

**Supplementary Table S2 - Hypermethylation and correlation to gene expression for individual CpG sites at 3p11.2-p14.2 in cervical cancer**

\* Spearman's rank correlation between methylation ( $\beta$ ) and gene expression

Spearman's rank correlation between methylation (p) and gene expression									
CpG site ID	Gene symbol	Location	Rel CpG-I	Hypermethylation frequency (%)		Gene expression correlation*			
MAPINFO				Cohort 1	Cohort 2	Cohort 1		Cohort 2	
						Rho	Adj P	Rho	Adj P
cg25736251	FHIT	61235869	N_Shore	22.1	20.7	-0.40	0.0000	-0.32	0.0029
cg15570148	FHIT	61235985	N_Shore	14.8	13.2	-0.38	0.0000	-0.31	0.0044
cg07212940	C3orf14	62304165	N_Shore	13.4	19.8	-0.46	0.0000	-0.44	0.0000
cg25119986	C3orf14	62304264	N_Shore	13.4	3.3	-0.28	0.0053	-0.15	0.3256
cg11120913	C3orf14	62304470	N_Shore	51.7	55.4	-0.77	0.0000	-0.66	0.0000
cg26896572	C3orf14	62304515	Island	63.1	66.9	-0.79	0.0000	-0.71	0.0000
cg01384143	C3orf14	62304554	Island	75.2	81.8	-0.73	0.0000	-0.64	0.0000
cg02221302	C3orf14	62304629	Island	85.9	86.0	-0.63	0.0000	-0.55	0.0000
cg15059608	C3orf14	62305003	S_Shore	52.3	47.9	-0.76	0.0000	-0.60	0.0000
cg22751696	C3orf14	62305147	S_Shore	45.0	52.9	-0.75	0.0000	-0.62	0.0000
cg01181009	C3orf14	62305213	S_Shore	37.6	40.5	-0.67	0.0000	-0.54	0.0000
cg12845975	C3orf14	62305226	S_Shore	27.5	33.9	-0.63	0.0000	-0.43	0.0000
cg14590206	C3orf14	62305285	S_Shore	69.1	67.8	-0.36	0.0001	-0.20	0.1182
cg02083234	FEZF2	62357769	Island	68.5	79.3	-0.12	0.4323	-0.02	0.9484
cg18104012	FEZF2	62358241	Island	99.3	98.3	-0.09	0.6841	0.01	0.9791
cg26136365	FEZF2	62358379	Island	86.6	77.7	-0.19	0.1316	-0.04	0.8922
cg18902742	FEZF2	62358610	Island	79.2	84.3	-0.06	0.7233	0.06	0.8065
cg19629292	FEZF2	62358980	Island	77.9	79.3	-0.15	0.2808	0.06	0.8365
cg15812348	FEZF2	62359390	Island	77.9	85.1	-0.09	0.6466	-0.02	0.9365
cg19227130	FEZF2	62359392	Island	96.6	99.2	-0.09	0.6425	-0.03	0.9142
cg06423920	FEZF2	62359420	Island	63.8	65.3	-0.14	0.3109	0.01	0.9787
cg24705960	FEZF2	62359456	Island	100.0	99.2	-0.13	0.4087	0.02	0.9498
cg11374425	FEZF2	62359677	Island	100.0	100.0	-0.16	0.2144	0.06	0.8523
cg08252579	FEZF2	62359773	Island	91.3	94.2	-0.19	0.1316	-0.04	0.9020
cg08681924	FEZF2	62359924	S_Shore	92.6	95.9	-0.15	0.2884	-0.01	0.9704
cg27564792	FEZF2	62360162	S_Shore	43.0	47.1	-0.13	0.4144	0.05	0.8691
cg14261840	FEZF2	62360417	S_Shore	79.9	86.0	-0.18	0.1444	-0.03	0.9262
cg04927889	FEZF2	62360464	S_Shore	83.2	88.4	-0.13	0.4108	-0.08	0.7453
cg06819546	FEZF2	62360674	N_Shore	83.9	90.1	-0.06	0.7233	-0.19	0.1482
cg09024435	FEZF2	62360893	N_Shore	60.4	69.4	0.01	0.9698	-0.09	0.7145
cg04191342	CADPS	62859289	N_Shore	30.2	41.3	-0.11	0.4965	-0.03	0.9297
cg15997484	CADPS	62859461	N_Shore	54.4	58.7	-0.02	0.8941	0.02	0.9484
cg27476262	CADPS	62859618	Island	51.0	60.3	0.00	0.9948	0.02	0.9609
cg15914463	CADPS	62860103	Island	44.3	51.2	0.02	0.9605	0.06	0.8172
cg13514230	CADPS	62860224	Island	71.8	73.6	-0.07	0.7233	0.08	0.7495
cg21458907	CADPS	62860802	Island	94.0	93.4	-0.20	0.1042	-0.04	0.8922
cg15957055	CADPS	62861055	Island	87.9	77.7	-0.15	0.2708	-0.14	0.3553
cg11905007	CADPS	62861071	Island	94.0	90.1	-0.11	0.5348	-0.16	0.2674
cg13491481	CADPS	62861142	Island	100.0	100.0	-0.20	0.1093	-0.05	0.8880
cg25947544	CADPS	62861145	Island	100.0	100.0	-0.18	0.1607	-0.04	0.8922
cg02719752	CADPS	62861245	S_Shore	96.0	96.7	-0.11	0.5431	-0.23	0.0585
cg23825335	CADPS	62861311	S_Shore	100.0	100.0	-0.12	0.4807	-0.19	0.1570
cg24505341	CADPS	62861544	S_Shore	90.6	93.4	-0.16	0.2267	-0.26	0.0299
cg21534264	CADPS	62861631	S_Shore	87.9	88.4	-0.09	0.6841	-0.09	0.6998
cg10748355	CADPS	62861796	S_Shore	99.3	100.0	-0.07	0.7233	-0.21	0.1096
cg09379755	CADPS	62861925	S_Shore	53.0	61.2	-0.04	0.8433	-0.13	0.4603
cg22189386	SYNPR	63263752	N_Shore	14.8	22.3	0.07	0.7233	-0.06	0.8570
cg09462808	SYNPR	63263824	N_Shore	96.0	96.7	0.10	0.6053	-0.05	0.8706
cg04785972	SYNPR	63263828	N_Shore	71.1	76.9	0.04	0.8433	0.02	0.9484
cg06314761	SYNPR	63263832	N_Shore	76.5	77.7	0.07	0.7233	-0.04	0.9020
cg08536228	SYNPR	63264063	Island	96.6	98.3	-0.02	0.9342	-0.07	0.7622
cg25854303	SYNPR	63264142	Island	81.9	85.1	0.07	0.7233	-0.15	0.3474
cg15056773	SYNPR	63264249	S_Shore	94.6	94.2	0.00	0.9909	-0.09	0.7145
cg14183384	SYNPR	63264335	S_Shore	93.3	93.4	-0.04	0.8532	-0.11	0.5617
cg15772216	SYNPR	63264919	S_Shore	96.0	95.0	0.01	0.9770	-0.16	0.2779
cg15559684	SYNPR	63428234		90.6	95.0	-0.03	0.8714	-0.12	0.5238
cg06185146	SYNPR	63428305		11.4	13.2	-0.03	0.8700	-0.04	0.9020
cg25506386	ATXN7	63849756	Island	55.0	43.8	0.16	0.2385	-0.17	0.2350
cg25506386	THOC7	63849756	Island	55.0	43.8	-0.01	0.9770	-0.21	0.0975
cg06286796	PSMD6	64008041	N_Shore	46.3	47.1	-0.21	0.0834	0.12	0.5238

cg22801134	PRICKLE2	64210439		17.4	12.4	-0.12	0.4275	0.03	0.9020
cg23047271	PRICKLE2	64210991		32.2	39.7	0.04	0.8460	-0.23	0.0676
cg25818214	PRICKLE2	64211155		22.1	25.6	-0.03	0.8762	-0.28	0.0136
cg02147797	PRICKLE2	64211204		26.8	30.6	0.04	0.8348	-0.24	0.0434
cg07480640	PRICKLE2	64211328		43.6	47.1	-0.05	0.7786	-0.28	0.0136
cg22083047	PRICKLE2	64211464		18.1	5.8	0.03	0.8799	-0.24	0.0504
cg22081832	ADAMTS9	64670459	N_Shore	30.9	16.5	0.07	0.7233	-0.23	0.0597
cg25859972	ADAMTS9	64670515	N_Shore	14.8	12.4	0.07	0.7233	-0.25	0.0354
cg03427905	ADAMTS9	64671378	Island	57.0	69.4	-0.14	0.3346	-0.31	0.0048
cg04366011	ADAMTS9	64671477	Island	66.4	75.2	-0.18	0.1438	-0.18	0.1834
cg12478384	ADAMTS9	64671764	Island	58.4	73.6	-0.17	0.1867	-0.27	0.0254
cg23070026	ADAMTS9	64672542	Island	65.1	78.5	-0.10	0.5574	-0.37	0.0004
cg11427510	ADAMTS9	64673495	Island	94.6	99.2	-0.18	0.1468	-0.26	0.0320
cg21878275	ADAMTS9	64673501	Island	99.3	100.0	-0.12	0.4275	-0.25	0.0432
cg17626022	ADAMTS9	64673914	Island	100.0	100.0	-0.15	0.2622	-0.19	0.1570
cg25121125	ADAMTS9	64674314	S_Shore	49.0	64.5	-0.14	0.3423	-0.25	0.0423
cg15764058	MAGI1	66024691	Island	51.0	55.4	-0.04	0.8532	-0.02	0.9484
cg06096184	LRIG1	66549732	N_Shore	63.1	49.6	-0.57	0.0000	-0.61	0.0000
cg01709518	FAM19A1	68053484	N_Shelf	23.5	31.4	-0.11	0.5124	-0.05	0.8864
cg08495813	FAM19A4	68980320	N_Shore	47.7	62.8	-0.01	0.9698	-0.02	0.9475
cg01405004	FAM19A4	68980539	N_Shore	73.8	81.8	-0.08	0.7135	-0.03	0.9365
cg03186486	FAM19A4	68980947	Island	53.0	61.2	-0.08	0.7135	-0.07	0.7757
cg15356923	FAM19A4	68981011	Island	93.3	98.3	-0.07	0.7233	-0.15	0.3474
cg23967169	FAM19A4	68981503	Island	79.9	78.5	-0.09	0.6949	-0.07	0.8031
cg12417685	FAM19A4	68981852	Island	100.0	100.0	-0.08	0.7135	-0.10	0.6721
cg12219082	FAM19A4	68981854	Island	99.3	100.0	-0.06	0.7260	-0.10	0.6786
cg09868336	FAM19A4	68981866	Island	96.6	95.0	0.01	0.9770	-0.11	0.5794
cg12412079	FAM19A4	68981877	Island	98.7	99.2	-0.01	0.9698	-0.07	0.7728
cg13921352	FAM19A4	68981890	Island	84.6	90.1	-0.07	0.7233	-0.09	0.7145
cg20375342	FAM19A4	68981895	Island	82.6	85.1	-0.03	0.8730	-0.07	0.8065
cg05893614	FAM19A4	68981956	Island	87.2	89.3	-0.04	0.8363	-0.09	0.7145
cg08038353	FAM19A4	68982064	S_Shore	73.2	85.1	-0.04	0.8433	-0.09	0.6788
cg03427298	FAM19A4	68982098	S_Shore	83.2	87.6	-0.04	0.8312	-0.03	0.9020
cg06070625	MITF	69812798		11.4	16.5	0.11	0.5204	0.10	0.6716
cg09325003	MITF	69812885		32.2	34.7	0.06	0.7233	0.08	0.7599
cg03831180	MITF	69915302		12.8	12.4	0.04	0.8603	0.09	0.7145
cg13523819	MITF	69915449		10.1	5.0	0.04	0.8603	-0.05	0.8714
cg05384123	FOXP1	71294341		14.8	12.4	-0.08	0.7021	-0.24	0.0504
cg12431087	FOXP1	71355122		61.1	62.0	-0.09	0.6841	-0.20	0.1265
cg20506347	FOXP1	71355161		59.7	63.6	-0.09	0.6841	-0.20	0.1265
cg22888463	EIF4E3	71779016		12.8	12.4	-0.17	0.2003	0.04	0.8922
cg13026730	EIF4E3	71804139	Island	16.1	18.2	0.08	0.7021	-0.20	0.1265
cg04087740	EIF4E3	71804142	Island	17.4	17.4	0.07	0.7233	-0.11	0.5426
cg13026730	GPR27	71804139	Island	16.1	18.2	-0.30	0.0017	-0.38	0.0002
cg04087740	GPR27	71804142	Island	17.4	17.4	-0.31	0.0012	-0.38	0.0003
cg09655952	PROK2	71833631	N_Shore	28.2	30.6	-0.06	0.7233	-0.15	0.3256
cg01025398	PROK2	71833878	N_Shore	88.6	95.9	0.07	0.7233	-0.08	0.7599
cg15798455	PROK2	71833907	N_Shore	40.9	47.9	0.11	0.4965	-0.13	0.4098
cg19388776	PROK2	71835112	S_Shore	73.8	77.7	0.07	0.7233	-0.01	0.9787
cg05523500	PPP4R2	73046033	Island	20.8	23.1	0.08	0.7070	0.16	0.2779
cg25865467	PDZRN3	73673231	Island	61.1	75.2	-0.18	0.1468	-0.23	0.0675
cg20132590	PDZRN3	73673893	Island	89.3	91.7	-0.14	0.3624	-0.08	0.7355
cg11148130	PDZRN3	73674068	Island	63.8	68.6	-0.13	0.4092	-0.13	0.4098
cg26055770	PDZRN3	73674070	Island	67.1	70.2	-0.13	0.4092	-0.11	0.5719
cg25486757	PDZRN3	73674074	Island	65.8	66.9	-0.16	0.2265	-0.13	0.4370
cg08141424	PDZRN3	73674087	Island	65.1	68.6	-0.17	0.1882	-0.16	0.2994
cg10111115	PDZRN3	73674146	Island	61.7	59.5	-0.15	0.2995	-0.07	0.7728
cg05502701	PDZRN3	73674160	Island	93.3	90.9	-0.19	0.1411	-0.15	0.3474
cg24353443	PDZRN3	73674166	Island	92.6	96.7	-0.21	0.0834	-0.20	0.1265
cg14473924	PDZRN3	73674170	Island	73.2	74.4	-0.23	0.0375	-0.23	0.0675
cg23489627	PDZRN3	73674339	Island	53.7	52.9	-0.24	0.0289	-0.18	0.2034
cg13688769	PDZRN3	73674363	Island	65.8	65.3	-0.21	0.0834	-0.15	0.3256
cg21751983	PDZRN3	73674433	S_Shore	76.5	92.6	-0.16	0.2385	-0.13	0.4098
cg23822879	PDZRN3	73674591	S_Shore	43.0	48.8	-0.20	0.0834	-0.20	0.1265
cg03869608	PDZRN3	73674656	S_Shore	62.4	73.6	-0.20	0.0834	-0.20	0.1265
cg14753334	PDZRN3	73674702	S_Shore	85.2	95.0	-0.24	0.0289	-0.21	0.0975
cg27409478	ZNF717	75834335	Island	83.2	84.3	-0.53	0.0000	-0.44	0.0000

cg02621032	ZNF717	75834525	Island	77.9	76.0	-0.46	0.0000	-0.36	0.0005
cg25964040	ZNF717	75834703	Island	47.0	43.0	-0.08	0.7021	0.10	0.6421
cg16718624	ROBO2	77089518	S_Shore	81.2	89.3	-0.21	0.0739	-0.20	0.1265
cg11980129	ROBO1	79815639	Island	88.6	94.2	-0.03	0.8829	-0.09	0.7162
cg04562217	ROBO1	79815718	Island	99.3	99.2	-0.01	0.9698	-0.08	0.7622
cg15325658	ROBO1	79815782	Island	100.0	100.0	0.10	0.6347	0.03	0.9133
cg21865845	ROBO1	79815848	Island	87.9	88.4	0.08	0.7021	0.12	0.5121
cg07287167	ROBO1	79816794	S_Shore	84.6	81.0	-0.06	0.7233	-0.14	0.3925
cg10243398	ROBO1	79816838	S_Shore	95.3	95.9	-0.01	0.9770	-0.08	0.7336
cg07997035	ROBO1	79816949	S_Shore	92.6	97.5	-0.06	0.7233	-0.04	0.8922
cg21743712	ROBO1	79817125	S_Shore	70.5	80.2	-0.11	0.5124	-0.06	0.8265
cg08661007	ROBO1	79817232	S_Shore	81.2	86.8	-0.03	0.8829	0.04	0.9020
cg18703601	ROBO1	79817278	S_Shore	92.6	95.9	-0.06	0.7260	0.03	0.9142
cg11630696	ROBO1	79817333	S_Shore	89.3	91.7	-0.08	0.7021	0.07	0.7728
cg07356753	GBE1	81810745	Island	47.7	68.6	0.17	0.2016	-0.01	0.9791
cg03147002	CADM2	85007732	N_Shore	68.5	71.1	-0.18	0.1468	0.02	0.9484
cg15355387	CADM2	85007817	N_Shore	61.1	67.8	-0.08	0.7135	0.02	0.9609
cg20541723	CADM2	85007894	N_Shore	84.6	89.3	-0.06	0.7260	-0.01	0.9787
cg06217406	CADM2	85007959	N_Shore	77.9	84.3	-0.08	0.7135	0.01	0.9638
cg25649680	CADM2	85007992	N_Shore	63.1	66.1	-0.07	0.7233	-0.01	0.9704
cg24621982	CADM2	85008061	N_Shore	79.9	80.2	-0.08	0.7135	0.06	0.8523
cg12989890	CADM2	85008105	N_Shore	79.9	83.5	-0.09	0.6841	0.02	0.9498
cg26113636	CADM2	85008156	N_Shore	99.3	100.0	0.00	0.9909	0.16	0.2779
cg05152589	CADM2	85008678	Island	89.9	95.0	-0.14	0.3624	0.03	0.9133
cg22380921	CADM2	85008786	Island	90.6	95.0	-0.14	0.3311	0.10	0.6421
cg12458207	CADM2	85008991	S_Shore	73.8	78.5	-0.08	0.7021	0.08	0.7599