871214	up	6.56E-12

hsa-miR-5010-3p	23.709328	up	1.11E-10
hsa-miR-191-3p	21.585037	up	3.30E-10
hsa-miR-4433a-5p	20.750298	up	6.51E-12
hsa-miR-1234-3p	20.488674	up	1.48E-09
hsa-miR-3162-3p	19.78715	up	3.22E-13
hsa-miR-1281	19.084553	up	2.54E-10
hsa-miR-4455	18.082542	up	4.14E-09
hsa-miR-6797-3p	18.079847	up	6.06E-11
hsa-miR-574-5p	15.281876	up	3.38E-09
hsa-miR-1825	14.909924	up	2.33E-08
hsa-miR-4665-3p	14.3801985	up	6.29E-09
hsa-miR-940	14.21207	up	5.06E-10
hsa-miR-6751-3p	11.924637	up	6.65E-06
hsa-miR-6851-3p	10.274067	up	4.08E-06
hsa-miR-8485	10.240803	up	1.65E-06
hsa-miR-1304-3p	9.692887	up	4.43E-05
hsa-miR-4313	9.627616	up	4.77E-05
hsa-miR-4649-3p	8.847954	up	2.86E-06
hsa-miR-4725-5p	7.8299713	up	1.93E-04
hsa-miR-6813-3p	7.5761566	up	3.55E-05
hsa-miR-32-3p	7.5108023	up	3.72E-05
hsa-miR-6870-3p	7.2413974	up	9.60E-05
hsa-miR-4769-3p	6.9003167	up	5.20E-05
hsa-miR-6834-3p	5.953099	up	3.99E-04
hsa-miR-3149	5.6869464	up	4.85E-04
hsa-miR-7114-3p	5.6578975	up	2.53E-04
hsa-miR-4446-5p	5.199757	up	0.001480785
hsa-miR-4284	4.7353096	up	0.012844542
hsa-miR-1250-3p	4.440918	up	0.001619956
hsa-miR-483-3p	4.3843226	up	0.003350844
hsa-miR-6514-3p	4.2128963	up	0.008658452
hsa-miR-6515-3p	4.108173	up	0.003259649
hsa-miR-1290	3.9771118	up	2.92E-04
hsa-miR-4485-5p	3.619606	up	0.035324756
hsa-miR-6861-3p	3.578525	up	0.003532203
hsa-miR-6889-3p	3.514845	up	0.008078669
hsa-miR-1246	3.4087684	up	1.19E-06
hsa-miR-6760-3p	3.3645709	up	0.005375398
hsa-miR-3653-5p	3.3227017	up	0.001715339
hsa-miR-491-3p	3.0987763	up	0.002226062
hsa-miR-933	2.9197109	up	0.004580116
hsa-miR-1273g-3p	2.7311556	up	0.006227011
hsa-miR-6798-3p	2.6818657	up	0.012433725
hsa-miR-4290	2.638919	up	0.037525527
hsa-miR-6880-3p	2.1112335	up	0.024522016
hsa-miR-4749-3p	2.060287	up	0.020719018
hsa-miR-6778-3p	1.9191736	up	0.013868927
hsa-miR-3613-3p	1.8628482	up	0.040795192
hsa-miR-34b-3p	1.8161502	up	0.025234645
hsa-miR-1224-3p	1.7235461	up	0.035547186
hsa-miR-6805-5p	1.5911901	up	0.030013535

Table S7. Differentially expressed miRNAs were analyzed in plasma chemotreated colorectal cancer patients versus untreated colorectal cancer patients. The threshold value for upregulated and downregulated genes was a fold change ≥ 1.5 and p -value ≤ 0.05 .

Systematic_Name	FC (abs)	Regulation	p
hsa-miR-574-3p	-4.707971	down	0.007044553
hsa-miR-6088	-4.2144275	down	0.003552679
hsa-miR-4455	-3.8249462	down	0.011860294
hsa-miR-6125	-3.7428992	down	0.004982985
hsa-miR-6740-5p	-3.725341	down	0.039324444
hsa-miR-5010-3p	-3.2811484	down	0.021567397
hsa-miR-32-3p	-2.9936733	down	0.03313809

hsa-miR-6165	-2.942446	down	0.039437376
hsa-miR-1290	-2.670601	down	0.04024074
hsa-miR-4730	-2.2495148	down	0.04175604
hsa-miR-6090	-2.2029164	down	0.04453954
hsa-miR-6089	-2.135594	down	0.005230125
hsa-miR-4281	-1.7625313	down	0.025285373
hsa-miR-3960	-1.7338134	down	0.029885752
hsa-miR-18a-5p	4.6639194	up	0.001662072
hsa-miR-151a-3p	4.4174294	up	0.001037019
hsa-let-7d-5p	4.233113	up	0.010206928
hsa-miR-103a-3p	4.15344	up	0.013946099
hsa-miR-26b-5p	3.9169278	up	0.021480478
hsa-miR-30e-5p	3.7584565	up	0.008996997
hsa-miR-26a-5p	3.6667118	up	0.029952237
hsa-miR-199a-5p	3.595766	up	0.020379977
hsa-let-7f-5p	3.4678154	up	0.025064226
hsa-miR-23b-3p	3.2887168	up	0.012643079
hsa-miR-144-3p	3.201038	up	0.038210653
hsa-miR-17-5p	3.1981778	up	0.009441602
hsa-miR-29b-3p	3.0401678	up	0.018676355
hsa-miR-30b-5p	3.0304313	up	0.030820938
hsa-miR-19a-3p	2.9517112	up	0.024809351
hsa-miR-18b-5p	2.9143608	up	0.004686276
hsa-miR-30c-5p	2.9088764	up	0.006498599
hsa-miR-374a-5p	2.8217683	up	0.035894904
hsa-miR-148b-3p	2.607857	up	0.020650163
hsa-miR-328-3p	2.5699759	up	0.020868253
hsa-miR-181a-5p	2.543037	up	0.04186078
hsa-miR-151b	2.5332196	up	0.028695533
hsa-miR-93-5p	2.397497	up	0.027022392
hsa-miR-374b-5p	2.371192	up	0.01429387
hsa-miR-34a-5p	2.2413929	up	0.004126904
hsa-miR-106b-5p	2.2385614	up	0.041558307
hsa-miR-324-3p	2.2074447	up	0.041203555
hsa-miR-210-3p	2.2065916	up	0.046626933
hsa-miR-20b-5p	2.1872258	up	0.017583672
hsa-miR-361-5p	2.138619	up	0.031487927
hsa-miR-584-5p	2.1347876	up	0.008861961
hsa-miR-96-5p	2.101457	up	0.011548122
hsa-miR-331-3p	1.9966366	up	0.037425395
hsa-miR-126-3p	1.9670222	up	0.018098893
hsa-miR-195-5p	1.8922216	up	0.042993996
hsa-miR-20a-5p	1.8627847	up	0.004240367
hsa-miR-215-5p	1.8601036	up	0.04361076
hsa-miR-532-5p	1.8593402	up	0.01576892
hsa-miR-19b-3p	1.8193731	up	0.013355121
hsa-miR-183-5p	1.7478797	up	0.021310113
hsa-miR-652-3p	1.7190313	up	0.044040028
hsa-miR-25-3p	1.6944741	up	0.02510068
hsa-miR-10b-5p	1.671827	up	0.046438057
hsa-miR-194-5p	1.6507075	up	0.034387264
hsa-miR-486-3p	1.6445782	up	0.01744914
hsa-miR-128-3p	1.642851	up	0.033004418
hsa-miR-16-5p	1.6003872	up	0.030637063
hsa-miR-21-5p	1.596436	up	0.013982079
hsa-miR-629-5p	1.5757582	up	0.005779247

Table S8. Differentially expressed miRNAs were analyzed in plasma chemotreated rectal cancer patients versus untreated rectal cancer patients. The threshold value for upregulated and downregulated genes was a fold change ≥ 1.5 and p -value ≤ 0.05 .

Systematic_Name	FC (abs)	Regulation	p
hsa-miR-4455	-10.197052	down	0.002471766
hsa-miR-6740-5p	-8.901676	down	0.010032822

hsa-miR-574-3p	-8.493112	down	0.010908118
hsa-miR-3149	-7.9205465	down	0.003406616
hsa-miR-32-3p	-6.936792	down	0.003502164
hsa-miR-5010-3p	-6.359786	down	0.014490048
hsa-miR-6834-3p	-5.377581	down	0.030148871
hsa-miR-6739-5p	-4.8212924	down	0.007088768
hsa-miR-451b	-3.7644587	down	0.036476903
hsa-miR-4644	-3.4251516	down	0.01447643
hsa-miR-26a-5p	8.998737	up	0.007867808
hsa-let-7d-5p	8.37634	up	0.003975279
hsa-miR-103a-3p	7.846926	up	0.010587392
hsa-miR-26b-5p	7.004991	up	0.010193903
hsa-miR-30e-5p	5.6959457	up	0.007506873
hsa-miR-144-3p	5.5556955	up	0.005611194
hsa-miR-425-5p	5.441935	up	0.03630426
hsa-let-7f-5p	5.226171	up	0.025616886
hsa-miR-18a-5p	5.0511136	up	0.027735166
hsa-miR-19a-3p	4.863106	up	0.016271124
hsa-miR-151a-3p	3.9572845	up	0.025120396
hsa-miR-30c-5p	3.79025	up	0.0304551
hsa-miR-29b-3p	3.787197	up	0.00868337
hsa-miR-23a-3p	3.3684056	up	0.019133346
hsa-miR-106b-5p	3.2983665	up	0.020186564
hsa-miR-34a-5p	3.097207	up	0.011985444
hsa-miR-130a-3p	2.9837472	up	0.030885218
hsa-miR-17-5p	2.7596178	up	0.004184775
hsa-let-7a-5p	2.6237125	up	0.033776604
hsa-miR-15b-5p	2.5663142	up	0.001061199
hsa-miR-126-3p	2.4664588	up	0.008646518
hsa-miR-215-5p	2.4504719	up	0.049638417
hsa-miR-19b-3p	2.4384582	up	0.004268087
hsa-miR-142-3p	2.3890023	up	0.040102866
hsa-let-7g-5p	2.2943914	up	0.023863621
hsa-miR-93-5p	2.229338	up	0.014466448
hsa-miR-20b-5p	2.2016134	up	0.005933316
hsa-miR-185-5p	2.0949988	up	0.049758106
hsa-miR-101-3p	2.0491412	up	0.0189567
hsa-miR-29c-3p	2.016969	up	8.56E-04
hsa-miR-21-5p	1.9557222	up	0.008012681
hsa-miR-107	1.9434578	up	0.037316296
hsa-miR-629-5p	1.8806	up	0.015035483
hsa-miR-20a-5p	1.8104604	up	0.011932527
hsa-miR-4306	1.796793	up	0.024286147
hsa-miR-22-3p	1.742627	up	0.007275642
hsa-miR-16-5p	1.6699768	up	0.012902103
hsa-miR-25-3p	1.6550758	up	0.042343654
hsa-miR-15a-5p	1.6123587	up	0.004987674
hsa-let-7i-5p	1.5934038	up	0.020621313



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