

Supplementary Table 1. Primer information of SNPs of RP11-108K3.2.

SNP ID	Primer Information	
rs2470151	2nd-PCR	ACGTTGGATGGCCTCTGTCTTTGTTTCTTC
	1st-PCR	ACGTTGGATGCAACCAACAGGTTTGGAGAC
	UEP_SEQ	TTTCCTCCATTTTCCTCATT
rs3751591	2nd-PCR	ACGTTGGATGTTGGGAGAGTCCCAAAGAAC
	1st-PCR	ACGTTGGATGCTGGGAGAGTGATGAGATTC
	UEP_SEQ	gccctGGGGTGTTACTAAACTCTTA
rs3751592	2nd-PCR	ACGTTGGATGTGGACCACTAAAAGCCCAAC
	1st-PCR	ACGTTGGATGGGGAAAGAGGGACTTTTTGC
	UEP_SEQ	CCCAACATGCCTGAG
rs77348531	2nd-PCR	ACGTTGGATGAGTGGATGAAAGCAAGCAGG
	1st-PCR	ACGTTGGATGTTTCCTGGTTCAAGCCACTG
	UEP_SEQ	ctatAGGTCAATTAGGAGCTG
rs17602308	2nd-PCR	ACGTTGGATGTCCAGGAAGAAAATGGTGGC
	1st-PCR	ACGTTGGATGCCTTCAAAATCTCTCTAGCC
	UEP_SEQ	gggaGAAGAAAATGGTGGCATGACC
rs75106900	2nd-PCR	ACGTTGGATGCCTTGCTGGTTGTGTTTCTC
	1st-PCR	ACGTTGGATGATAACCTTCTGACCGGACTG
	UEP_SEQ	gtTTGTGTTTCTCAACACTCCC

Supplementary Table 2. Main characteristics of colorectal cancer cases and controls.

Characteristics	Discovery set		Validation set	
	Cases	Controls	Cases	Controls
	N=320	N=319	N=501	N=538
Age (years), mean $\pm$ s.d.	65.76 $\pm$ 10.23	65.30 $\pm$ 9.76	62.73 $\pm$ 10.99	62.26 $\pm$ 10.53
Gender, N (%)				
Males	168 (52.50)	157 (49.22)	262 (52.30)	285 (52.97)
Females	152 (47.50)	162 (50.78)	239 (47.70)	253 (47.03)
BMI (kg/m ²), N (%)				
≤ 18.5	27 (8.44)	17 (5.33)	47 (9.38)	46 (8.55)
18.5-24	217 (67.81)	201 (63.01)	339 (67.66)	364 (67.66)
24-28	60 (18.75)	85 (26.65)	99 (19.76)	113 (21.00)
>28	16 (5.00)	16 (5.02)	16 (3.19)	15 (2.79)
Family history of cancer, N (%)				
No	257 (80.31)	287 (89.97)	394 (78.64)	450 (83.64)
Yes	63 (19.69)	30 (9.40)	107 (21.36)	88 (16.36)
Smoking, N (%)				
No	208 (65.00)	220 (68.97)	316 (63.07)	330 (61.34)
Yes	112 (35.00)	99 (31.03)	183 (36.53)	206 (38.29)
Alcohol consumption, N (%)				
No	247 (77.19)	248 (77.74)	359 (71.66)	386 (71.75)
Yes	72 (22.50)	68 (21.32)	138 (27.54)	145 (26.95)
Tea consumption, N (%)				
No	200 (62.50)	193 (60.50)	294 (58.68)	273 (50.74)

Yes	120 (37.50)	126 (39.50)	201 (40.12)	259 (48.14)
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Subjects with missing information were not included.

Supplementary Table 3. Association between RP11-108K3.2 rs2470151 and the risk of CRC for gender.

Genotype	Cases, N (%)	Controls, N (%)	Adjusted OR (95%CI) ^a	P-value
Total				
CC	297 (36.44)	262 (30.93)	1	
CT	372 (45.64)	445 (52.54)	0.73 (0.58, 0.92)	0.007
TT	146 (17.91)	140 (16.53)	0.94 (0.70, 1.26)	0.659
CT+TT	518 (63.56)	585 (69.07)	0.79 (0.64, 0.97)	0.025
Male				
CC	161 (37.79)	139 (31.66)	1	
CT	195 (45.77)	217 (49.43)	0.79 (0.58, 1.07)	0.123
TT	70 (16.43)	83 (18.91)	0.70 (0.47, 1.05)	0.084
CT+TT	265 (62.21)	300 (68.34)	0.76 (0.57, 1.02)	0.066
Female				
CC	136 (34.96)	123 (30.15)	1	
CT	177 (45.50)	228 (55.88)	0.67 (0.48, 0.93)	0.015
TT	76 (19.54)	57 (13.97)	1.25 (0.81, 1.92)	0.324
CT+TT	253 (65.04)	285 (69.85)	0.78 (0.58, 1.07)	0.120

a: Adjusted for age, gender, BMI, occupation, education level, marital status, family history of cancer, smoking, alcohol drinking and tea drinking.

Supplementary Table 4. Association between RP11-108K3.2 expression level and clinicpathological characteristics.

Characteristics	RP11-108K3.2 expression		P-value
	high (%)	low (%)	
Gender			
male	26 (55.3)	21 (44.7)	0.331
female	8 (42.1)	11 (57.9)	
Tumor Position			
colon	13 (44.8)	16 (55.2)	0.336
rectum	21 (56.8)	16 (43.2)	
Tumor Invasion			
T1-T3	17 (58.6)	12 (41.4)	0.304
T4	16 (45.7)	19 (54.3)	
Lymph Node			
N0	17 (51.5)	16 (48.5)	0.994
N1-N3	16 (51.6)	15 (48.4)	
Metastasis			
M0	26 (51.0)	25 (49.0)	0.687
M1	3 (42.9)	4 (57.1)	

Different groups of RP11-108K3.2 expression level was defined by the median value of all the subjects.

Missing information was not shown in the table.