Supplementary Materials: Identification of 42 Genes Linked to Stage II Colorectal Cancer Metastatic Relapse

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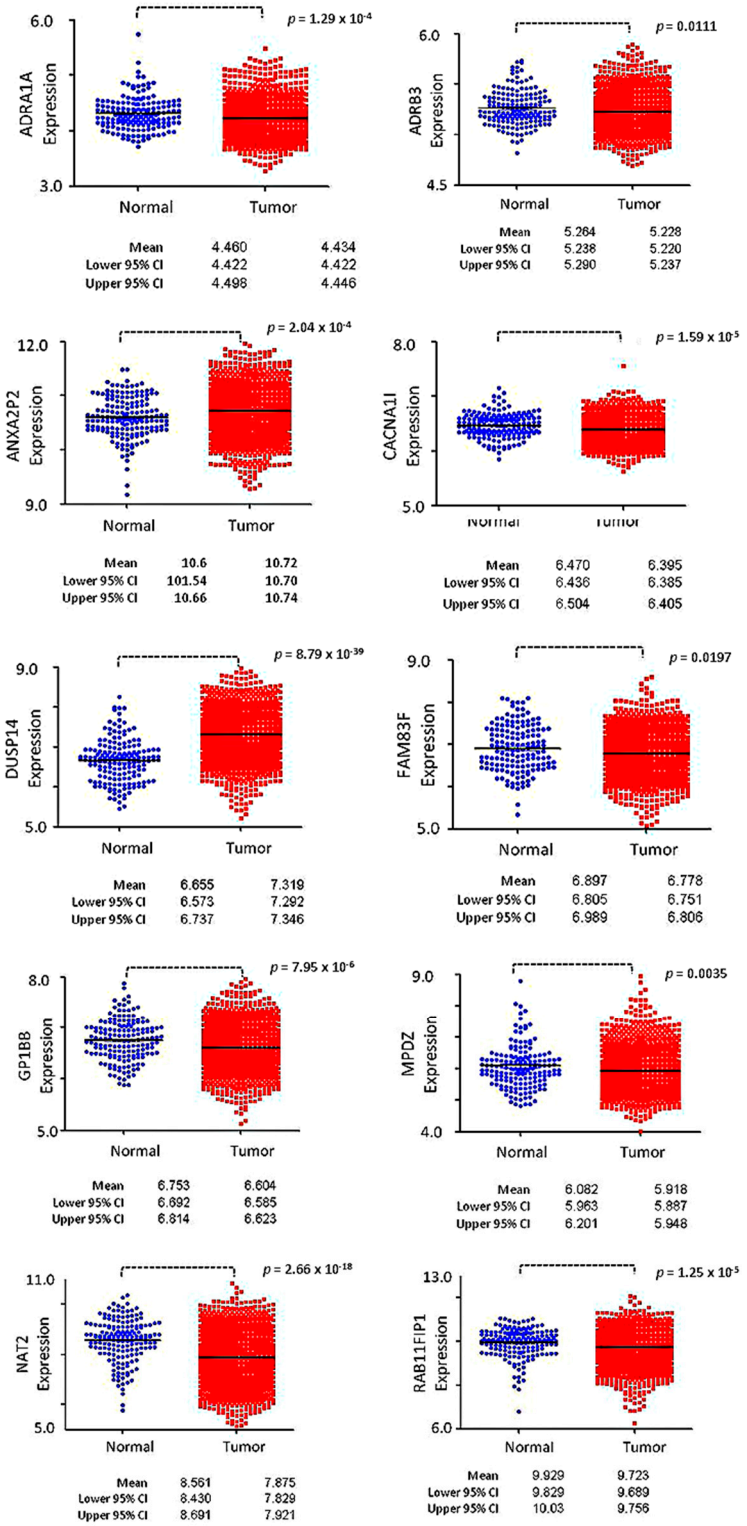

Figure S1. *Cont.*

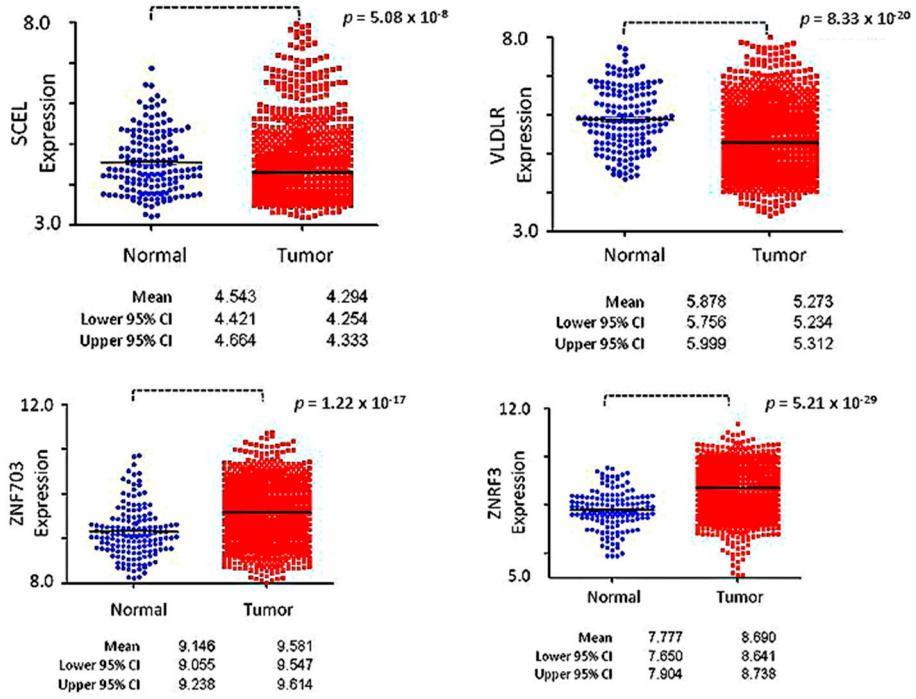

Figure S1. Mean expression levels of fourteen genes of significant association with CRC DFS and OS that are differentially expressed in normal colon compared to CRC tissues. Each dot represents a sample.

Table S1. Copy number aberrations associated with poor disease-free survival and metastasis in early stage II CRC as predicted by STAC and SPPS combined methodologies with resident gene symbols. CN stands for copy number, whereas CNV is copy number variation.

Region	Region Length	Cytoband Location	Event	% of CNV Overlap	Count of Genes	Gene Symbols
chr1:113,025,076–113,199,133	174,057	p13.2	CN Loss	0.0	2	***AKR7A2P1, SLC16A1***
chr1:141,465,960–141,822,265	356,305	q12–q21.1	CN Gain	95.9	1	***SRGAP2B***
chr1:144,911,564–146,242,907	1,331,343	q21.1	CN Gain	99.6	16	***MIR5087, LOC10013000 0, FLJ39739, LOC10028679 3, PPIAL4G, PPIAL4A, NBPF14, NBPF15, NBPF16, PPIAL4E, NBPF16, PPIAL4D, PPIAL4F, LOC645166, LOC388692, FCGR1C***
chr1:177,209,428–177,226,812	17,384	q25.3	CN Gain	0.0	0	
chr1:197,652,888–197,676,831	23,943	q32.1	CN Gain	0.0	1	***KIF21B***
chr1:201,015,278–201,033,308	18,030	q32.1	CN Gain	0.0	1	***PLEKHA6***
chr1:201,289,154–201,298,247	9093	q32.1	CN Gain	0.0	0	
chr1:216,820,186–217,043,421	223,235	q41	CN Gain	0.0	2	***RAB3GAP2, AURKAPS1***
chr1:223,586,936–223,618,129	31,193	q42.13	CN Gain	0.0	1	***CDC42BPA***
chr1:223,734,287–224,055,935	321,648	q42.13	CN Gain	0.0	1	***CDC42BPA***
chr4:93,838,017–93,935,669	97,652	q22.3	CN Loss	0.0	1	***GRID2***
chr5:62,861,335–63,175,713	314,378	q12.1-q12.2	CN Loss	0.0	0	
chr5:63,276,234–63,281,719	5485	q12.3	CN Loss	0.0	0	
chr5:63,824,454–63,890,954	66,500	q12.3	CN Loss	0.0	1	***RGS7BP***
chr5:63,982,847–64,092,827	109,980	q12.3	CN Loss	0.0	2	***FAM159B, SREK1IP1***
chr5:65,613,783–65,628,119	14,336	q12.3	CN Loss	0.0	0	
chr5:66,625,878–66,992,921	367,043	q12-q13.1	CN Loss	0.1	0	
chr5:67,038,088–67,070,360	32,272	q13.1	CN Loss	0.0	0	
chr5:71,478,793–72,228,866	750,073	q13.2	CN Loss	0.1	7	***MAP1B, MIR4803, MRPS27, PTCD2, ZNF366, TNPO1, MIR4804***
chr5:75,418,362–75,787,844	369,482	q13.3	CN Loss	0.0	2	***SV2C, IQGAP2***
chr5:76,429,582–76,636,664	207,082	q13.3	CN Loss	0.0	2	***ZBED3-AS1, PDE8B***
chr5:76,652,632–76,716,658	64,026	q13.3	CN Loss	0.0	1	***PDE8B***
chr5:78,401,367–78,735,677	334,310	q14.1	CN Loss	0.0	4	***BHMT2, BHMT, JMY, HOMER1***

chr5:78,900,343–79,945,203	1,044,860	q14.1	CN Loss	0.1	11	***PAPD4, CMYA5, MTX3, THBS4, SERINC5, LOC644936, SPZ1, CRSP8P, ZFYVE16, FAM151B, ANKRD34B***
chr5:80,435,819–80,734,178	298,359	q14.1	CN Loss	0.0	5	***RASGRF2, CKMT2, LOC10013106 7, ZCCHC9, ACOT12***
chr5:81,139,670–82,114,164	974,494	q14-q14.2	CN Loss	0.0	3	***ATG10, RPS23, ATP6AP1L***
chr5:82,650,005–83,385,290	735,285	q14-q14.3	CN Loss	2.5	4	***XRCC4, VCAN, HAPLN1, EDIL3***
chr5:85,551,789–85,979,590	427,801	q14.3	CN Loss	0.0	3	***NBPF22P, COX7C, MIR3607***
chr5:125,906,988–126,007,887	100,899	q23.2	CN Loss	0.0	3	***ALDH7A1, PHAX, TEX43***
chr5:126,218,261–126,981,847	763,586	q23.2	CN Loss	0.0	4	***MARCH3, C5orf63, MEGF10, PRRC1***
chr5:127,942,415–128,305,543	363,128	q23.3	CN Loss	0.0	0	
chr5:132,843,603–133,166,922	323,319	q31.1	CN Loss	0.0	1	***FSTL4***
chr5:134,347,761–134,796,875	449,114	q31.1	CN Loss	0.0	4	***CATSPER3, PITX1, LOC340073, H2AFY***
chr5:140,069,236–140,199,990	130,754	q31.3	CN Loss	2.1	10	***VTRNA1–1, VTRNA1–2, VTRNA1–3, PCDHA1, PCDHA2, PCDHA3, PCDHA4, PCDHA5, PCDHA6, PCDHA7***
chr5:140,219,209–140,485,367	266,158	q31.3	CN Loss	1.8	19	***PCDHA1, PCDHA2, PCDHA3, PCDHA4, PCDHA5, PCDHA6, PCDHA7, PCDHA8, PCDHA9, PCDHA10, PCDHA11, PCDHA12, PCDHA13, PCDHAC1, PCDHAC2, PCDHB1, PCDHB2, PCDHB3, PCDHB4***
chr5:140,724,660–140,871,691	147,031	q31.3	CN Loss	0.0	23	***PCDHGA1, PCDHGA2, PCDHGB8P, PCDHGA3, PCDHGB1, PCDHGA4, PCDHGB2, PCDHGA5, PCDHGB3, PCDHGA6, PCDHGA7, PCDHGB4, PCDHGA8, PCDHGB5, PCDHGA9, PCDHGB6, PCDHGA10, PCDHGB7, PCDHGA11, PCDHGA12, PCDHGC3, PCDHGC4, PCDHGC5***
chr5:143,838,624–144,617,390	778,766	q31.3-q32	CN Loss	0.0	0	
chr5:145,868,969–146,052,295	183,326	q32	CN Loss	1.3	3	***TCERG1, GPR151, PPP2R2B***
chr5:147,767,845–148,006,323	238,478	q32	CN Loss	0.0	2	***FBXO38, HTR4***
chr5:148,050,020–148,670,099	620,079	q32	CN Loss	0.0	4	***ADRB2, SH3TC2, ABLIM3, AFAP1L1***
chr5:153,205,713–153,335,688	129,975	q33.2	CN Loss	0.0	0	
chr5:156,046,644–156,069,471	22,827	q33.3	CN Loss	0.0	1	***SGCD***
chr5:177,692,918–177,924,656	231,738	q35.3	CN Loss	0.0	1	***COL23A1***
chr5:178,303,189–178,617,480	314,291	q35.3	CN Loss	0.7	5	***ZNF454, GRM6, ZNF879, ZNF354C, ADAMTS2***
chr5:178,726,856–178,908,104	181,248	q35.3	CN Loss	82.8	0	
chr5:179,569,883–179,719,152	149,269	q35.3	CN Loss	0.0	2	***MAPK9, GFPT2***
chr5:180,560,732–180,581,384	20,652	q35.3	CN Loss	0.0	1	***TRIM7***
chr8:0–225,128	225,128	p23.3	CN Loss	0.0	3	***OR4F21, RPL23AP53, ZNF596***
chr8:3,192,664–3,298,863	106,199	p23.2	CN Loss	0.0	1	***CSMD1***
chr8:5,543,815–5,742,245	198,430	p23.2	CN Loss	100.0	0	
chr8:6,820,292–9,022,725	2,202,433	p23.1	CN Loss	68.7	59	***DEFA1, DEFA1B, DEFT1P2, DEFT1P, DEFA1, DEFA1B, DEFT1P2, DEFT1P, DEFA3, DEFA11P, DEFA5, LOC349196, LOC349196, LOC349196, DEFB109P1B , FAM66B, USP17L1P, USP17L4, ZNF705G, DEFB4B, DEFB103B, DEFB103A, SPAG11B, DEFB104A, DEFB104B, DEFB106A,***

						DEFB106B, DEFB105A, DEFB105B, DEFB107A, DEFB107B, FAM90A7P, FAM90A7P, FAM90A10P, DEFB107A, DEFB107B, DEFB105A, DEFB105B, DEFB106A, DEFB106B, DEFB104A, DEFB104B, SPAG11B, SPAG11A, DEFB103A, DEFB103B, DEFB4A, ZNF705B, USP17L8, USP17L3, FAM66E, DEFB109P1B , MIR548I3, FAM86B3P, SGK223, CLDN23, MFHAS1, ERI1, MIR4660
chr8:9,108,088–9,506,118	398,030	p23.1	CN Loss	0.3	2	***LOC157273, TNKS***
chr8:9,699,935–9,786,655	86,720	p23.1	CN Loss	0.0	0	
chr8:12,480,144–12,641,126	160,982	p23.1	CN Loss	100.0	4	***LOC729732, MIR3926–1, MIR3926–2, LONRF1***
chr8:14,144,737–15,008,775	864,038	p22	CN Loss	1.8	2	***SGCZ, MIR383***
chr8:17,753,137–17,933,149	180,012	p22	CN Loss	0.0	2	***FGL1, PCM1***
chr8:18,105,847–	241,893	p22	CN	0.0	2	***NAT1, NAT2***
18,347,740			Loss			
chr8:19,940,444–20,004,254	63,810	p21.3	CN Loss	0.0	0	
chr8:21,810,399–21,947,727	137,328	p21.3	CN Loss	0.0	3	***DOK2, XPO7, NPM2***
chr8:22,101,084–23,436,255	1,335,171	p21.3-p21.2	CN Loss	1.3	28	***BMP1, PHYHIP, MIR320A, POLR3D, PIWIL2, SLC39A14, PPP3CC, SORBS3, PDLIM2, C8orf58, KIAA1967, FLJ14107, BIN3, EGR3, PEBP4, RHOBTB2, TNFRSF10B, LOC286059, LOC254896, TNFRSF10C, TNFRSF10D, TNFRSF10A, LOC389641, CHMP7, R3HCC1, LOXL2, LOC10050715 6, ENTPD4***
chr8:23,774,569–24,321,211	546,642	p21.2	CN Loss	3.1	2	***ADAM28, ADAMDEC1***
chr8:25,872,199–26,078,696	206,497	p21.2	CN Loss	0.0	1	***EBF2***
chr8:26,337,410–28,069,477	1,732,067	p21.2-p21.1	CN Loss	0.4	19	***PNMA2, DPYSL2, ADRA1A, STMN4, TRIM35, PTK2B, CHRNA2, EPHX2, CLU, SCARA3, MIR3622A,***
						MIR3622B, CCDC25, ESCO2, PBK, MIR4287, SCARA5, NUGGC, ELP3
chr8:28,135,907–28,195,087	59,180	p21.1	CN Loss	0.0	0	
chr8:30,398,928–30,577,619	178,691	p12	CN Loss	0.0	2	***RBPMS, GTF2E2***
chr8:37,261,348–37,414,728	153,380	p12	CN Loss	0.0	0	
chr8:37,553,512–38,049,159	495,647	p12	CN Loss	0.0	10	***ZNF703, ERLIN2, LOC728024, PROSC, GPR124, BRF2, RAB11FIP1, GOT1L1, ADRB3, EIF4EBP1***
chr8:39,252,098–39,337,749	85,651	p11.23	CN Loss	51.7	2	***ADAM32, ADAM5***
chr8:39,508,473–39,628,658	120,185	p11.22	CN Loss	57.5	2	***LOC10013096 4, ADAM18***
chr9:1,934,152–3,256,829	1,322,677	p24.3-p24.2	CN Gain	0.1	6	***SMARCA2, FLJ35024, VLDLR, KCNV2, KIAA0020, RFX3***
chr9:3,272,788–10,248,806	6,976,018	p24.2-p23	CN Gain	1.2	31	***RFX3, GLIS3–AS1, GLIS3, SLC1A1, SPATA6L, PPAPDC2, CDC37L1, AK3, RCL1, MIR101–2, JAK2, INSL6, INSL4, RLN2, RLN1, PLGRKT,***
						CD274, PDCD1LG2, KIAA1432, ERMP1, MLANA, KIAA2026, MIR4665, RANBP6, IL33, TPD52L3, UHRF2, GLDC, KDM4C, C9orf123, PTPRD
chr9:10,761,919–12,567,760	1,805,841	p23	CN Gain	19.9	0	
chr9:13,084,687–13,177,901	93,214	p23	CN Gain	0.0	1	***MPDZ***
chr9:13,244,498–14,505,317	1,260,819	p23-p22.3	CN Gain	0.0	4	***MPDZ, FLJ41200, LINC00583,***

						NFIB
chr9:16,475,837–17,181,075	705,238	p22.3-p22.2	CN Gain	0.0	2	***BNC2, CNTLN***
chr9:19,031,830–19,044,266	12,436	p22.1	CN Gain	0.0	2	***RRAGA, HAUS6***
chr9:20,612,727–21,131,395	518,668	p21.3	CN Gain	0.6	5	***MIR491, FOCAD, PTPLAD2, IFNB1, IFNW1***
chr9:21,328,058–21,907,688	579,630	p21.3	CN Gain	0.0	9	***IFNA6, IFNA13, IFNA2, IFNA8, IFNA1, IFNE, MIR31HG, MIR31, MTAP***
chr9:23,263,046–23,717,938	454,892	p21.3	CN Gain	3.3	1	***ELAVL2***
chr9:25,505,935–25,682,015	176,080	p21.2	CN Gain	0.0	1	***TUSC1***
chr9:32,501,115–33,201,863	700,748	p21.1-p13.3	CN Gain	0.7	10	***DDX58, TOPORS, LOC100129250, NDUFB6, TAF1L, TMEM215, APTX, DNAJA1, SMU1, B4GALT1***
chr9:33,262,141–33,357,824	95,683	p13.3	CN Gain	0.0	2	***CHMP5, NFX1***
chr9:33,415,054–33,460,111	45,057	p13.3	CN Gain	0.0	2	***AQP3, NOL6***
chr9:33,580,807–33,694,356	113,549	p13.3	CN Gain	0.0	2	***ANXA2P2, PTENP1***
chr9:33,912,931–34,065,134	152,203	p13.3	CN Gain	0.0	3	***SNORD121B, SNORD121A, UBAP2***
chr9:37,803,369–38,050,915	247,546	p13.2	CN Gain	0.0	3	***DCAF10, SLC25A51, SHB***
chr9:86,776,995–86,785,994	8999	q21.33	CN Loss	0.0	0	
chr9:118,108,362–119,065,161	956,799	q33.1	CN Loss	0.0	1	***DBC1***
chr9:131,381,496–131,526,405	144,909	q34.13	CN Loss	0.0	8	***PRRC2B, SNORD62A, SNORD62B, SNORD62A, SNORD62B, POMT1, UCK1, RAPGEF1***
chr9:132,164,868–132,207,419	42,551	q34.13	CN Loss	0.0	1	***SETX***
chr9:132,379,055–132,484,506	105,451	q34.13	CN Loss	0.0	1	***C9orf171***
chr9:133,330,358–133,379,264	48,906	q34.2	CN Loss	0.0	3	***ADAMTS13, CACFD1, SLC2A6***
chr9:133,659,673–133,743,260	83,587	q34.2	CN Loss	0.0	1	***VAV2***
chr9:133,977,094–134,047,962	70,868	q34.2	CN Loss	0.0	1	***WDR5***
chr9:137,815,000	7872	q34.3	CN	0.0	1	***EHMT1***
–137,822,872			Loss			
chr11:48,338,680	697,136	p11.2–	CN	1.6	4	***OR4A47,***
–49,035,816		p11.12	Loss			***TRIM51GP, TRIM49B, TRIM64C***
chr11:54,789,837–54,920,601	130,764	q11	CN Loss	2.5	4	***TRIM48, TRIM51HP, OR4A16, OR4A15***
chr11:54,984,140–55,028,017	43,877	q11	CN Loss	0.0	0	
chr11:55,234,512–55,245,355	10,843	q11	CN Loss	100.0	0	
chr11:55,430,801–55,440,341	9540	q11	CN Loss	0.0	1	***OR5W2***
chr11:79,573,296–80,192,881	619,585	q14.1	CN Loss	7.8	0	
chr11:114,705,324–114,770,907	65,583	q23.3	CN Loss	0.0	1	***CADM1***
chr11:121,200,535–121,256,571	56,036	q24.1	CN Loss	0.0	0	
chr11:123,555,009–123,596,823	41,814	q24.1	CN Loss	0.0	0	
chr11:123,762,619–123,857,511	94,892	q24.1-q24.2	CN Loss	0.0	3	***OR8B3, OR8B4, OR8B8***
chr11:124,111,730–124,524,064	412,334	q24.2	CN Loss	0.0	11	***NRGN, VSIG2, ESAM, MSANTD2, ROBO3, ROBO4, HEPN1, HEPACAM, CCDC15, SLC37A2, TMEM218***
chr11:124,791,565–124,811,913	20,348	q24.2	CN Loss	0.0	1	***PKNOX2***
chr11:125,688,454–125,871,027	182,573	q24.2	CN Loss	0.0	4	***DCPS, FLJ39051, ST3GAL4, KIRREL3***
chr11:126,652,653–126,922,796	270,143	q24.2	CN Loss	0.0	0	
chr11:128,066,083–128,285,672	219,589	q24.3	CN Loss	0.0	5	***FLI1–AS1, FLI1, KCNJ1, C11orf45, KCNJ5***
chr11:129,792,320–130,252,874	460,554	q24.3	CN Loss	0.0	4	***ADAMTS8, ADAMTS15, C11orf44, SNX19***
chr11:133,410,359–133,657,612	247,253	q25	CN Loss	0.0	7	***LOC100128239, JAM3, NCAPD3, VPS26B, THYN1, ACAD8, GLB1L3***

chr13:18,065,953–18,419,347	353,394	q11-q12.11	CN Gain	82.8	1	***ANKRD20A9 P***
chr13:20,059,415–20,431,085	371,670	q12.11	CN Gain	0.0	4	***IFT88, IL17D, N6AMT2, XPO4***
chr13:20,926,840–20,932,672	5832	q12.11	CN Gain	0.0	1	***ZDHHC20***
chr13:46,771,673–47,079,768	308,095	q14.2	CN Gain	0.0	0	
chr13:49,862,191–49,941,428	79,237	q14.3	CN Gain	0.0	0	
chr13:50,241,792–50,451,595	209,803	q14.3	CN Gain	0.3	4	***DLEU7, DLEU7–AS1, RNASEH2B–AS1, RNASEH2B***
chr13:51,111,933–51,209,836	97,903	q14.3	CN Gain	0.0	1	***WDFY2***
chr13:63,584,603–64,531,695	947,092	q21.31	CN Gain	0.0	0	
chr13:65,213,613–65,821,403	607,790	q21.32	CN Gain	0.0	3	***MIR548X2, MIR4704, PCDH9***
chr13:66,027,749–66,058,947	31,198	q21.32	CN Gain	100.0	1	***PCDH9***
chr13:66,093,042–66,156,159	63,117	q21.32	CN Gain	0.0	1	***PCDH9***
chr13:66,511,486–66,924,124	412,638	q21.32	CN Gain	0.0	1	***PCDH9***
chr13:67,365,515	180,209	q21.32–	CN	0.0	0	
–67,545,724		q21.33	Gain			
chr13:73,519,926–73,591,864	71,938	q22.1	CN Gain	0.0	1	***KLF12***
chr13:77,091,913–77,120,617	28,704	q22.3	CN Gain	0.0	1	***SCEL***
chr13:79,263,868–79,425,040	161,172	q31.1	CN Gain	0.0	0	
chr13:80,128,565–80,449,023	320,458	q31.1	CN Gain	0.0	0	
chr13:107,027,908–107,048,590	20,682	q33.3	CN Gain	0.0	1	***FAM155A***
chr13:107,967,995–108,597,339	629,344	q33.3	CN Gain	0.0	1	***MYO16***
chr13:110,020,406–110,544,514	524,108	q34	CN Gain	0.0	5	***CARKD, CARS2, ING1, LINC00346, ANKRD10***
chr13:110,557,042–111,966,665	1,409,623	q34	CN Gain	0.0	3	***ARHGEF7, TEX29, SOX1***
chr13:112,502,030–112,673,447	171,417	q34	CN Gain	0.0	3	***ATP11A, MCF2L–AS1, MCF2L***
chr13:112,720,269–112,849,806	129,537	q34	CN Gain	0.0	3	***MCF2L, F7, F10***
chr13:112,913,326–113,004,883	91,557	q34	CN Gain	0.0	2	***CUL4A, LAMP1***
chr13:113,220,267–114,142,980	922,713	q34	CN Gain	0.0	13	***TMCO3, TFDP1, ATP4B, GRK1, LINC00565, LOC10050639 4, GAS6, GAS6-AS1, TMEM255B, RASA3, CDC16, UPF3A, CHAMP1***
chr14:19,808,051–19,879,596	71,545	q11.2	CN Loss	0.0	3	***TTC5, CCNB1IP1, SNORD126***
chr14:19,942,006–20,534,688	592,682	q11.2	CN Loss	10.1	21	***TEP1, KLHL33, OSGEP, APEX1, TMEM55B, PNP, RNASE10, RNASE9, RNASE11, RNASE12, OR6S1, ANG, RNASE4, EDDM3A, EDDM3B, RNASE6, RNASE1, RNASE3, ECRP, RNASE2, METTL17***
chr14:21,131,506–21,157,261	25,755	q11.2	CN Loss	0.0	0	
chr14:21,409,247–21,434,637	25,390	q11.2	CN Loss	100.0	0	
chr14:21,671,956–21,743,735	71,779	q11.2	CN Loss	100.0	0	
chr14:22,465,578–22,607,869	142,291	q11.2	CN Loss	0.0	9	***PRMT5, HAUS4, MIR4707, AJUBA, C14orf93, PSMB5, PSMB11, CDH24, ACIN1***
chr14:22,615,515–22,632,327	16,812	q11.2	CN Loss	0.0	1	***ACIN1***
chr14:23,677,922–23,751,956	74,034	q11.2	CN Loss	0.0	10	***PSME1, EMC9, PSME2, RNF31, IRF9, REC8, IPO4, TM9SF1, TSSK4, CHMP4A***
chr14:24,456,066	443,215	q12	CN	0.3	1	***STXBP6***
–24,899,281			Loss			
chr14:29,101,429–29,234,859	133,430	q12	CN Loss	0.0	1	***PRKD1***
chr14:29,885,479–30,068,871	183,392	q12	CN Loss	0.0	0	
chr14:30,270,202–30,293,223	23,021	q12	CN Loss	0.0	1	***SCFD1***
chr14:30,430,997–30,640,692	209,695	q12	CN Loss	0.0	4	***STRN3, MIR624, AP4S1, HECTD1***
chr14:31,100,236–31,198,516	98,280	q12	CN Loss	0.0	2	***RNU6-16, NUBPL***
chr14:31,893,257–32,079,668	186,411	q12	CN Loss	0.0	1	***AKAP6***
chr14:32,170,549–32,341,433	170,884	q12	CN Loss	0.0	1	***AKAP6***
chr14:33,255,411–33,507,210	251,799	q13.1	CN Loss	0.0	2	***NPAS3, EGLN3***
chr14:34,699,297–34,951,855	252,558	q13.2	CN Loss	0.0	3	***KIAA0391, PSMA6, NFKBIA***

chr14:35,089,377–35,367,707	278,330	q13.2	CN Loss	0.0	2	***RALGAPA1, BRMS1L***
chr14:35,556,347–35,661,337	104,990	q13.2-q13.3	CN Loss	0.0	1	***LINC00609***
chr14:35,682,484–35,813,344	130,860	q13.3	CN Loss	2.3	2	***LINC00609, PTCSC3***
chr14:36,063,641–36,078,282	14,641	q13.3	CN Loss	0.0	0	
chr14:37,021,167–37,079,803	58,636	q21.1	CN Loss	0.0	1	***MIPOL1***
chr14:37,839,846–37,974,393	134,547	q21.1	CN Loss	0.0	0	
chr14:45,475,327–45,600,580	125,253	q21.2	CN Loss	0.0	0	
chr14:47,354,464–48,020,135	665,671	q21.3	CN Loss	1.5	0	
chr14:50,212,681–50,221,394	8713	q22.1	CN Loss	0.0	0	
chr14:58,159,179–58,169,617	10,438	q23.1	CN Loss	0.0	0	
chr14:64,025,225–64,066,957	41,732	q23.3	CN Loss	0.0	2	***ZBTB25, ZBTB1***
chr14:64,468,309–64,616,437	148,128	q23.3	CN Loss	0.0	7	***CHURC1, GPX2, RAB15, CHURC1-FNTB, FNTB, MIR4706, MAX***
chr14:65,216,309–65,227,085	10,776	q23.3	CN Loss	0.0	1	***FUT8***
chr14:66,289,598–66,343,213	53,615	q23.3	CN Loss	0.0	1	***GPHN***
chr14:68,070,078–68,078,261	8183	q24.1	CN Loss	0.0	1	***RAD51B***
chr14:68,147,384–68,316,581	169,197	q24.1	CN Loss	0.0	0	
chr14:75,010,936–75,190,330	179,394	q24.3	CN Loss	0.0	3	***BATF, FLVCR2, C14orf1***
chr14:76,921,429–76,926,634	5205	q24.3	CN Loss	0.0	1	***SAMD15***
chr14:77,054,665–77,298,258	243,593	q24.3	CN Loss	0.0	5	***SPTLC2, ALKBH1, SLIRP, SNW1, C14orf178***
chr14:77,302,965–77,315,530	12,565	q24.3	CN Loss	0.0	1	***C14orf178***
chr14:85,385,179–85,506,646	121,467	q31.3	CN Loss	0.0	0	
chr14:85,650,613–86,446,911	796,298	q31.3	CN Loss	0.0	1	***LOC283585***
chr14:88,542,999–88,563,278	20,279	q32.11	CN Loss	0.0	0	
chr14:90,172,729–90,532,073	359,344	q32.12	CN Loss	0.0	2	***TTC7B, RPS6KA5***
chr14:90,719,732–90,775,532	55,800	q32.12	CN Loss	0.0	2	***C14orf159, GPR68***
chr14:90,826,366–90,877,803	51,437	q32.12	CN Loss	13.7	1	***CCDC88C***
chr14:91,160,620–91,628,513	467,893	q32.12	CN Loss	0.0	5	***CATSPERB, TC2N, FBLN5, TRIP11, ATXN3***
chr14:91,920,394	406,473	q32.12	CN	0.0	3	***SLC24A4,***
–92,326,867			Loss			***RIN3, LGMN***
chr14:95,850,445–95,864,146	13,701	q32.2	CN Loss	0.0	1	***ATG2B***
chr14:100,622,842–101,449,140	826,298	q32.31	CN Loss	1.8	5	***DIO3OS, MIR1247, DIO3, LINC00239, PPP2R5C***
chr14:101,497,577–101,582,372	84,795	q32.31-q32.32	CN Loss	0.0	1	***DYNC1H1***
chr14:101,831,526–101,956,883	125,357	q32.32	CN Loss	0.0	4	***MOK, ZNF839, CINP, TECPR2***
chr14:102,197,708–102,372,289	174,581	q32.32	CN Loss	0.0	2	***RCOR1, TRAF3***
chr14:102,514,378–102,635,142	120,764	q32.32	CN Loss	0.0	1	***CDC42BPB***
chr14:102,871,848–102,931,032	59,184	q32.32	CN Loss	0.0	3	***SNORA28, EIF5, MARK3***
chr14:104,270,021–104,273,557	3536	q32.33	CN Loss	0.0	1	***ADSSL1***
chr14:106,172,526–106,368,585	196,059	q32.33	CN Loss	74.3	0	
chr15:39,669,823–39,721,803	51,980	q15.1	CN Loss	0.0	0	
chr15:46,719,007–46,741,098	22,091	q21.1	CN Loss	0.0	1	***FBN1***
chr15:47,748,774–48,210,910	462,136	q21.2	CN Loss	0.0	1	***ATP8B4***
chr15:50,188,307–50,544,741	356,434	q21.2	CN Loss	0.0	5	***BCL2L10, GNB5, MYO5C, MIR1266, MYO5A***
chr15:50,826,333–50,843,466	17,133	q21.3	CN Loss	0.0	1	***HNF6***
chr15:51,605,915–51,756,728	150,813	q21.3	CN Loss	0.0	1	***WDR72***
chr15:53,065,652–53,417,306	351,654	q21.3	CN Loss	0.0	3	***RSL24D1, RAB27A, PIGB***
chr15:53,427,831–53,604,156	176,325	q21.3	CN Loss	0.0	6	***PIGB, MIR628, CCPG1, FLJ27352, DYX1C1-CCPG1, DYX1C1***
chr15:53,689,271–53,904,157	214,886	q21.3	CN Loss	0.0	1	***PRTG***
chr15:54,039,484–54,061,026	21,542	q21.3	CN Loss	0.0	1	***NEDD4***
chr15:54,320,234–54,407,485	87,251	q21.3	CN Loss	0.0	1	***RFX7***
chr15:55,449,459–56,222,552	773,093	q21.3	CN Loss	0.0	6	***CGNL1, MYZAP, GCOM1, POLR2M, ALDH1A2, AQP9***
chr15:56,630,587–56,734,190	103,603	q21.3	CN Loss	0.0	2	***LIPC, ADAM10***

chr15:56,854,439–56,923,398	68,959	q21.3	CN Loss	0.0	1	***FAM63B***
chr15:61,448,730–61,478,020	29,290	q22.2	CN Loss	0.0	1	***CA12***
chr15:62,990,918–63,023,391	32,473	q22.31	CN Loss	0.0	1	***ANKDD1A***
chr15:63,129,167–63,186,496	57,329	q22.31	CN Loss	0.0	4	***SLC51B, RASL12, KBTBD13, UBAP1L***
chr15:63,570,638–63,794,541	223,903	q22.31	CN Loss	0.0	5	***DPP8, PTPLAD1, VWA9, SLC24A1, DENND4A***
chr15:69,922,996–69,937,813	14,817	q23	CN Loss	0.0	1	***MYO9A***
chr15:72,526,739–72,648,021	121,282	q24.1	CN Loss	0.0	3	***UBL7, LOC440288, ARID3B***
chr15:72,702,022–72,840,230	138,208	q24.1	CN Loss	0.0	4	***CLK3, EDC3, CYP1A1, CYP1A2***
chr15:73,091,745–73,416,859	325,114	q24.1-q24.2	CN Loss	0.0	6	***SCAMP5, PPCDC, C15orf39, GOLGA6C, GOLGA6D,***
						COMMD4
chr15:73,701,548–73,821,706	120,158	q24.2	CN Loss	0.0	6	***SNUPN, IMP3, SNX33, CSPG4, ODF3L1, DNM1P35***
chr15:75,048,739–75,510,213	461,474	q24.3	CN Loss	0.0	5	***PSTPIP1, TSPAN3, LINC00597, PEAK1, HMG20A***
chr15:76,072,953–76,283,942	210,989	q24.3-q25.1	CN Loss	0.0	6	***LOC91450, TBC1D2B, SH2D7, CIB2, IDH3A, ACSBG1***
chr15:79,413,377–79,473,916	60,539	q25.1	CN Loss	0.0	1	***TMC3***
chr15:81,452,388–81,533,579	81,191	q25.2	CN Loss	0.0	3	***C15orf40, BTBD1, MIR4515***
chr15:82,505,738–83,278,235	772,497	q25.2-q25.3	CN Loss	38.4	19	***EFTUD1P1, DNM1P41, LOC10050567 9, LOC642423, LOC440300, LOC388152, GOLGA6L4, DNM1P41, GOLGA6L5, UBE2Q2P1, LOC10050687 4, ZSCAN2, SCAND2, WDR73, NMB, SEC11A, ZNF592, ALPK3, SLC28A1***
chr15:83,445,433–83,804,111	358,678	q25.3	CN Loss	2.1	3	***PDE8A, LOC642423, AKAP13***
chr15:83,940,783–84,081,736	140,953	q25.3	CN Loss	0.0	1	***AKAP13***
chr15:87,518,064–87,849,590	331,526	q26.1	CN Loss	4.9	8	***ABHD2, RLBP1, FANCI, POLG, MIR9–3, LOC254559, RHCG, LOC283761***
chr15:88,026,032–88,052,390	26,358	q26.1	CN Loss	0.0	2	***PEX11A, WDR93***
chr15:88,120,990–88,413,815	292,825	q26.1	CN Loss	1.5	7	***MESP2, ANPEP, MIR5094, AP3S2, C15orf38–AP3S2, C15orf38, ZNF710***
chr15:88,634,497–88,759,698	125,201	q26.1	CN Loss	0.0	3	***GABARAPL3, ZNF774, IQGAP1***
chr15:90,847,328–91,360,624	513,296	q26.1	CN Loss	0.0	6	***LOC10014460 4, FAM174B, ASB9P1, LOC10050721 7, MIR3175, CHD2***
chr15:98,023,402–98,179,732	156,330	q26.3	CN Loss	0.0	3	***MEF2A, LYSMD4, DNM1P46***
chr17:5,526,400–5,588,767	62,367	p13.2	CN Loss	0.0	0	
chr17:21,431,559–21,674,159	242,600	p11.2	CN Loss	11.6	0	
chr17:24,083,391–24,314,380	230,989	q11.2	CN Gain	0.0	12	***NEK8, TRAF4, FAM222B, ERAL1, MIR451A, MIR451B, MIR144, MIR4732, FLOT2, DHRS13,***
						PHF12, SEZ6
chr17:25,066,969–25,138,469	71,500	q11.2	CN Gain	0.0	1	***SSH2***
chr17:32,784,580–33,098,353	313,773	q12	CN Gain	0.7	6	***ACACA, C17orf78, TADA2A, DUSP14, SYNRG, DDX52***
chr17:38,570,907–38,829,651	258,744	q21.31	CN Gain	17.3	4	***NBR1, TMEM106A, TMEM106A–AS1, LOC10013058 1***
chr17:54,059,332–54,748,763	689,431	q23.2	CN Gain	0.2	10	***TEX14, RAD51C, PPM1E, TRIM37, SKA2, MIR454, MIR301A, PRR11, SMG8, GDPD1***
chr17:54,969,023–55,120,848	151,825	q23.2	CN Gain	0.0	2	***DHX40, CLTC***
chr17:55,126,726–55,133,381	6655	q23.2	CN Gain	0.0	2	***CLTC, PTRH2***
chr17:55,661,447–55,682,369	20,922	q23.2	CN Gain	0.0	2	***SCARNA20, USP32***
chr17:57,286,642–57,474,557	187,915	q23.2	CN Gain	0.0	3	***BRIP1, INTS2, MED13***
chr17:57,494,180–58,081,012	586,832	q23.2-q23.3	CN Gain	0.0	6	***MED13, TBC1D3P2, EFCAB3, METTL2A, TLK2, MRC2***
chr17:62,469,882–62,632,674	162,792	q24.2	CN Gain	0.0	2	***CACNG1, HELZ***

chr17:62,823,228–62,982,920	159,692	q24.2	CN Gain	0.0	2	***MIR548AA2, PITPNC1***
chr17:72,252,138–72,289,494	37,356	q25.1	CN Gain	0.0	1	***MFSD11***
chr18:142,250–471,404	329,154	p11.32	CN Loss	3.3	3	***USP14, THOC1, COLEC12***
chr18:818,102–825,963	7861	p11.32	CN Loss	0.0	0	
chr18:1,411,976–1,469,679	57,703	p11.32	CN Loss	0.0	0	
chr18:2,923,913–3,023,053	99,140	p11.31	CN Loss	0.0	2	***LOC727896, LPIN2***
chr18:3,931,287–4,504,523	573,236	p11.31	CN Loss	1.3	2	***DLGAP1, DLGAP1–AS5***
chr18:4,642,369–5,282,511	640,142	p11.31	CN Loss	0.0	4	***C18orf42, LINC00526, LINC00667, ZFP161***
chr18:9,884,667–10,054,928	170,261	p11.22	CN Loss	0.0	1	***VAPA***
chr18:11,984,291–12,302,067	317,776	p11.21	CN Loss	0.0	4	***IMPA2, C18orf61, CIDEA, TUBB6***
chr18:12,430,766–12,673,891	243,125	p11.21	CN Loss	0.0	3	***SPIRE1, CEP76, PSMG2***
chr18:12,691,989–14,091,725	1,399,736	p11.21	CN Loss	0.0	14	***CEP76, PSMG2, PTPN2, SEH1L, CEP192, LOC10028812 2, LDLRAD4, MIR5190, MIR4526, FAM210A, RNMT, MC5R, MC2R, ZNF519***
chr18:17,691,079–18,004,067	312,988	q11.2	CN Loss	0.3	2	***MIB1, GATA6***
chr18:19,195,122–19,361,994	166,872	q11.2	CN Loss	0.0	3	***TMEM241, RIOK3, C18orf8***
chr18:21,213,576	496,304	q11.2	CN	0.0	0	
–21,709,880			Loss			
chr18:22,931,625–22,955,852	24,227	q11.2	CN Loss	0.0	1	***CHST9***
chr18:24,103,460–24,447,720	344,260	q12.1	CN Loss	0.0	0	
chr18:25,528,591–26,129,267	600,676	q12.1	CN Loss	0.9	0	
chr18:27,851,691–27,921,721	70,030	q12.1	CN Loss	0.0	1	***RNF125***
chr18:29,012,906–29,275,546	262,640	q12.1	CN Loss	0.0	1	***CCDC178***
chr18:29,473,060–29,736,659	263,599	q12.1	CN Loss	0.0	2	***ASXL3, NOL4***
chr18:29,808,480–30,154,768	346,288	q12.1	CN Loss	0.0	1	***NOL4***
chr18:30,431,568–31,838,877	1,407,309	q12.1-q12.2	CN Loss	0.0	13	***DTNA, MAPRE2, ZNF397, ZSCAN30, ZNF271, ZNF24, ZNF396, INO80C, MIR3975, GALNT1, MIR187, C18orf21, RPRD1A***
chr18:33,386,018–33,707,865	321,847	q12.2	CN Loss	0.0	2	***CELF4, MIR4318***
chr18:34,475,739–34,493,818	18,079	q12.2	CN Loss	0.0	0	
chr18:38,391,943–38,631,170	239,227	q12.3	CN Loss	0.0	2	***LOC284260, RIT2***
chr18:41,954,284–41,981,261	26,977	q21.1	CN Loss	0.0	1	***HAUS1***
chr18:42,549,128–42,633,040	83,912	q21.1	CN Loss	0.0	1	***ST8SIA5***
chr20:85,564–168,766	83,202	p13	CN Loss	0.0	3	***DEFB127, DEFB128, DEFB129***
chr20:604,610–1,511,702	907,092	p13	CN Loss	0.9	18	***SCRT2, SLC52A3, FAM110A, ANGPT4, RSPO4, PSMF1, TMEM74B, C20orf202, RAD21L1, SNPH, SDCBP2, FKBP1A–SDCBP2, SDCBP2–AS1, FKBP1A, NSFL1C, SIRPB2, SIRPD, SIRPB1***
chr20:1,543,029–2,278,494	735,465	p13	CN Loss	0.5	7	***SIRPB1, SIRPG, LOC10028947 3, SIRPA, PDYN, STK35, TGM3***
chr20:4,163,287–4,643,781	480,494	p13	CN Loss	1.2	2	***ADRA1D, PRNP***
chr20:4,836,072–5,158,170	322,098	p13-p12.3	CN Loss	0.0	5	***SLC23A2, TMEM230, PCNA-AS1, PCNA, CDS2***
chr20:5,748,138–7,167,999	1,419,861	p12.3	CN Loss	0.0	8	***C20orf196, CHGB, TRMT6, MCM8, CRLS1, LRRN4, FERMT1, BMP2***
chr20:7,910,186–12,535,405	4,625,219	p12.3-p12.1	CN Loss	0.2	13	***TMX4, PLCB1, PLCB4, LAMP5, PAK7, ANKRD5, SNAP25-AS1,***
						SNAP25, MKKS, SLX4IP, JAG1, LOC339593, BTBD3
chr20:14,002,958–14,119,675	116,717	p12.1	CN Loss	0.0	1	***MACROD2***
chr20:27,100,000–28,266,172	1,166,172	q11.1	CN Gain	7.3	3	***FRG1B, LOC642236, MLLT10P1***
chr20:38,914,556–39,667,021	752,465	q12	CN Gain	1.2	6	***TOP1, PLCG1, ZHX3, LPIN3, EMILIN3, CHD6***
chr20:39,924,701–40,217,630	292,929	q12	CN Gain	0.0	1	***PTPRT***
chr20:43,182,807–43,715,277	532,470	q13.12	CN Gain	0.0	22	***WFDC12, PI3, SEMG1, SEMG2, SLPI, MATN4, RBPJL, SDC4, SYS1, TP53TG5, SYS1-DBNDD2, DBNDD2, PIGT, WFDC2,***

						SPINT3, WFDC6, EPPIN-WFDC6, EPPIN, WFDC8, WFDC9, WFDC10A, WFDC11
chr20:49,017,282–49,536,308	519,026	q13.13-q13.2	CN Gain	0.0	3	***KCNG1, MIR3194, NFATC2***
chr20:52,091,103–52,625,110	534,007	q13.2	CN Gain	0.6	5	***BCAS1, MIR4756,***
						CYP24A1, PFDN4, DOK5
chr20:55,932,323–56,527,968	595,645	q13.32	CN Gain	0.0	6	***C20orf85, PPP4R1L, RAB22A, VAPB, APCDD1L, APCDD1L-AS1***
chr20:57,616,783–57,848,527	231,744	q13.33	CN Gain	0.0	2	***LOC10050638 4, PHACTR3***
chr20:60,580,608–61,681,007	1,100,399	q13.33	CN Gain	4.3	35	***SLCO4A1, LOC10012788 8, NTSR1, LINC00659, MRGBP, OGFR, COL9A3, DPH3P1, TCFL5, DIDO1, GID8, SLC17A9, BHLHE23, LINC00029, LOC10014459 7, LOC63930, HAR1B, HAR1A, MIR124-3, YTHDF1, BIRC7, MIR3196, NKAIN4, FLJ16779, ARFGAP1, MIR4326, COL20A1, CHRNA4, KCNQ2, EEF1A2, PPDPF, PTK6, SRMS, C20orf195, HELZ2***
chr20:62,049,989–62,100,343	50,354	q13.33	CN Gain	0.0	5	***UCKL1, UCKL1-AS1, ZNF512B, SAMD10, PRPF6***
chr22:17,753,414–17,894,591	141,177	q11.21	CN Loss	0.0	6	***HIRA, MRPL40, C22orf39, UFD1L, CDC45, CLDN5***
chr22:18,008,241–18,116,460	108,219	q11.21	CN Loss	0.0	3	***SEPT5, SEPT5-GP1BB, GP1BB***
chr22:18,379,998–18,446,807	66,809	q11.21	CN Loss	0.0	3	***MIR185, TANGO2, DGCR8***
chr22:19,700,181–19,726,957	26,776	q11.21	CN Loss	0.0	4	***P2RX6, SLC7A4, P2RX6P, LOC400891***
chr22:20,471,450–20,573,268	101,818	q11.21-q11.22	CN Loss	0.0	1	***MAPK1***
chr22:20,926,471–21,344,777	418,306	q11.22	CN Loss	100.0	7	***LOC96610, ZNF280B, ZNF280A, PRAME, LOC648691, POM121L1P, GGTLC2***
chr22:22,093,542–22,317,997	224,455	q11.23	CN Loss	0.0	3	***IGLL1, C22orf43, GUSBP11***
chr22:22,722,828–22,886,439	163,611	q11.23	CN Loss	4.0	2	***GSTTP2, CABIN1***
chr22:23,451,589–23,676,351	224,762	q11.23	CN Loss	0.0	4	***PIWIL3, TOP1P2, SGSM1, TMEM211***
chr22:24,975,375–26,236,804	1,261,429	q12.1	CN Loss	0.0	10	***SEZ6L, ASPHD2, HPS4, SRRD, TFIP11, MIR548J, TPST2,***
						CRYBB1, CRYBA4, MIAT
chr22:26,431,206–26,520,119	88,913	q12.1	CN Loss	0.0	1	***MN1***
chr22:27,750,436–27,757,126	6690	q12.1	CN Loss	0.0	2	***ZNRF3, ZNRF3-AS1***
chr22:28,572,986–28,769,738	196,752	q12.2	CN Loss	0.0	1	***MTMR3***
chr22:29,051,285–29,095,047	43,762	q12.2	CN Loss	0.0	3	***SF3A1, CCDC157, KIAA1656***
chr22:29,406,916–29,573,097	166,181	q12.2	CN Loss	1.7	2	***MIR3200, OSBP2***
chr22:31,004,821–32,262,860	1,258,039	q12.3	CN Loss	0.2	10	***RFPL3, RFPL3-AS1, LOC339666, C22orf28, BPIFC, FBXO7, SYN3, TIMP3, MIR4764, LARGE***
chr22:33,859,038–33,890,879	31,841	q12.3	CN Loss	0.0	0	
chr22:35,275,581–35,542,533	266,952	q12.3	CN Loss	1.2	3	***CACNG2, IFT27, PVALB***
chr22:37,563,348–37,657,804	94,456	q13.1	CN Loss	2.9	2	***NPTXR, CBX6***
chr22:37,735,270–37,795,940	60,670	q13.1	CN Loss	0.0	3	***APOBEC3C, APOBEC3D, APOBEC3F***
chr22:37,822,564–39,067,017	1,244,453	q13.1	CN Loss	0.0	22	***APOBEC3H, CBX7, PDGFB, SNORD83B, SNORD83A, RPL3, RNU86, SNORD43, SYNGR1, TAB1, LOC10050647 2, MGAT3,***
						SMCR7L, ATF4, RPS19BP1, CACNA1I, ENTHD1, GRAP2, FAM83F, LOC10013089 9, TNRC6B, ADSL
chr22:43,453,639–43,498,325	44,686	q13.31	CN Loss	0.0	3	***PRR5, PRR5-ARHGAP8, ARHGAP8***
chr22:44,249,179–44,256,822	7643	q13.31	CN Loss	0.0	1	***FBLN1***
					1,099	

Table S11. Mann-Whitney (MW) *p*-values correlating metastasis-suppressor expression with CRC grade using a cohort composed of 1436 cases. *p*-Values highlighted in bold indicate significant correlation ($p > 0.05$).

Gene	Grade 1 *vs.* Grade 2. MW.pv	Grade 1 *vs.* Grade 3. MW.pv	Grade 2 *vs.* Grade 3. MW.pv
ADRA1A	0.200865	0.909476	0.07734
ADRA1D	0.102804	0.275505	0.477323
ADRB3	0.166421	**0.025572**	0.084262
APOBEC3D	0.833025	0.705971	0.457078
BRF2	0.108288	0.257709	0.640776
C20orf202	0.411843	0.784154	0.485192
TEX43	0.555174	0.616151	0.112187
CABIN1	0.512398	0.897197	0.351707
CACNA1I	0.230195	0.66045	0.480946
CSMD1	0.433949	0.080664	0.08836
DIO3	0.180268	0.121035	0.521137
EPHX2	0.951485	0.848353	0.823836
FAM83F	0.593739	0.756492	0.192038
GP1BB	**0.025659**	**0.016719**	0.390149
KIAA1656	**0.022059**	0.354918	0.33879
LOC339593	0.885246	0.702133	0.753526
MCM8	0.199375	0.590931	0.426505
NAT1	0.670187	0.538551	0.112849
NAT2	0.428978	0.29412	**0.001922**
HNF6	0.058524	0.201768	0.590868
PCDHGA11	0.113676	0.118576	0.620738
RAB11FIP1	0.53823	0.26208	0.417514
SPAG11A	0.067325	0.14933	0.754265
SIRPD	0.847406	0.72139	0.775775
TOP1P2	0.219921	0.872714	0.176931
WDR5	0.562789	0.491856	0.727828
ZNF366	0.108287	0.545399	0.392835
ZNF703	0.621442	0.069676	**0.011174**
ZNRF3	0.93572	0.062085	**0.006155**

Table S12. Mann-Whitney (MW) *p*-values correlating metastasis-suppressor expression with CRC stage using a cohort composed of 1436 cases. *p*-Values highlighted in bold indicate significant correlation ($p > 0.05$).

Gene	St. I *vs.* St. II	St. I *vs.* St. III	St. I *vs.* St. IV	St. II *vs.* St. III	St. II *vs.* St. IV	St. III *vs.* St. IV
ADRA1A	0.385629	0.054778	0.066347	0.127172	0.251446	0.849241
ADRA1D	0.785608	0.620774	0.116326	0.807158	**0.026466**	**0.047567**
ADRB3	0.10136	0.106675	**0.002672**	0.989223	**0.015087**	**0.014459**
APOBEC3D	0.712223	0.101441	0.153276	0.093201	0.193716	0.987492
BRF2	0.613642	0.415448	0.779541	0.486063	0.255382	0.108503
C20orf202	0.75567	0.462678	0.345101	0.526794	0.33763	0.677814
TEX43	0.318561	0.138558	0.279374	0.356343	0.767092	0.782308
CABIN1	0.544609	0.586498	0.779541	0.963063	0.161186	0.183319
CACNA1I	0.072997	0.493167	**0.028731**	0.139647	0.367745	**0.046696**
CSMD1	0.153858	0.042229	**0.007777**	0.311502	0.098403	0.448219
DIO3	**0.02618**	0.082522	**0.003979**	0.582364	0.32418	0.171977
EPHX2	0.065733	0.057956	0.18561	0.946155	0.631153	0.639529
FAM83F	0.8723	0.374491	0.226341	0.274343	0.125788	0.655018
GP1BB	0.275655	0.320917	0.050063	0.968447	0.092493	0.103424
KIAA1656	0.052232	0.081441	**0.01574**	0.828146	0.229776	0.222879
LOC339593	0.937582	0.21104	0.518774	**0.028447**	0.171109	0.771792
MCM8	0.62673	0.473988	0.83094	0.69029	0.726134	0.506484
NAT1	**0.023528**	**0.00892**	**0.01309**	0.251721	0.23828	0.682123
NAT2	**0.001433**	**0.000855**	**0.007777**	0.495168	0.990289	0.725755
HNF6	0.149155	0.208807	0.303232	0.859855	0.798256	0.943758
PCDHGA11	0.645843	0.455222	0.170335	0.68461	0.156389	0.288172
RAB11FIP1	0.461923	0.914349	0.118548	0.322231	0.120851	**0.039813**
SPAG11A	0.103964	0.117781	**0.018376**	0.908595	0.137917	0.123967
SIRPD	0.083448	0.052494	**0.000976**	0.425495	**0.020228**	0.103424
TOP1P2	0.486096	0.181304	0.060926	0.280316	0.08465	0.389628
WDR5	0.054005	0.071256	0.095858	0.693848	0.728164	0.890892
ZNF366	0.675705	0.885161	0.095857	0.597676	0.079882	**0.040961**
ZNF703	0.634052	0.356582	0.3801	0.288125	0.417887	0.866165
ZNRF3	0.687798	0.354983	0.212116	0.064105	0.196514	**0.00523**

Table S4. Mann-Whitney (MW) *p*-values correlating metastasis- suppressor expression with MSS *vs.* MSI CRC and Tumor (T) *vs.* Normal (N) using a cohort composed of 1436 cases.

Gene	MSS v. MSI-MW.pv	T v. N-MW.pv
ADRA1A	4.65×10^{-02}	0.000607
ADRA1D	6.67×10^{-02}	4.21×10^{-01}
ADRB3	0.018867	3.12×10^{-02}
APOBEC3D	0.538426	0.001437
BRF2	6.13×10^{-06}	1.44×10^{-01}
C20orf202	0.011137	5.24×10^{-02}
TEX43	4.67×10^{-03}	1.17×10^{-04}
CABIN1	4.10×10^{-08}	8.48×10^{-02}
CACNA1I	0.032276	4.77×10^{-05}
CSMD1	0.308815	7.95×10^{-01}
DIO3	4.58×10^{-05}	1.86×10^{-02}
EPHX2	2.40×10^{-01}	2.15×10^{-25}
FAM83F	0.047495	1.97×10^{-02}
GP1BB	4.17×10^{-02}	3.33×10^{-04}
KIAA1656	1.37×10^{-02}	1.53×10^{-04}
LOC339593	2.46×10^{-01}	8.75×10^{-01}
MCM8	2.74×10^{-02}	1.27×10^{-15}
NAT1	5.71×10^{-06}	2.62×10^{-11}
NAT2	7.89×10^{-03}	1.86×10^{-16}
HNF6	9.65×10^{-03}	4.04×10^{-02}
PCDHGA11	7.69×10^{-02}	0.926676
RAB11FIP1	4.69×10^{-01}	5.70×10^{-06}
SPAG11A	3.67×10^{-01}	5.53×10^{-01}
SIRPD	3.25×10^{-02}	4.27×10^{-01}
TOP1P2	2.12×10^{-01}	6.52×10^{-01}
WDR5	1.09×10^{-02}	4.33×10^{-10}
ZNF366	1.23×10^{-01}	5.03×10^{-01}
ZNF703	1.23×10^{-02}	1.22×10^{-17}
ZNRF3	1.40×10^{-09}	5.21×10^{-29}

Table S5. Mann-Whitney (MW) *p*-values correlating metastasis-enhancers expression with MSS *vs.* MSI CRC and Tumor (T) *vs.* Normal (N) using a cohort composed of 1436 cases.

Gene	MSS v. MSI-MW.pv	T v. N-MW.pv
MPDZ	4.47×10^{-01}	0.034502
DUSP14	8.90×10^{-04}	1.02×10^{-35}
SCEL	4.66×10^{-01}	3.82×10^{-08}
ANXA2P2	1.39×10^{-10}	3.41×10^{-03}
GLIS3	4.23×10^{-01}	1.39×10^{-01}
DOK5	0.875129	0.823477
VLDLR	1.04×10^{-02}	5.44×10^{-18}
CDC42BPA	0.260157	9.47×10^{-08}
USP32	7.89×10^{-04}	9.42×10^{-01}
PITPNC1	1.36×10^{-07}	2.06×10^{-06}
SEMG1	8.73×10^{-09}	4.94×10^{-01}
SMU1	1.01×10^{-11}	1.95×10^{-12}
ING1	2.09×10^{-02}	5.99×10^{-05}

Table S6. Mann-Whitney (MW) *p*-values correlating metastasis- enhancers expression with CRC grade using a cohort composed of 1436 cases. *p*-Values highlighted in bold indicate significant correlation ($p > 0.05$).

Gene	Grade 1 *vs.* Grade 2. MW.pv	Grade 1 *vs.* Grade 3. MW.pv	Grade 2 *vs.* Grade 3. MW.pv
MPDZ	**0.019342**	0.29412	0.097428
DUSP14	0.605543	0.062085	**0.007799**
SCEL	**0.039522**	0.333825	0.225055
ANXA2P2	0.322648	0.344263	**0.015006**
GLIS3	0.068606	**0.017196**	0.291099
DOK5	**0.000225**	**0.036341**	0.163315
VLDLR	0.824203	0.608901	0.675231
CDC42BPA	0.480159	0.385258	0.564302
USP32	0.420768	0.20917	0.383217
PITPNC1	0.35331	0.129961	0.237943
SEMG1	0.258852	0.566197	0.680923
SMU1	0.154207	0.98763	0.068939
ING1	0.311019	0.580271	0.644258

Table S7. Mann-Whitney (MW) *p*-values correlating metastasis-enhancers expression with CRC stage using a cohort composed of 1436 cases. *p*-Values highlighted in bold indicate significant correlation ($p > 0.05$).

Gene	St. I *vs.* St. II	St. I *vs.* St. III	St. I *vs.* St. IV	St. II *vs.* St. III	St. II *vs.* St. IV	St. III *vs.* St. IV
MPDZ	**0.045841**	**0.009583**	**0.001658**	0.477648	**0.038911**	0.182032
DUSP14	**0.002751**	**0.011843**	**0.017458**	0.556179	0.880672	0.752379
SCEL	**0.020656**	**0.005734**	**0.04278**	0.206618	0.860441	0.193857
ANXA2P2	**0.035557**	0.058363	0.077578	0.997691	0.872143	0.886247
GLIS3	**0.045841**	**0.000171**	0.101671	**0.038591**	0.615848	**0.012062**
DOK5	0.07008	**0.006356**	0.057107	0.130821	0.803482	0.393965
VLDLR	**0.029086**	0.051751	**0.005432**	0.750194	0.171961	0.186565
CDC42BPA	0.277474	0.169559	0.124249	0.30737	0.178417	0.667804
USP32	0.579347	0.244156	0.164499	0.521766	0.303395	0.685001
PITPNC1	0.073659	0.157487	0.156026	0.482447	0.723091	0.889343
SEMG1	0.953987	0.185351	0.182477	0.080427	0.055664	0.66923
SMU1	0.754104	0.997548	0.245083	0.732698	0.28963	0.142163
ING1	**0.021112**	**0.007786**	**0.006191**	0.377871	0.093281	0.449392

Table S8. Spearman's Rho correlation and *p* value for epithelial to mesenchymal transition and expression of 29 potential metastasis suppressor genes.

Gene	Spear. EMT. Corr. Rho	Spear. EMT. Corr. pv
ADRA1A	−0.11554	1.14×10^{-05}
ADRA1D	−0.10702	4.83×10^{-05}
ADRB3	−0.12734	1.29×10^{-06}
APOBEC3D	−0.04603	8.12×10^{-02}
BRF2	0.043368	1.00×10^{-01}
C20orf202	−0.08187	1.90×10^{-03}
TEX43	−0.12857	1.02×10^{-06}
CABIN1	0.006294	8.12×10^{-01}
CACNA1I	−0.18416	2.02×10^{-12}
CSMD1	−0.1708	7.28×10^{-11}
DIO3	−0.12678	1.44×10^{-06}
EPHX2	−0.31109	1.36×10^{-33}
FAM83F	−0.38216	3.78×10^{-51}
GP1BB	−0.11784	7.56×10^{-06}
KIAA1656	−0.11734	8.27×10^{-06}
LOC339593	−0.11113	2.44×10^{-05}
MCM8	−0.12744	1.27×10^{-06}
NAT1	−0.22961	1.24×10^{-18}
NAT2	−0.36097	1.96×10^{-45}
HNF6	−0.05085	5.40×10^{-02}
PCDHGA11	−0.15348	5.05×10^{-09}
RAB11FIP1	−0.30085	2.00×10^{-31}
SPAG11A	−0.0079	7.65×10^{-01}
SIRPD	0.055333	3.60×10^{-02}
TOP1P2	−0.04795	6.93×10^{-02}
WDR5	−0.30379	4.86×10^{-32}
ZNF366	−0.06771	1.03×10^{-02}
ZNF703	−0.32778	2.58×10^{-37}
ZNRF3	−0.24291	9.91×10^{-21}

Table S9. Spearman's Rho correlation and *p*-value for epithelial to mesenchymal transition and expression of 13 potential metastasis-enhancer genes.

Gene	Spear. EMT. Corr. Rho	Spear. EMT. Corr. pv
MPDZ	0.683395	3.43×10^{-198}
DUSP14	0.316919	7.25×10^{-35}
SCEL	0.062208	1.84×10^{-02}
ANXA2P2	0.016965	5.21×10^{-01}
GLIS3	0.308117	5.90×10^{-33}
DOK5	0.656223	1.33×10^{-177}
VLDLR	0.107559	4.42×10^{-05}
CDC42BPA	0.006847	0.795453
USP32	0.215219	1.65×10^{-16}
PITPNC1	0.000786	9.76×10^{-01}
SEMG1	−0.07814	3.05×10^{-03}
SMU1	−0.02528	0.338419
ING1	−0.04653	7.80×10^{-02}

Table S10. Metastatic CRC deleted genes' ontology and supporting evidence of their CRC involvement in cancer progression and metastasis. NA stands for none available.

Gene	Biological Process	References
ADRA1A	Growth inhibition	[18,47–51]
ADRA1D	Cell proliferation	[50–53]
ADRB3	Metabolic regulation	[53,54]
APOBEC3D	Viral immune response; retrotransposition inhibition	[20,55,56]
BRF2	Cell proliferation; hemopoiesis	[57,58]
C20orf202	Unknown	NA
TEX43	Unknown	NA
CABIN1	Inflammation and apoptosis regulation	[16,59]
CACNA1I	Calcium signaling; neuronal excitability	[60]
CSMD1	Tumor suppressor gene; unknown function	[14,61]
DIO3	Thyroid hormone inactivation	[25,62]
EPHX2	Lipid metabolism	[,15,63]
FAM83F	Suppressed in cancer; unknown function	[15,64]
GP1BB	Blood coagulation; cell adhesion	[23]
KIAA1656	Non-coding RNA; unknown function	NA
LOC339593	Non-coding RNA; unknown function	NA
MCM8	cellular response to DNA damage stimulus; DNA replication	[21,65]
NAT1	Biological oxidation; drug metabolism; chemical carcinogenesis	[66–68]
NAT2	Biological oxidation; drug metabolism; chemical carcinogenesis	[66,69]
HNF6	Cell differentiation; cell fate commitment, cell migration; glucose metabolism	[27,70–72]
PCDHGA11	Cell adhesion	[24]
RAB11FIP1	Negative regulation of adiponectin secretion; protein transport; endocytosis	[73,74]
SPAG11A	Unknown	NA
SIRPD	Unknown	NA
TOP1P2	Unknown	NA
WDR5	Chromatin organization; histone H3 acetylation; histone H3-K4 methylation	[22,75–76]
ZNF366	Negative regulation of estrogen receptor signaling pathway	[77,78]
ZNF703	Cell proliferation; cell migration; EMT regulation	[79,80]
ZNRF3	Negative regulation of WNT signaling pathway	[26]

Table S11. Metastatic CRC amplified genes' ontology and supporting. The evidence of their CRC involvement in cancer progression and metastasis.

Gene	Biological Process	References
ANXA2P2	Expressed pseudogene of unknown function	[81]
CDC42BPA	Cytoskeleton organization; cell migration	[82]
DOK5	MAPK cascade; neurite growth; tyrosine kinase signaling pathway	[83,84]
DUSP14	Inactivation of MAPK activity, peptidyl tyrosine dephosphorylation	[85,86]
SCEL	Embryo development	[87]
GLIS3	Transcriptional regulation from RNA polymerase II promoter	[88]
MPDZ	Cell adhesion; myelination	[89–91]
VLDLR	Cholesterol metabolism, cellular response to hypoxia and glucose starvation	[32]
USP32	Ubiquitin-dependent protein catabolism; protein de-ubiquitination	[33]
PITPNC1	Phospholipid transport; pro-angiogenic; signal transduction	[34,92]
SEMG1	Insemination; negative regulation of calcium ion import	[93]
SMU1	Genome integrity, regulation of DNA synthesis	[30]
ING1	Cell cycle; chromatin modification; negative regulation of cell growth	[31,94]