Supplementary Table 9A. One hundred and one genes, for which the 255 probes belonging to Probe Cluster I and showing a significant (P<0.05) inverse correlation (r <-0.2) between DNA methylation levels and mRNA expression levels in the endometrial cancer dataset deposited in The Cancer Genome Atlas database (https://tcgadata.nci.nih.gov/tcga/) were designed.

Target ID[a]	Chromosome	Position[b]	Gene symbol[c]	Gene region[d]
cg00018606	2	208,989,425	*CRYGD*	TSS200
cg00154357	3	147,111,280	*ZIC4*	TSS1500
cg00235367	3	147,110,322	*ZIC4*	TSS200
cg00275741	5	140,261,749	*PCDHA13*	TSS200
cg00423153	2	229,046,785	*SPHKAP*	TSS1500
cg00548552	19	57,183,205	*ZNF835*	TSS200
cg00589371	18	63,417,783	*CDH7*	TSS200
cg00661523	3	151,985,426	*MBNL1*	TSS1500
cg00663077	4	188,916,709	*ZFP42*	TSS1500
cg00701946	2	54,087,200	*GPR75*	TSS200
cg00705992	7	27,226,329	*HOXA11*	TSS1500
cg00970622	1	1,294,362	*MXRA8*	TSS200
cg00983904	12	6,665,288	*IFFO1*	TSS200
cg00983956	19	58,220,669	*ZNF154*	TSS200
cg01268824	19	58,220,818	*ZNF154*	TSS1500
cg01285501	7	27,206,461	*HOXA9*	TSS1500
cg01344171	6	43,612,647	*RSPH9*	TSS200
cg01493517	12	6,665,447	*IFFO1*	TSS200
cg01560972	11	8,190,837	*RIC3*	TSS200
cg01581018	3	147,110,595	*ZIC4*	TSS1500
cg01635193	17	42,092,472	*TMEM101*	TSS200
cg01643203	1	161,171,336	*NDUFS2*	TSS1500
cg01979888	12	6,665,424	*IFFO1*	TSS200
cg02051771	5	140,261,663	*PCDHA13*	TSS200
cg02165355	5	178,368,071	*ZNF454*	TSS200
cg02362103	1	119,532,773	*TBX15*	TSS1500
cg02370605	18	63,417,776	*CDH7*	TSS200
cg02387803	3	147,123,457	*ZIC4*	TSS200
cg02401399	19	36,523,584	*CLIP3*	TSS200
cg02452944	5	140,810,109	*PCDHGA12*	TSS200
cg02536691	19	22,194,032	*ZNF208*	TSS1500
cg03043444	19	57,183,213	*ZNF835*	TSS200
cg03043789	2	176,981,138	*HOXD10*	TSS1500
cg03100639	16	31,483,137	*TGFB1I1*	TSS1500
cg03221247	1	219,347,458	*LYPLAL1*	TSS200
cg03234186	19	58,220,657	*ZNF154*	TSS200

cg03464573	7	27,205,504	*HOXA9*	TSS1500
cg03685124	1	66,999,148	*SGIP1*	TSS200
cg03722888	3	37,033,831	*MLH1*	TSS1500
cg03785076	2	241,936,915	*SNED1*	TSS1500
cg03881775	3	147,111,135	*ZIC4*	TSS1500
cg03900143	3	147,111,660	*ZIC4*	TSS1500
cg03946671	20	62,693,973	*TCEA2*	TSS1500
cg04146745	3	42,947,263	*ZNF662*	TSS200
cg04225243	2	5,831,374	*SOX11*	TSS200
cg04300937	17	4,981,221	*ZFP3*	TSS1500
cg04380519	17	61,778,366	*LIMD2*	TSS1500
cg04417677	7	150,039,105	*RARRES2*	TSS1500
cg04553690	5	140,777,501	*PCDHGB5*	TSS200
cg04726821	3	37,033,791	*MLH1*	TSS1500
cg04891086	12	5,018,513	*KCNA1*	TSS1500
cg04917181	8	98,290,229	*TSPYL5*	TSS200
cg05158240	3	147,123,477	*ZIC4*	TSS200
cg05159188	6	26,240,579	*HIST1H4F*	TSS200
cg05408831	5	179,220,797	*LTC4S*	TSS200
cg05618426	4	148,401,958	*EDNRA*	TSS200
cg05656486	1	161,171,383	*NDUFS2*	TSS1500
cg05670953	3	37,033,903	*MLH1*	TSS1500
cg05771342	11	68,782,202	*MRGPRF*	TSS1500
cg05811594	3	147,123,392	*ZIC4*	TSS200
cg05816193	6	26,018,127	*HIST1H1A*	TSS200
cg05845319	3	37,034,066	*MLH1*	TSS1500
cg05886087	2	102,758,186	*IL1R1*	TSS200
cg05970811	12	64,237,202	*SRGAP1*	TSS1500
cg05979020	2	176,981,336	*HOXD10*	TSS200
cg06092815	2	229,046,406	*SPHKAP*	TSS200
cg06145435	7	1,022,769	*CYP2W1*	TSS200
cg06157602	5	140,787,575	*PCDHGB6*	TSS200
cg06274159	4	188,916,867	*ZFP42*	TSS200
cg06484167	6	27,832,180	*HIST1H2AL*	TSS1500
cg06511389	17	42,092,403	*TMEM101*	TSS200
cg06579547	17	76,922,183	*TIMP2*	TSS1500
cg06743610	19	35,630,305	*FXYD1*	TSS200
cg06847624	5	176,827,671	*PFN3*	TSS200
cg07354440	1	161,168,889	*NDUFS2*	TSS200
cg07355476	11	125,756,934	*HYLS1*	TSS200

cg07578826	2	229,046,410	*SPHKAP*	TSS200
cg07599144	16	30,959,430	*ORAI3*	TSS1500
cg07625529	2	176,981,283	*HOXD10*	TSS1500
cg07644368	5	115,152,785	*CDO1*	TSS1500
cg07660236	6	28,367,883	*ZSCAN12*	TSS1500
cg07730329	5	140,810,137	*PCDHGA12*	TSS200
cg07850418	3	147,110,378	*ZIC4*	TSS200
cg08129583	2	127,413,367	*GYPC*	TSS200
cg08491188	5	140,777,503	*PCDHGB5*	TSS200
cg08526991	2	5,831,394	*SOX11*	TSS200
cg08605326	17	50,237,401	*CA10*	TSS200
cg08668790	19	58,220,662	*ZNF154*	TSS200
cg08812189	3	147,110,367	*ZIC4*	TSS200
cg08850169	1	161,171,469	*NDUFS2*	TSS1500
cg08875705	12	6,665,330	*IFFO1*	TSS200
cg09132480	19	57,183,342	*ZNF835*	TSS1500
cg09178190	5	140,529,580	*PCDHB6*	TSS200
cg09207053	5	140,800,524	*PCDHGA11*	TSS200
cg09292826	1	45,274,032	*BTBD19; TCTEX1D4*	TSS200
cg09400475	1	45,274,055	*BTBD19*	TSS200
cg09414673	7	1,022,797	*CYP2W1*	TSS200
cg09465698	5	140,787,623	*PCDHGB6*	TSS200
cg10242602	4	188,916,875	*ZFP42*	TSS200
cg10376827	10	88,730,324	*AGAP11*	TSS200
cg10689784	9	35,791,982	*NPR2*	TSS1500
cg10795659	5	72,415,998	*TMEM171*	TSS1500
cg10959353	2	229,046,515	*SPHKAP*	TSS200
cg11108890	2	85,811,471	*VAMP5*	TSS200
cg11152302	14	24,867,472	*NYNRIN*	TSS1500
cg11291081	3	37,033,894	*MLH1*	TSS1500
cg11327857	4	123,747,558	*FGF2*	TSS1500
cg11618529	19	58,952,108	*ZNF132*	TSS1500
cg11679069	13	43,596,577	*DNAJC15*	TSS1500
cg11735755	2	176,981,244	*HOXD10*	TSS1500
cg11847636	19	50,015,523	*FCGRT*	TSS200
cg11891393	6	100,911,727	*SIM1*	TSS200
cg12260798	6	26,240,519	*HIST1H4F*	TSS200
cg12304520	5	140,810,123	*PCDHGA12*	TSS200
cg12388007	3	147,110,499	*ZIC4*	TSS1500
cg12506930	19	58,220,718	*ZNF154*	TSS200

cg12615761	18	8,608,907	*RAB12*	TSS1500
cg12681972	6	26,225,299	*HIST1H3E*	TSS200
cg13052034	1	66,999,238	*SGIP1*	TSS200
cg13125157	17	50,237,403	*CA10*	TSS200
cg13340636	3	147,110,667	*ZIC4*	TSS1500
cg13561081	13	43,596,606	*DNAJC15*	TSS1500
cg13734833	11	68,779,817	*MRGPRF*	TSS200
cg13836098	6	26,225,268	*HIST1H3E*	TSS200
cg13871633	3	42,947,385	*ZNF662*	TSS200
cg13939745	2	208,989,405	*CRYGD*	TSS200
cg14021880	2	27,301,369	*EMILIN1*	TSS200
cg14209784	10	88,729,861	*AGAP11*	TSS1500
cg14231749	17	50,237,249	*CA10*	TSS200
cg14268839	15	74,466,809	*ISLR*	TSS200
cg14382215	1	161,169,007	*NDUFS2*	TSS200
cg14410016	2	176,986,659	*HOXD9*	TSS1500
cg14423778	3	151,985,433	*MBNL1*	TSS1500
cg14582763	19	52,956,683	*ZNF578*	TSS200
cg14610403	1	66,998,812	*SGIP1*	TSS1500
cg14703002	6	26,018,058	*HIST1H1A*	TSS200
cg14708218	10	124,638,991	*LOC399815*	TSS200
cg14744898	5	72,415,900	*TMEM171*	TSS1500
cg14817655	4	188,916,724	*ZFP42*	TSS200
cg15066174	5	140,501,311	*PCDHB4*	TSS200
cg15128226	4	123,747,672	*FGF2*	TSS200
cg15418246	1	161,168,858	*NDUFS2*	TSS200
cg15480817	5	72,416,082	*TMEM171*	TSS1500
cg15506609	7	27,206,073	*HOXA9*	TSS1500
cg15718581	4	188,916,581	*ZFP42*	TSS1500
cg15741433	6	26,018,084	*HIST1H1A*	TSS200
cg15874877	5	140,799,572	*PCDHGA11*	TSS1500
cg16047117	22	42,470,063	*FAM109B*	TSS200
cg16316394	5	140,805,841	*PCDHGA11*	TSS200
cg16536329	5	178,368,185	*ZNF454*	TSS200
cg16566400	11	119,293,869	*THY1*	TSS1500
cg16681597	1	219,347,410	*LYPLAL1*	TSS200
cg16708981	19	53,758,609	*ZNF677*	TSS1500
cg16717065	2	5,831,755	*SOX11*	TSS1500
cg16719560	2	85,811,421	*VAMP5*	TSS200
cg16790847	3	147,123,429	*ZIC4*	TSS200

cg16937168	2	241,936,844	*SNED1*	TSS1500
cg17003736	3	147,111,308	*ZIC4*	TSS1500
cg17023770	5	140,624,874	*PCDHB15*	TSS200
cg17105014	2	127,413,363	*GYPC*	TSS200
cg17162576	1	66,999,059	*SGIP1*	TSS200
cg17214107	4	123,747,542	*FGF2*	TSS1500
cg17214381	4	188,916,668	*ZFP42*	TSS1500
cg17384889	6	28,227,068	*NKAPL*	TSS200
cg17463145	7	79,084,011	*MAGI2*	TSS1500
cg17540545	19	35,630,355	*FXYD1*	TSS200
cg17544586	6	73,973,412	*KHDC1*	TSS1500
cg17692242	1	66,999,038	*SGIP1*	TSS1500
cg17736443	6	27,783,054	*HIST1H2AJ*	TSS1500
cg17857974	5	140,800,474	*PCDHGA11*	TSS200
cg18034737	4	188,916,865	*ZFP42*	TSS200
cg18115040	2	176,981,328	*HOXD10*	TSS200
cg18118262	5	140,800,424	*PCDHGA11*	TSS200
cg18320188	3	37,033,980	*MLH1*	TSS1500
cg18366919	19	15,344,364	*EPHX3*	TSS1500
cg18384926	15	45,722,598	*C15orf48*	TSS200
cg18503912	19	35,630,279	*FXYD1*	TSS200
cg18606364	5	140,624,898	*PCDHB15*	TSS200
cg18660345	20	35,169,539	*MYL9*	TSS1500
cg18815343	6	28,367,644	*ZSCAN12*	TSS200
cg18862850	17	50,237,380	*CA10*	TSS200
cg19513321	2	85,811,432	*VAMP5*	TSS200
cg19516404	3	147,123,475	*ZIC4*	TSS200
cg19663224	5	140,799,541	*PCDHGA11*	TSS1500
cg19664945	2	54,087,343	*GPR75*	TSS200
cg19876814	5	140,261,653	*PCDHA13*	TSS200
cg19915738	19	44,952,730	*ZNF229*	TSS200
cg20275132	6	28,367,749	*ZSCAN12*	TSS1500
cg20441805	16	31,483,061	*TGFB1I1*	TSS1500
cg20518446	11	62,315,034	*AHNAK*	TSS1500
cg20552747	17	50,237,576	*CA10*	TSS200
cg20649017	2	176,980,837	*HOXD10*	TSS1500
cg20765086	6	28,367,885	*ZSCAN12*	TSS1500
cg20838362	1	161,168,931	*NDUFS2*	TSS200
cg20911718	14	24,867,491	*NYNRIN*	TSS1500
cg21063722	6	100,911,709	*SIM1*	TSS200

cg21082452	16	66,585,225	*TK2*	TSS1500
cg21109167	3	37,034,084	*MLH1*	TSS1500
cg21156812	18	8,608,738	*RAB12*	TSS1500
cg21304158	2	241,937,034	*SNED1*	TSS1500
cg21385821	17	50,237,844	*CA10*	TSS1500
cg21550024	4	123,747,533	*FGF2*	TSS1500
87, cg24683623, cg	4	123,747,634	*FGF2*	TSS1500
cg21591742	2	176,980,998	*HOXD10*	TSS1500
cg21627409	5	140,810,106	*PCDHGA12*	TSS200
cg21695771	19	36,643,932	*COX7A1*	TSS200
cg21911021	19	58,095,011	*ZIK1*	TSS1500
cg21974923	3	122,296,441	*PARP15*	TSS200
cg22134923	11	62,314,874	*AHNAK*	TSS1500
cg22203219	12	6,665,335	*IFFO1*	TSS200
cg22319311	8	98,290,310	*TSPYL5*	TSS200
cg22464292	5	140,777,446	*PCDHGB5*	TSS1500
cg22510134	15	55,881,599	*PYGO1*	TSS1500
cg22732749	5	140,624,888	*PCDHB15*	TSS200
cg22855255	17	50,237,267	*CA10*	TSS200
cg23002957	16	30,959,532	*ORAI3*	TSS1500
cg23037403	5	178,368,183	*ZNF454*	TSS200
cg23163333	2	229,046,408	*SPHKAP*	TSS200
cg23371746	1	119,532,925	*TBX15*	TSS1500
cg23405212	2	208,989,382	*CRYGD*	TSS200
cg23680086	5	140,787,629	*PCDHGB6*	TSS200
cg23737737	12	6,665,370	*IFFO1*	TSS200
cg23792314	12	25,056,243	*BCAT1*	TSS1500
cg23829024	6	26,018,074	*HIST1H1A*	TSS200
cg23837265	10	88,730,407	*AGAP11*	TSS200
cg24049880	1	161,171,211	*NDUFS2*	TSS1500
cg24503966	18	31,803,678	*NOL4*	TSS200
cg24683623	4	123,747,447	*FGF2*	TSS1500
cg24745495	19	15,344,239	*EPHX3*	TSS1500
cg24779381	15	74,466,794	*ISLR*	TSS200
cg24843380	5	178,367,827	*ZNF454*	TSS1500
cg24896649	4	188,916,726	*ZFP42*	TSS200
cg24918705	5	140,501,321	*PCDHB4*	TSS200
cg25060829	6	28,367,571	*ZSCAN12*	TSS200
cg25156646	19	36,523,600	*CLIP3*	TSS200
cg25194918	2	5,831,370	*SOX11*	TSS200

cg25340966	1	119,532,195	*TBX15*	TSS200
cg25362339	2	85,811,413	*VAMP5*	TSS200
cg25390440	2	127,413,369	*GYPC*	TSS200
cg25429719	2	208,989,324	*CRYGD*	TSS200
cg25754158	5	140,235,442	*PCDHA10*	TSS200
cg25967418	5	140,261,759	*PCDHA13*	TSS200
cg25999578	7	27,205,514	*HOXA9*	TSS1500
cg26010734	19	15,344,046	*EPHX3*	TSS200
cg26092675	6	26,225,258	*HIST1H3E*	TSS200
cg26149875	6	26,225,282	*HIST1H3E*	TSS200
cg26212328	12	46,767,665	*SLC38A2*	TSS1500
cg26356061	19	58,446,960	*ZNF418*	TSS1500
cg26465391	19	58,220,773	*ZNF154*	TSS200
cg26647197	5	140,800,398	*PCDHGA11*	TSS200
cg26800986	15	74,466,704	*ISLR*	TSS200
cg27085869	5	72,416,202	*TMEM171*	TSS200
cg27507960	6	26,225,246	*HIST1H3E*	TSS200
cg27558095	1	66,999,588	*SGIP1*	TSS200
cg27606499	3	147,111,120	*ZIC4*	TSS1500

[a]Probe ID of the Infinium MethylationEPIC BeadChip. [b]National Center for Biotechnology Information (NCBI) database (Genome Build 37). [c]N/A, not annotated (designed for the intergenic regions). [d]Probe CpG sites were annotated as the region from 200 bp upstream of the transcription start site (TSS) to 1500 bp upstream of it (TSS1500) and the region from TSS to 200 bp upstream of TSS (TSS200) based on the RefSeq database (http://www.ncbi.nlm.nih.gov/refseq/).