

**Table S3.** A complete list of somatic small indels identified in 22 colorectal cancer patients by exome sequencing.

Chror	Start	End	Ref	Obs	Func	ExonicFunc	Gene	Amino acid change	mutated	sample
chr1	1.5E+08	1.5E+08	C	-	exonic	frameshift deletion	PGLYRP4	NM_020393:c.187delG;p.A63fs	D22	
chr2	7.3E+07	7.3E+07	C	-	exonic	frameshift deletion	SPR	NM_003124:c.598delC;p.P200fs	D22	
chr5	4.3E+07	4.3E+07	AA	-	exonic	frameshift deletion	SEPP1	NM_005410:c.379_380del;p.127_127del	D22	
chr5	1.1E+08	1.1E+08	GT	-	exonic	frameshift deletion	APC	NM_001127511:c.3922_3923del;p.1308_1308del	D22	
chr2	1.6E+08	1.6E+08	-	A	exonic	frameshift insertion	KCNH7	NM_173162:c.1957_1958insT;p.G653fs	D15	
chr3	1.4E+08	1.4E+08	ATTAA	-	exonic	frameshift deletion	RASA2	NM_006506:c.1321_1325del;p.441_442del	D15	
chr6	3.6E+07	3.6E+07	-	C	exonic	frameshift insertion	RPL10A	NM_007104:c.594_595insC;p.W198fs	D15	
chr7	4.7E+07	4.7E+07	-	GG	exonic	frameshift insertion	TNS3	NM_022748:c.860_861insCC;p.R287fs	D15	
chr8	8.3E+07	8.3E+07	GTGGGTTTGGC	-	exonic	nonframeshift deletion	PMP2	NM_002677:c.90_119del;p.30_40del	D15	
chr9	1.3E+08	1.3E+08	CCT	-	exonic	nonframeshift deletion	GOLGA2	NM_004486:c.2144_2146del;p.715_716del	D15	
chr1	2.7E+07	2.7E+07	-	GT	exonic	frameshift insertion	ARID1A	NM_006015:c.6357_6358insGT;p.L2119fs	D17	
chr1	1.5E+08	1.5E+08	CCCAGGGCC	-	exonic	nonframeshift deletion	EFNA4	NM_005227:c.189_197del;p.63_66del	D4	
chr3	1.9E+07	1.9E+07	AAG	-	exonic	nonframeshift deletion	KCNH8	NM_144633:c.437_439del;p.146_147del	D4	
chr4	5.7E+07	5.7E+07	A	-	exonic	frameshift deletion	AASDH	NM_181806:c.1319delT;p.L440fs	D4	
chr5	1.1E+08	1.1E+08	AC	-	exonic	frameshift deletion	APC	NM_001127511:c.2431_2432del;p.811_811del	D4	
chr9	1.3E+08	1.3E+08	CCT	-	exonic	nonframeshift deletion	GOLGA2	NM_004486:c.2144_2146del;p.715_716del	D4	
chr14	5.2E+07	5.2E+07	T	-	exonic	frameshift deletion	PSMC6	NM_002806:c.665delT;p.I222fs	D4	
chr19	5.8E+07	5.8E+07	-	TGTG	exonic	frameshift insertion	ZNF83	NM_018300:c.1178_1179insCAC;p.R393fs	D4	
chr21	2.9E+07	2.9E+07	T	-	exonic	frameshift deletion	LTN1	NM_015565:c.1745delA;p.N582fs	D4	
chr7	2439420	2439420	T	-	exonic	frameshift deletion	CHST12	NM_018641:c.620delT;p.V207fs	D19	
chr19	4.2E+07	4.2E+07	-	T	exonic	frameshift insertion	ZNF790	NM_206894:c.443_444insA;p.R148fs	D19	
chr2	4.7E+07	4.7E+07	G	-	exonic	frameshift deletion	SOCS5	NM_014011:c.1571delG;p.R524fs	D16	
chr4	5.7E+07	5.7E+07	-	A	exonic	frameshift insertion	AASDH	NM_181806:c.1320_1321insT;p.L440fs	D16	
chr5	3.4E+07	3.4E+07	T	-	exonic	frameshift deletion	SLC45A2	NM_001012509:c.915delA;p.S305fs	D16	
chr11	1.2E+08	1.2E+08	GGGCTGGAGA	-	exonic	nonframeshift deletion	TMPRSS13	NM_001077263:c.248_262del;p.83_88del	D16	
chr14	2.2E+07	2.2E+07	-	GGC	exonic	nonframeshift insertion	RBM23	NM_001077352:c.1078_1079insGCC;p.Q360delinsAQ	D16	
chr17	1.2E+07	1.2E+07	GAA	-	exonic	nonframeshift deletion	DNAH9	NM_004662:c.2079_2081del;p.693_694del	D16	
chr19	9439669	9439669	T	-	exonic	frameshift deletion	ZNF560	NM_152476:c.954delA;p.K318fs	D16	
chr19	1.5E+07	1.5E+07	-	T	exonic	frameshift insertion	OR7C2	NM_012377:c.303_304insT;p.I101fs	D16	
chrX	1E+08	1E+08	T	-	exonic	frameshift deletion	TRMT2B	NM_001167972:c.196delA;p.S66fs	D16	
chrX	1.4E+08	1.4E+08	G	-	exonic	frameshift insertion	SPANXN2	NM_001009615:c.72_73insA;p.N24fs	D16	
chr4	1.5E+08	1.5E+08	-	T	exonic	frameshift insertion	FBXW7	NM_001013415:c.1440_1441insA;p.N480fs	D21	
chr4	1.5E+08	1.5E+08	G	-	exonic	frameshift deletion	FBXW7	NM_001013415:c.975delC;p.L325fs	D21	
chr1	7.1E+07	7.1E+07	C	-	exonic	frameshift deletion	CTH	NM_001190463:c.1027delC;p.R343fs	D7	
chr5	1.1E+08	1.1E+08	-	C	exonic	frameshift insertion	APC	NM_001127511:c.4062_4063insC;p.P1354fs	D7	
chr7	1.4E+08	1.4E+08	-	T	exonic	frameshift insertion	PTN	NM_002825:c.124_125insA;p.V42fs	D7	
chr11	1E+08	1E+08	-	T	exonic	frameshift insertion	MMP10	NM_002425:c.188_189insA;p.I63fs	D7	
chr5	1.1E+08	1.1E+08	TCTCCCTCCAA	-	exonic	frameshift deletion	APC	NM_001127511:c.4024_4037del;p.1342_1346del	D5	
chr10	2.3E+07	2.3E+07	TTAC	-	splicing		COMMD3		D5	
chr19	4.7E+07	4.7E+07	G	-	exonic	frameshift deletion	CEACAM5	NM_004363:c.516delG;p.Q172fs	D5	
chr1	1.6E+08	1.6E+08	T	-	exonic	frameshift deletion	AIM2	NM_004833:c.1027delA;p.T343fs	D3	
chr1	2.4E+08	2.4E+08	-	AA	exonic	frameshift insertion	KMO	NM_003679:c.1412_1413insAA;p.A471fs	D3	
chr2	1.5E+08	1.5E+08	T	-	exonic;splicing	frameshift deletion	RBM43	NM_198557:c.213delA;p.K71fs	D3	
chr3	4.6E+07	4.6E+07	A	-	exonic	frameshift deletion	CCR3	NM_178329:c.694delA;p.K232fs	D3	
chr3	1.3E+08	1.3E+08	-	A	exonic	stopgain SNV	CCDC48	NM_024768:c.1318_1319insA;p.Y440_F441delinsX	D3	
chr3	1.4E+08	1.4E+08	A	-	exonic	stopgain SNV	XRN1	NM_001042604:c.2012delT;p.L671X	D3	
chr3	1.5E+08	1.5E+08	-	T	exonic	frameshift insertion	IGSF10	NM_178822:c.1598_1599insA;p.S533fs	D3	
chr3	1.7E+08	1.7E+08	-	T	exonic	frameshift insertion	EIF5A2	NM_020390:c.119_120insA;p.I40fs	D3	

chr8	1.3E+08	1.3E+08	A	-	exonic	frameshift deletion	TG	NM_003235:c.6051delA:p.L2017fs	D3
chr11	3.3E+07	3.3E+07	A	-	exonic	frameshift deletion	CSTF3	NM_001326:c.960delT:p.F320fs	D3
chr12	1.4E+07	1.4E+07	-	T	exonic	frameshift insertion	GRIN2B	NM_000834:c.1366_1367insA:p.C456fs	D3
chr12	9E+07	9E+07	TCTTCTCCTC/-	-	exonic	nonframeshift deletion	C12orf12	NM_152638:c.939_959del:p.313_320del	D3
chr17	7190325	7190327	AGA	-	exonic	nonframeshift deletion	ACAP1	NM_014716:c.893_895del:p.298_299del	D3
chr22	2.8E+07	2.8E+07	AACGAA	-	exonic	nonframeshift deletion	NEFH	NM_021076:c.1923_1928del:p.641_643del	D3
chrX	1.4E+08	1.4E+08	G	-	exonic	frameshift deletion	MCF2	NM_001171877:c.19delC;p.R7fs	D3
chr1	1.5E+08	1.5E+08	TG	-	exonic	frameshift deletion	BCL9	NM_004326:c.3093_3094del:p.1031_1032del	D10
chr3	1.6E+08	1.6E+08	-	A	exonic	frameshift insertion	SMC4	NM_005496:c.2556_2557insA:p.D852fs	D10
chr6	1E+08	1E+08	A	-	exonic	frameshift deletion	MCHR2	NM_001040179:c.623delT:p.F208fs	D10
chr1	1.1E+07	1.1E+07	-	TAGAGAA(	exonic	stopgain SNV	CASZ1	NM_001079843:c.3448_3449insCTTCTCTA:p.E1150_N1151delinsLL)	D8
chr2	1.5E+08	1.5E+08	-	A	exonic	frameshift insertion	ACVR2A	NM_001616:c.1302_1303insA:p.H434fs	D8
chr4	8.2E+07	8.2E+07	A	-	exonic	frameshift deletion	C4orf22	NM_152770:c.441delA:p.G147fs	D8
chr5	1.1E+08	1.1E+08	-	T	exonic	frameshift insertion	APC	NM_001127511:c.2921_2922insT:p.S974fs	D8
chr5	1.1E+08	1.1E+08	A	-	exonic	frameshift deletion	APC	NM_001127511:c.4281delA:p.T1427fs	D8
chr7	1.1E+08	1.1E+08	-	A	splicing		COG5		D8
chr9	6244555	6244555	-	A	splicing		IL33		D8
chrX	8.3E+07	8.3E+07	-	A	exonic	frameshift insertion	CYLC1	NM_021118:c.1264_1265insA:p.E422fs	D8
chr4	4.7E+07	4.7E+07	AG	-	exonic	frameshift deletion	ATP10D	NM_020453:c.2760_2761del:p.920_921del	D9
chr5	1.1E+08	1.1E+08	A	-	exonic	frameshift deletion	APC	NM_001127511:c.2559delA:p.G853fs	D9
chr4	1.8E+08	1.8E+08	G	-	exonic	frameshift deletion	ADAM29	NM_001130705:c.219delG:p.L73fs	D6
chr7	8.7E+07	8.7E+07	-	A	exonic	frameshift insertion	ABCB4	NM_000443:c.1016_1017insT:p.S339fs	D6
chr9	7.7E+07	7.7E+07	T	-	exonic	frameshift deletion	TRPM6	NM_001177310:c.3126delA:p.P1042fs	D6
chr3	1.2E+08	1.2E+08	-	G	splicing		MYLK		D2
chr22	3.5E+07	3.5E+07	T	-	exonic	frameshift deletion	APOL1	NM_001136541:c.560delT:p.L187fs	D2
chr5	1.1E+08	1.1E+08	AG	-	exonic	frameshift deletion	APC	NM_001127511:c.4163_4164del:p.1388_1388del	D12
chr12	5.5E+07	5.5E+07	AAGG	-	exonic	frameshift deletion	MYL6	NM_021019:c.292_295del:p.98_99del	D12
chr16	2.5E+07	2.5E+07	A	-	exonic	frameshift deletion	TNRC6A	NM_014494:c.3723delA:p.I1241fs	D12
chr17	2.7E+07	2.7E+07	C	-	exonic	frameshift deletion	NF1	NM_000267:c.2027delC:p.T676fs	D12
chr9	1.3E+08	1.3E+08	CCT	-	exonic	nonframeshift deletion	GOLGA2	NM_004486:c.2144_2146del:p.715_716del	D18
chr10	7.9E+07	7.9E+07	-	C	exonic	frameshift insertion	DLG5	NM_004747:c.5346_5347insG:p.G1782fs	D18
chr11	1.5E+07	1.5E+07	CACCACAGAGT-	-	exonic	nonframeshift deletion	INSC	NM_001031853:c.759_770del:p.253_257del	D18
chr19	6E+07	6E+07	C	-	exonic	stopgain SNV	PTPRH	NM_001161440:c.951delG:p.W317X	D18
chr2	5.4E+07	5.4E+07	-	G	splicing		PSME4		D14
chr11	1.2E+08	1.2E+08	GGGCTGGAGA1-	-	exonic	nonframeshift deletion	TMPRSS13	NM_001077263:c.248_262del:p.83_88del	D14
chr1	8.9E+07	8.9E+07	T	-	exonic	frameshift deletion	GBP2	NM_004120:c.1532delA:p.N511fs	D20
chr3	7596012	7596012	-	T	exonic	frameshift insertion	GRM7	NM_000844:c.2419_2420insT:p.I807fs	D20
chr14	2E+07	2E+07	-	T	exonic	frameshift insertion	RNASE9	NM_001001673:c.273_274insA:p.N91fs	D20
chr15	3.9E+07	3.9E+07	-	AA	exonic	frameshift insertion	SPINT1	NM_001032367:c.1427_1428insAA:p.R476fs	D20
chr16	2.4E+07	2.4E+07	-	T	exonic	frameshift insertion	PALB2	NM_024675:c.840_841insA:p.N280fs	D20
chr19	5.1E+07	5.1E+07	-	CTCCTCG(	exonic	nonframeshift insertion	RSPH6A	NM_030785:c.2143_2144insGAGGAGGGCGAGGAG;p.T715deli	D20