

Supplementary talbes:

Talbe 1: The list of ChIP-PCR primers for 12 miRNAs.

miRNA gene	FP	RP	PCR product size
miR-17	GGGCGGGGAGGTCGGAAGTA	CGAAGGACCATGTGGGTGAATG	112bp
miR-10a	CTCCGGCAATGGCGAGTT	TGGAGCTTTACACCAAAGGGA	97bp
miR-25	CGCTTCGCTCTTAGTAAACA	CAATGGCTGGACTGGCTC	101bp
miR-23b	GGGGCCACTGGGAAACGTC	CGCTCCTGGAGTCGAAACCTG	119bp
miR-135b	GGCTGTCTGGTCGGTGAA	TGAGTAATACATGGCTGGTTCA	83bp
miR-130b	GGTCATTTGGATGTGGGTCT	GTGTCCTGTTCTCCTGCTC	194bp
miR-326	GGTGGTTGGAAGCCGAGGGT	AAGGGTGGAGCACAGGGCGAAG	112bp
miR-141	AGATGACGGCTGACGATAA	TGACAGAAAGTGCCTAGACTGAA	106bp
miR-152	GTCCTGCTTCCTGCCTGCTC	AAAGTGGGCTTTGCTTGTG	99bp
miR-199b	TCAGGGAACCAGGTGAGTG	AGGCAGAGTGGGAGGCTTG	155bp
miR-95	CGGAATCCGGGAGTCGCTAG	AAAGAAGAGTTGGCCCAGAAGG	113bp
<i>let-7g</i>	GGTCGGGTATGCTGCTGG	GGACGCTGCGGTGGACTAG	89bp

Table 2: miRNA promoter and pre-miRNAs annotation of Egr1 binding sites

mir_ID	TSS_start	TSS_stop	pre_mir_start-stop	score	strand	chr	peak_start	peak_end	reads_count
hsa-mir-101-1	65305901	65306101		10	-	chr1	65304361	65306441	35
hsa-mir-555	153798677	153798877		20	-	chr1	153798581	153799810	33
hsa-mir-30e/30c-1	40929851	40930051		19	+	chr1	40929438	40930684	25
(cluster-hsa-mir-30a)									
hsa-mir-135b	203685571	203685771	203684053-203684149	20	-	chr1	203684801	203687659	20
hsa-mir-92b	153429179	153434335	153431592-153431687	10	+	chr1	153429752	153430844	13

hsa-mir-556	160306104	160306304		19	+	chr1	160305486	160307110	12
hsa-mir-92b	153429179	153434335	153431592-153431687	10	+	chr1	153427927	153429740	11
hsa-mir-200b	1088265	1090140	1092347-1092441	10	+	chr1	1090788	1092194	11
hsa-mir-200b	1088265	1090140	1092347-1092441	10	+	chr1	1093470	1094709	10
hsa-mir-200b	1088265	1090140		10	+	chr1	1086466	1087332	9
hsa-mir-146b	104184797	104186757	104186259-104186331	10	+	chr10	104184853	104186029	23
hsa-mir-346	88116829	88117029		7	-	chr10	88114636	88115944	12
hsa-mir-346	88113726	88113926		9	-	chr10	88114636	88115944	12
hsa-mir-346	88116130	88116330		22	-	chr10	88114636	88115944	12
hsa-mir-605	52421023	52421223		20	+	chr10	52420222	52422200	11
hsa-mir-604	30064636	30064836		17	-	chr10	30064695	30066725	10
hsa-mir-326	74740421	74740621		19	-	chr11	74739237	74741496	17
hsa-mir-483	2125516	2125716		18	-	chr11	2126682	2128933	12
hsa-mir-483	2118637	2118837	2111940-2112015	9	-	chr11	2115360	2117075	11
hsa-mir-483	2116071	2116271	2111940-2112015	10	-	chr11	2115360	2117075	11
hsa-mir-483	2118637	2118837		9	-	chr11	2117140	2118920	11
hsa-mir-483	2116071	2116271		10	-	chr11	2117140	2118920	11
hsa-mir-611	61491579	61491779		1	-	chr11	61495484	61496445	10
hsa-mir-619	107775395	107775595		20	-	chr12	107774349	107776147	45
hsa-mir-619			107754813- 107754911		-	chr12	107754298	107755296	9
hsa-mir-26a-2	56526689	56526889		24	-	chr12	56524889	56527557	34
hsa-mir-616	56200467	56200667	56199213- 56199309	30	-	chr12	56199944	56201247	17
hsa-mir-616	56200467	56200667	56199213- 56199309	30	-	chr12	56202693	56203724	14
hsa-mir-200c	6942568	6942768	6943123-6943190	20	+	chr12	6939984	6941280	17
hsa-mir-141	6942568	6942768	6943521-6943615	20	+	chr12	6939984	6941280	17
hsa-mir-615	52697079	52697279		6	+	chr12	52697573	52699045	15
hsa-mir-548c	63290459	63290659		20	+	chr12	63288961	63291268	11
hsa-mir-620	115199426	115199626		19	-	chr12	115199056	115200256	9
hsa-mir-17	90797974	90798174	90800860-90800943	35	+	chr13	90796751	90799889	171
(cluster-hsa-mir-17)									
hsa-mir-18a	90797974	90798174	90800860-90800943	35	+	chr13	90796751	90799889	171
(cluster-hsa-mir-17)									
hsa-mir-19a	90797974	90798174	90800860-90800943	25	+	chr13	90796751	90799889	171
(cluster-hsa-mir-17)									
hsa-mir-20a	90797974	90798174	90801320-90801390	25	+	chr13	90796751	90799889	171
(cluster-hsa-mir-17)									
hsa-mir-19b-1	90797974	90798174	90801447-90801533	25	+	chr13	90796751	90799889	171
(cluster-hsa-mir-17)									
hsa-mir-92a-1	90797974	90798174	90801569-90801646	25	+	chr13	90796751	90799889	171
(cluster-hsa-mir-17)									
hsa-mir-16-1	49597556	49597756		13	-	chr13	49595986	49597162	13
hsa-mir-15a	49597556	49597756		13	-	chr13	49595986	49597162	13

hsa-mir-342	99601429	99601629		4	+	chr14	99604136	99605350	14
hsa-mir-342			99645745- 99645843		+	chr14	99643142	99644079	9
hsa-mir-770	100385433	100386041	100388480- 100388577	10	+	chr14	100387824	100388808	9
hsa-mir-629	68177210	68177410		20	-	chr15	68175183	68176381	10
hsa-mir-140	68353649	68353849		25	+	chr16	68353308	68354641	16
hsa-mir-140			68524485- 68524584		+	chr16	68523996	68524960	10
hsa-mir-193b	14303600	14303800	14305325-14305407	25	+	chr16	14302511	14304605	14
hsa-mir-365-1	14303600	14303800		13	+	chr16	14302511	14304605	14
hsa-mir-10a	44014310	44014709	44012199- 44012308	15	-	chr17	44008884	44011068	51
hsa-mir-10a	44014310	44014709	44012199- 44012308	15	-	chr17	44013523	44015182	9
hsa-mir-132	1899412	1901670	1899952-1900052	10	-	chr17	1899338	1901306	23
(cluster-hsa-mir-132)									
has-mir-212	1899412	1901670	1900315-1900424		-	chr17	1899338	1901306	23
(cluster-hsa-mir-132)									
hsa-mir-132	1899412	1901670	1899952-1900052	10	-	chr17	1903422	1904692	23
(cluster-hsa-mir-132)									
has-mir-212	1899412	1901670	1900315-1900424		-	chr17	1903422	1904692	23
(cluster-hsa-mir-132)									
hsa-mir-634	61729287	61729487		21	+	chr17	61728232	61730014	19
hsa-mir-152	43470051	43470251	43469526-43469612	35	-	chr17	43469206	43470940	15
hsa-mir-22	1566155	1566355	1563947-1564031	30	-	chr17	1565778	1567025	15
hsa-mir-142	53379405	53785839		10	-	chr17	53755132	53757845	14
hsa-mir-142	53379405	53785839		10	-	chr17	53515159	53516879	14
hsa-mir-142	53379405	53785839	53763592-53763678	10	-	chr17	53763238	53766135	13
hsa-mir-142	53379405	53785839	53763592-53763678	10	-	chr17	53760183	53761181	11
hsa-mir-142	53379405	53785839		10	-	chr17	53382858	53383856	11
hsa-mir-142	53379405	53785839		10	-	chr17	53740252	53741278	10
hsa-mir-142	53379405	53785839		10	-	chr17	53671286	53672139	10
hsa-mir-142	53379405	53785839		10	-	chr17	53738154	53739803	9
hsa-mir-142	53379405	53785839		10	-	chr17	53710616	53711911	9
hsa-mir-142	53379405	53785839		10	-	chr17	53747423	53748589	9
hsa-mir-632	27701164	27701364	27701241-27701334	30	+	chr17	27700798	27702071	11
hsa-mir-641	45482936	45483136	45480290-45480388	30	-	chr19	45482340	45483703	31
hsa-mir-639	14501281	14501481	14501355-14501452	30	+	chr19	14500517	14501603	20
hsa-mir-642	50863241	50863441		20	+	chr19	50862529	50864891	18
hsa-mir-99b	56883717	56886813	56887677-56887746	10	+	chr19	56884696	56887763	17
hsa-mir-99b	56883717	56886813	56887677-56887746	10	+	chr19	56883516	56884514	10
hsa-let-7e	56883717	56886813	56887851-56887929	10	+	chr19	56884696	56887763	17
hsa-let-7e	56883717	56886813	56887851-56887929	10	+	chr19	56883516	56884514	10
hsa-mir-125a	56883717	56886813		10	+	chr19	56884696	56887763	17
hsa-mir-125a	56883717	56886813	56888319-56888404	10	+	chr19	56883516	56884514	10
hsa-mir-640	19377543	19377743		9	+	chr19	19377591	19378708	16

hsa-mir-24-2	13807762	13808928	13808101-13808173	10	-	chr19	13810990	13812054	13
hsa-mir-24-2	13818427	13819944		1	-	chr19	13814056	13815402	10
hsa-mir-27a	13807762	13808928	13808254-13808331	10	-	chr19	13810990	13812054	13
hsa-mir-27a	13818427	13819944		1	-	chr19	13814056	13815402	10
hsa-mir-23a	13807762	13808928	13808401-13808473	10	-	chr19	13810990	13812054	13
hsa-mir-23a	13818427	13819944		1	-	chr19	13814056	13815402	10
hsa-mir-7-3	4720051	4720251	4721682-4721791	32	+	chr19	4721193	4722191	9
hsa-mir-637	3921938	3922138		20	-	chr19	3917072	3918070	9
hsa-mir-637			3912412- 3912510		-	chr19	3914806	3916047	9
hsa-mir-558	32435133	32435333		20	+	chr2	32435252	32437174	20
hsa-mir-26b	218972621	218972821		30	+	chr2	218968493	218969942	19
hsa-mir-149	241023687	241023887		18	+	chr2	241022192	241023934	12
hsa-mir-149	241040800	241041000	241044091- 241044179	9	+	chr2	241042067	241043195	10
hsa-mir-149	241043770	241044582	241044091- 241044179	10	+	chr2	241042067	241043195	10
hsa-mir-124-3	61276703	61277978	61280297-61280383	9	+	chr20	61278534	61282127	33
hsa-mir-124-3	61278418	61280978	61280297-61280383	10	+	chr20	61278534	61282127	33
hsa-mir-124-3	61276703	61277978		9	+	chr20	61273473	61274471	10
hsa-mir-124-3	61278418	61280978		10	+	chr20	61273473	61274471	10
hsa-mir-103-2	3817385	3817585		20	+	chr20	3816986	3818449	25
hsa-mir-647	62058112	62058312		20	-	chr20	62059359	62060407	13
hsa-mir-647			62044428-62044523		-	chr20	62040150	62041214	10
hsa-mir-647	62058112	62058312	62044428-62044523	20	-	chr20	62057132	62058582	9
hsa-mir-649			19718465-19718561			chr22	19709172	19717877	26
hsa-mir-649	19727706	19727906		10	-	chr22	19731117	19733193	15
hsa-mir-649	19727706	19727906		10	-	chr22	19725856	19730822	14
hsa-mir-185	18384436	18384636		9	+	chr22	18386406	18391255	38
hsa-mir-185	18388530	18388730		20	+	chr22	18386406	18391255	38
hsa-mir-185	18384436	18384636		9	+	chr22	18381778	18386395	36
hsa-mir-185	18388530	18388730		20	+	chr22	18381778	18386395	36
hsa-mir-185	18353537	18353737		8	+	chr22	18351413	18357726	23
hsa-mir-185	18353537	18353737		8	+	chr22	18357853	18359277	18
hsa-mir-185	18384436	18384636		9	+	chr22	18379454	18381521	13
hsa-mir-185	18388530	18388730		20	+	chr22	18391737	18393577	10
hsa-mir-185			18400662- 18400743		+	chr22	18403536	18406547	20
hsa-mir-185			18400662- 18400743		+	chr22	18398616	18403407	19
hsa-mir-185			18400662- 18400743		+	chr22	18396013	18397798	9
hsa-mir-650	21491481	21491681	21495270- 21495365	10	+	chr22	21481503	21493798	29
hsa-mir-650	21491481	21491681	21495270- 21495365	10	+	chr22	21494147	21496551	13
hsa-mir-33a	40558951	40559151		19	+	chr22	40558199	40560138	21
hsa-mir-301b	20335495	20337979	20337270-20337347	10	+	chr22	20335155	20339104	20
hsa-mir-130b	20335495	20337979	20337593-20337674	10	+	chr22	20335155	20339104	20
hsa-mir-301b	20335495	20337979	20337270-20337347	10	+	chr22	20340131	20343284	19

hsa-mir-130b	20335495	20337979	20337593-20337674	10	+	chr22	20340131	20343284	19
hsa-mir-301b	20335495	20337979	20337270-20337347	10	+	chr22	20332257	20333984	9
hsa-mir-130b	20335495	20337979	20337593-20337674	10	+	chr22	20332257	20333984	9
hsa-mir-301b	20335495	20337979		10	+	chr22	20330285	20331488	9
hsa-mir-130b	20335495	20337979		10	+	chr22	20330285	20331488	9
hsa-mir-26a-1	37878072	37878272		24	+	chr3	37878214	37879646	57
hsa-mir-563	15876545	15876745		10	+	chr3	15875648	15877419	26
hsa-mir-569	172660712	172660912		18	-	chr3	172660321	172661437	24
hsa-mir-566	50167751	50167951		19	+	chr3	50166416	50167713	16
hsa-mir-26a-1	37878072	37878272		24	+	chr3	37876068	37877886	11
hsa-mir-425	49029742	49035883	49032585-49032671	10	-	chr3	49033085	49034121	11
hsa-mir-191	49029742	49035883	49033055-49033146	10	-	chr3	49033085	49034121	11
hsa-let-7g	52287341	52287541		23	-	chr3	52287474	52288472	10
hsa-mir-198	121652433	121652633		19	-	chr3	121652675	121653655	9
hsa-mir-574	38545731	38545931	38546048-38546143	30	+	chr4	38545109	38546745	26
hsa-mir-575	83938849	83939049		20	-	chr4	83937347	83938582	10
hsa-mir-576	110574219	110574419		20	+	chr4	110573931	110575286	13
hsa-mir-95	8211359	8211559		18	-	chr4	8210996	8212044	12
hsa-mir-95			8057928- 8058008			chr4	8052475	8053464	9
hsa-mir-218-1	19863881	19864081		21	+	chr4	19864904	19865902	9
hsa-mir-887	15553204	15553404		21	+	chr5	15553440	15554817	16
hsa-mir-581	53642060	53642260		20	-	chr5	53641824	53642947	15
hsa-mir-103-1	167939066	167939266		20	-	chr5	167938292	167939686	14
hsa-mir-579	32480501	32480701		20	-	chr5	32479115	32481331	13
hsa-mir-583	95323360	95323560		9	+	chr5	95323035	95324103	12
hsa-mir-219-1	33283025	33285248	33283590- 33283699	10	+	chr6	33283400	33286057	60
hsa-mir-586	45453548	45453748		18	-	chr6	45452670	45454160	23
hsa-mir-877	30631312	30631512		19	+	chr6	30630942	30632795	17
hsa-mir-877			30660088- 30660173		+	chr6	30659500	30660540	11
hsa-mir-25	99537263	99537463		20	-	chr7	99535358	99536719	51
hsa-mir-93	99537263	99537463		20	-	chr7	99535358	99536719	51
hsa-mir-106b	99537263	99537463		20	-	chr7	99535358	99536719	51
hsa-mir-96	129204548	129210298		10	-	chr7	129205887	129208547	23
hsa-mir-96			129201768- 129201845		-	chr7	129197933	129198987	12
hsa-mir-96	129204548	129210298	129201768- 129201845	10	-	chr7	129199595	129201130	9
hsa-mir-183	129204548	129210298		10	-	chr7	129205887	129208547	23
hsa-mir-183			129201981- 129202090		-	chr7	129197933	129198987	12
hsa-mir-183	129204548	129210298	129201981- 129202090	10	-	chr7	129199595	129201130	9
hsa-mir-671	150560417	150560617		20	+	chr7	150559882	150560988	18
hsa-mir-339	1034424	1034624		9	-	chr7	1034133	1035532	15
hsa-mir-339	1030750	1031846		10	-	chr7	1034133	1035532	15
hsa-mir-335	129919123	129919323		10	+	chr7	129918341	129919952	13

hsa-mir-148a	25955148	25959801	25956064-25956131	10	-	chr7	25956856	25958113	12
hsa-mir-153-2	158073079	158073279		13	-	chr7	158070702	158071700	11
hsa-mir-153-2	157062118	157062318		20	-	chr7	157065835	157067825	10
hsa-mir-153-2	158073079	158073279		13	-	chr7	158075026	158076024	11
hsa-mir-595	158073079	158073279		18	-	chr7	158070702	158071700	11
hsa-mir-595	158073079	158073279		18	-	chr7	158075026	158076024	11
hsa-mir-550-2	32501558	32501758		19	+	chr7	32501292	32502345	10
hsa-mir-591	95789241	95789441		20	-	chr7	95789083	95790081	9
hsa-mir-661			145091347- 145091435		-	chr8	145087661	145090032	52
hsa-mir-661	145099890	145100090		10	-	chr8	145095367	145098626	24
hsa-mir-661	145121431	145121631		17	-	chr8	145118427	145120534	23
hsa-mir-661	145121431	145121631		17	-	chr8	145121113	145123364	21
hsa-mir-548d-1	124497671	124497871		18	-	chr8	124497370	124498988	13
hsa-mir-596	1752393	1753192	1752804-1752880	10	+	chr8	1752011	1753037	13
hsa-mir-598	11096185	11096385		19	-	chr8	11094552	11096313	9
hsa-mir-151	142080414	142080614		19	-	chr8	142079967	142080962	9
hsa-mir-602	139633164	139633364		17	+	chr9	139632535	139634159	28
hsa-mir-601	125732138	125732338		19	-	chr9	125731230	125733010	27
hsa-mir-23b	96806816	96807016		6	+	chr9	96806161	96807548	26
hsa-mir-23b			96887311- 96887407				96885082	96886165	12
hsa-mir-27b	96806816	96807016		6	+	chr9	96806161	96807548	26
hsa-mir-27b			96887548-96887644				96885082	96886165	12
hsa-mir-24-1	96806816	96807016		6	+	chr9	96806161	96807548	26
hsa-mir-24-1			96888124-96888191				96885082	96886165	12
hsa-mir-455	115957951	115958151		20	+	chr9	115954575	115957533	14
hsa-mir-199b	130046615	130047143		10	-	chr9	130041503	130043718	12
hsa-mir-199b	130046615	130047143	130046821-130046930	10	-	chr9	130046525	130048798	10
hsa-let-7a-1	95968291	95968491		10	+	chr9	95967612	95969482	10
hsa-let-7f-1	95968291	95968491		10	+	chr9	95967612	95969482	10
hsa-let-7d	95968291	95968491		10	+	chr9	95967612	95969482	10
hsa-mir-126	138679952	138680152	138684875-138684959	10	+	chr9	138680045	138681200	10
hsa-mir-126	138679952	138680152	138684875-138684959	10	+	chr9	138682056	138683672	9
hsa-mir-32	110921946	110922146		19	-	chr9	110920926	110922542	9
hsa-mir-219-2	130194040	130195803	130194718-130194814	10	-	chr9	130195196	130196699	9
hsa-mir-181a-2	126460466	126460666		10	+	chr9	126460891	126461888	9
hsa-mir-181b-2	126460466	126460666		10	+	chr9	126460891	126461888	9
hsa-mir-652	109132898	109133098		20	+	chrX	109131651	109133456	16