TABLE S1. Mutational status of the 16 most commonly mutated genes in colorectal cancer found in our panel of CRC-SCs (COSMIC-reported mutations)

Sample_ID[1]	Hugo_Symbol	Protein_Change	Mutation_Type	Chromosome	Start_Position	End_Position	Reference_Allele	Variant_Allele	Mutation_type_2	SNP_id	COSMIC_ID	Overall_Coverage	Mutation_Coverage	Allele_Frequency
#1	KIAA1804	p.Tyr250Ser	snv	chr1	233464523	233464523	A	A/C	c.749A>C			433	128	29,56
	KIAA1804	p.Ser416Phe	snv	chr1	233490693	233490693	C	C/T	c.1247C>T			2619	285	10,88
	CTNNB1	p.Ser348Phe	snv	chr3	41268805	41268805	C	C/T	c.1043C>T			1503	400	26,61
	PIK3CA	p.Glu453Lys	snv	chr3	178928079	178928079	G	G/A	c.1357G>A		COSM1041484	4236	2006	47,36
	PIK3CA	p.Leu748Pro	snv	chr3	178941924	178941924	T	T/C	c.2243T>C			1422	200	14,06
	APC	p.Ala759AsnfsTer2	deletion	chr5	112173563	112173563	AAAGCCCTAGAAGC	AAAGCCCTAGAAGC/A	c.2273_2285delAAGCCCTAGAAGC			6722	6557	97,55
	TP53	c.672+1G>C	snv	chr17	7578176	7578176	C	G/G	c.672+1G>C		COSM118939	8208	8199	99,89
	MAP2K4	p.Phe59Tyr	snv	chr17	11958266	11958266	T	T/A	c.176T>A			876	213	24,32
	SMAD2	p.Lys51Ter	snv	chr18	45422977	45422977	T	T/A	c.151A>T			1029	149	14,48
#2	KIAA1804	p.Phe586Leu	snv	chr1	233511744	233511744	T	T/A	c.1758T>A			9259	2308	24,93
	KIAA1804	p.Ala722Val	snv	chr1	233514917	233514917	C	C/T	c.2165C>T			4289	624	14,55
	PIK3CA	p.Glu579Gly	snv	chr3	178937055	178937055	A	A/G	c.1736A>G			6902	908	13,16
	PIK3CA	p.Asn803Ser	snv	chr3	178942601	178942601	A	A/G	c.2408A>G			3011	374	12,42
	PIK3CA	p.Ile962Thr	snv	chr3	178948113	178948113	T	T/C	c.2885T>C			9326	1311	14,06
	FBXW7	p.Asp119Tyr	snv	chr4	153332601	153332601	C	C/A	c.355G>T	rs200988301		452	307	67,92
	APC	p.Glu202Gly	snv	chr5	112116560	112116560	A	A/G	c.605A>G			2341	686	29,3
	APC	p.Lys586Arg	snv	chr5	112170661	112170661	A	A/G	c.1757A>G			3075	653	21,24
	APC	p.Leu1021Ile	snv	chr5	112174352	112174352	C	C/A	c.3061C>A			1812	487	26,88
	APC	p.Gln1260HisfsTer15	deletion	chr5	112175069	112175069	CAG	CAG/C	c.3779_3780delAG			129	103	79,84
	APC	p.Gln1928Ter	snv	chr5	112177073	112177073	C	C/T	c.5782C>T			13901	1515	10,9
	APC	p.Pro2482Ser	snv	chr5	112178735	112178735	C	C/T	c.7444C>T			21701	2678	12,34
	BRAF	p.Arg558Ter	snv	chr7	140476734	140476734	G	G/A	c.1672C>T			12757	2349	18,41
	BRAF	p.Ala497Val	snv	chr7	140477818	140477818	G	G/A	c.1490C>T			5575	1193	21,4
	KRAS	p.Thr20Ala	snv	chr12	25398261	25398261	T	T/C	c.58A>G		COSM1360874	134	38	28,36
	KRAS	p.Gly12Asp	snv	chr12	25398284	25398284	C	C/T	c.35G>A	rs121913529	COSM1135366	13645	10823	79,32
	ACVR1B	p.Ile143Val	snv	chr12	52370206	52370206	A	A/G	c.427A>G			1460	912	62,47
	TP53	p.Ser303Asn	snv	chr17	7577030	7577030	C	C/T	c.908G>A		COSM43986	3607	515	14,28
	TP53	p.Arg248Gln	snv	chr17	7577538	7577538	C	T/T	c.743G>A	rs11540652	COSM10662	978	968	98,98
	TP53	p.Arg158Cys	snv	chr17	7578458	7578458	G	G/A	c.472C>T		COSM11087	6118	4508	73,68
	SMAD2	p.Tyr102ThrfsTer61	deletion	chr18	45396867	45396867	TA	TA/T	c.304delT			4275	553	12,94
	SMAD4	p.Pro293Leu	snv	chr18	48584800	48584800	C	C/T	c.878C>T			2907	992	34,12
	SMAD4	p.Lys392Ile	snv	chr18	48593424	48593424	A	A/T	c.1175A>T			2060	592	28,74
	SMAD4	p.Arg531Trp	snv	chr18	48604769	48604769	C	C/T	c.1591C>T		COSM1389106	5491	2610	47,53
	AMER1	p.Pro1013His	snv	chrX	63410129	63410129	G	G/T	c.3038C>A			11314	1931	17,07
	AMER1	p.Ala150Thr	snv	chrX	63412719	63412719	C	C/T	c.448G>A			8946	1195	13,36
#3	PIK3CA	p.Gly118Asp	snv	chr3	178917478	178917478	G	G/A	c.353G>A		COSM246588	3736	1699	45,48
	PIK3CA	p.Gly865Ser	snv	chr3	178947157	178947157	G	G/A	c.2593G>A			5614	1493	26,59
	APC	p.Tyr935Ter	snv	chr5	112174096	112174096	C	C/A	c.2805C>A	rs137854575	COSM19031	3522	2088	59,28
	APC	p.Gln1429Ter	snv	chr5	112175576	112175576	C	C/T	c.4285C>T	rs121913330, rs74535574	COSM18836	2173	731	33,64
	KRAS	p.Gly12Asp	snv	chr12	25398284	25398284	C	T/T	c.35G>A	rs121913529	COSM1135366	14256	14191	99,54
	TP53	p.Arg175His	snv	chr17	7578406	7578406	C	T/T	c.524G>A	rs28934578	COSM10648	7983	7948	99,56
#4	CTNNB1	p.Glu15Lys	snv	chr3	41266046	41266046	G	G/A	c.43G>A		COSM49161	4740	539	11,37
	APC	p.Ser873LeufsTer43	deletion	chr5	112173906	112173906	CT	CT/C	c.2616delT			11093	11036	99,49
	APC	p.Arg2439His	snv	chr5	112178607	112178607	G	G/A	c.7316G>A			7569	4075	53,84
	TP53	p.Arg306Ter	snv	chr17	7577022	7577022	G	G/A	c.916C>T	rs121913344	COSM10663	2551	1251	49,04
	AMER1	p.Pro876Ser	snv	chrX	63410541	63410541	G	G/A	c.2626C>T			562	60	10,68
#5	FBXW7	p.Arg465His	snv	chr4	153249384	153249384	C	C/T	c.1394G>A		COSM1149856	1556	862	55,4
	APC	p.Cys1387Ter	snv	chr5	112175452	112175452	T	A/A	c.4161T>A		COSM18806	6166	6146	99,68
#6	PIK3CA	p.Arg38Cys	snv	chr3	178916725	178916725	C	C/T	c.112C>T		COSM1041448	1820	772	42,42
	APC	p.Arg374Gln	snv	chr5	112154850	112154850	G	G/A	c.1121G>A	rs141582813		11206	5654	50,46
	APC	p.Arg805Ter	snv	chr5	112173704	112173704	C	C/T	c.2413C>T		COSM19058	7811	4357	55,78
	APC	p.Glu1464ValfsTer8	deletion	chr5	112175675	112175675	AAGAG	AAGAG/A	c.4385_4388delAGAG	rs387906235	COSM1432412	9389	4640	49,42
	PTEN	p.Lys267ArgfsTer9	deletion	chr10	89717769	89717769	TA	TA/T	c.795delA	rs121913289	COSM30622	10858	5210	47,98
	PTEN	p.Asn323MetfsTer21	deletion	chr10	89720811	89720811	CA	CA/C	c.963delA	rs121913291	COSM5823	9600	4779	49,78
	TP53	p.Arg267Gln	snv	chr17	7577138	7577138	C	C/T	c.800G>A		COSM11392	3640	1974	54,23
#7	KIAA1804	p.Ala374Val	snv	chr1	233489687	233489687	C	C/T	c.1121C>T			1466	325	22,17
	KIAA1804	p.Arg535Pro	snv	chr1	233507835	233507835	G	G/C	c.1604G>C			1424	150	10,53
	KIAA1804	p.Ser954Leu	snv	chr1	233518207	233518207	C	C/T	c.2861C>T			2299	232	10,09
	CTNNB1	p.Cys439Tyr	snv	chr3	41275150	41275150	G	G/A	c.1316G>A			10648	4186	39,31
	FBXW7	p.Ser668ValfsTer39	deletion	chr4	153244155	153244155	TC	TC/T	c.2001delG		COSM1427622	15666	7521	48,01
	FBXW7	p.Glu117del	deletion	chr4	153332604	153332604	TCTC	TCTC/T	c.349_351delGAG		COSM22937	1892	206	10,89
	APC		snv	chr5	112043458	112043458	C	C/T				1327	262	19,74
	APC	p.Arg876Ter	snv	chr5	112173917	112173917	C	C/T	c.2626C>T	rs121913333	COSM18852	20414	11008	53,92
	APC	p.Ser1465TrpfsTer3	deletion	chr5	112175675	112175675	AAG	AAG/A	c.4385_4386delAG	rs387906234	COSM18873	21063	10292	48,86
	BRAF	c.1861-1G>A	snv	chr7	140449219	140449219	C	C/T	c.1861-1G>A			3408	494	14,5
	TCF7L2	p.Leu200SerfsTer25	deletion	chr10	114900983	114900983	AC	AC/A	c.594delC		COSM1345824	3155	700	22,19
	SMAD4	p.Arg38Lys	snv	chr18	48573529	48573529	G	G/A	c.113G>A			2926	427	14,59
#8	PIK3CA	p.His1047Arg	snv	chr3	178952085	178952085	A	A/G	c.3140A>G	rs121913279	COSM249874	5413	2623	48,46
	FBXW7	p.Ala626Val	snv	chr4	153244280	153244280	G	G/A	c.1877C>T		COSM1427640	2452	1241	50,61
	KRAS	p.Gly12Val	snv	chr12	25398284	25398284	C	C/A	c.35G>T	rs121913529	COSM1135366	20083	12859	64,03
	SMAD4	p.Gln366Ter	snv	chr18	48591933	48591933	C	C/T	c.1096C>T		COSM30781	10071	5230	51,93
	SMAD4	p.Arg497His	snv	chr18	48604668	48604668	G	G/A	c.1490G>A		COSM14113	5947	2969	49,92
#9	KIAA1804	p.Pro552Leu	snv	chr1	233507886	233507886	C	C/T	c.1655C>T			120	14	11,67
	APC	p.Arg805Ter	snv	chr5	112173704	112173704	C	C/T	c.2413C>T		COSM19058	6936	4362	62,89
	APC	p.Ser1581LeufsTer69	deletion	chr5	112176029	112176029	AT	AT/A	c.4739delT		COSM1432454	4531	1772	39,11
	TCF7L2	p.Thr228Pro	snv	chr10	114901072	114901072	A	A/C	c.682A>C			105	16	15,24
	KRAS	p.Gly13Asp	snv	chr12	25398281	25398281	C	T/T	c.38G>A	rs112445441	COSM1140132	5318	5290	99,47
	TP53	p.His179Gln	snv	chr17	7578393	7578393	A	A/T	c.537T>A		COSM11249	3552	3504	98,65
#10	KIAA1804	p.Lys317Arg	snv	chr1	233482332	233482332	A	A/G	c.950A>G			4264	841	19,72
	KIAA1804	p.Thr783Ala	snv	chr1	233515099	233515099	A	A/G	c.2347A>G			122	14	11,48
	KIAA1804	p.Asp816ThrfsTer135	deletion	chr1	233515196	233515196	TG	TG/T	c.2445delG			742	100	13,48
	KIAA1804	p.Phe838Leu	snv	chr1	233515264	233515264	T	T/C	c.2512T>C			1798	378	21,02
	PIK3CA	p.Val32Ala	snv	chr3	178916708	178916708	T	T/C	c.95T>C			3044	446	14,65
	PIK3CA	p.Asn142Asp	snv	chr3	178917549	178917549	A	A/G	c.424A>G			1324	134	10,12
	FBXW7	p.Ser668ValfsTer39	deletion	chr4	153244155	153244155	TC	TC/T	c.2001delG		COSM1427622	3410	422	12,38
	FBXW7	p.Tyr545Ter	snv	chr4	153247167	153247167	A	A/T	c.1635T>A		COSM1427675	8978	2303	25,65
	FBXW7	p.Pro206Ser	snv	chr4	153268192	153268192	G	G/A	c.616C>T			3388	370	10,92
	FBXW7	p.Pro206Ala	snv	chr4	153268192	153268192	G	G/C	c.616C>G			3388	655	19,33
	APC	p.Ser1044Pro	snv	chr5	112174421	112174421	T	T/C	c.3130T>C			11076	1151	10,39
	APC	p.Ile1311Val	snv	chr5	112175222	112175222	A	A/G	c.3931A>G			17087	1742	10,19
	APC	p.Thr1313Ile	snv	chr5	112175229	112175229	C	C/T	c.3938C>T			17129	2818	16,45
	APC	p.Ser1335Cys	snv	chr5	112175294	112175294	A	A/T	c.4003A>T			9959	1630	16,37
	APC	p.Pro1619Leu	snv	chr5	112176147	112176147	C	C/T	c.4856C>T			8961	2004	22,36
	APC	p.Asp1636Glu	snv	chr5	112176199	112176199	T	T/A	c.4908T>A			779	78	10,01
	APC	p.Glu1784Lys	snv	chr5	112176641	112176641	G	G/A	c.5350G>A			4350	760	17,47
	APC	p.Gln1935ProfsTer14	insertion	chr5	112177090	112177090	T	T/TC	c.5799_5800insC			6408	2480	38,7
	APC	p.Ser2497Leu	snv	chr5	112178781	112178781	C	C/T	c.7490C>T	rs141010008		3700	1640	44,32
	APC	p.Thr2813Ile	snv	chr5	112179729	112179729	C	C/T	c.8438C>T			9243	1190	12,87
	BRAF	c.1517+2T>A	snv	chr7	140477789	140477789	A	A/T	c.1517+2T>A			2560	257	10,04
	TCF7L2	p.Lys508SerfsTer14	deletion	chr10	114925441	114925441	GC	GC/G	c.1520delC			2259	306	13,55
	TCF7L2	p.His528Tyr	snv	chr10	114925504	114925504	C	C/T	c.1582C>T			2269	297	13,09
	ACVR1B	p.Ser438Tyr	snv	chr12	52380655	52380655	C	C/A	c.1313C>A			27950	3513	12,57
	MAP2K4	p.Phe59Ser	snv	chr17	11958266	11958266	T	T/C	c.176T>C			2499	523	20,93
	MAP2K4	p.Arg355Gly	snv	chr17	12043178	12043178	A	A/G	c.1063A>G			1816	555	30,56
	SMAD2	p.Asp450Asn	snv	chr18	45368254	45368254	C	C/T	c.1348G>A			15342	4054	26,42
	SMAD2	p.Leu297Pro	snv	chr18	45374953	45374953	A	A/G	c.890T>C			8581	874	10,19
	SMAD4	p.Gly243Arg	snv	chr18	48584554	48584554	G	G/A	c.727G>A			1385	400	28,88
	AMER1	p.Gln913Arg	snv	chrX	63410429	63410429	T	T/C	c.2738A>G			4266	616	14,44
#11	NRAS	p.Phe156Ser	snv	chr1	115251259	115251259	A	A/G	c.467T>C			240	38	15,83
	CTNNB1	p.Asn141Ser	snv	chr3	41266625	41266625	A	A/G	c.422A>G			215	23	10,7
	APC	p.Ser634Gly	snv	chr5	112170804	112170804	A	A/G	c.1900A>G			203	23	11,33

Sample_ID[1]	Hugo_Symbol	Protein_Change	Mutation_Type	Chromosome	Start_Position	End_Position	Reference_Allele	Variant_Allele	Mutation_type_2	SNP_id	COSMIC_ID	Overall_Coverage	Mutation_Coverage	Allele_Frequency
	APC	p.Lys2819Arg	snv	chr5	112179747	112179747	A	A/G	c.8456A>G			586	72	12,29
	ACVR1B	p.Asn150Ile	snv	chr12	52370228	52370228	A	A/T	c.449A>T			428	50	11,68
	ACVR1B	p.Ile481Thr	snv	chr12	52385704	52385704	T	T/C	c.1442T>C			547	72	13,16
	TP53	p.Arg196Ter	snv	chr17	7578263	7578263	G	A/A	c.586C>T		COSM10705	6246	6182	98,98
	MAP2K4	p.Phe314Ser	snv	chr17	12032505	12032505	T	T/C	c.941T>C			173	90	52,02
	SMAD2	p.Cys412Arg	snv	chr18	45371757	45371757	A	A/G	c.1234T>C			226	57	25,22
	SMAD4	p.Ile545Thr	snv	chr18	48604812	48604812	T	T/C	c.1634T>C			1173	205	17,48
	AMER1	p.Ala836Pro	snv	chrX	63410661	63410661	C	C/G	c.2506G>C			422	58	13,74
#12	PIK3CA	p.Leu443Ser	snv	chr3	178928050	178928050	T	T/C	c.1328T>C			5057	2601	51,43
	PIK3CA	p.Glu545Lys	snv	chr3	178936091	178936091	G	G/A	c.1633G>A	rs104886003	COSM125370	753	383	50,86
	BRAF	p.Val600Glu	snv	chr7	140453136	140453136	A	A/T	c.1799T>A	rs113488022	COSM18443	16211	10640	65,63
	SMAD2	p.Arg182Ter	snv	chr18	45394805	45394805	G	G/A	c.544C>T			2131	1457	68,37
	AMER1	p.Arg699His	snv	chrX	63411071	63411071	C	C/T	c.2096G>A			2210	1280	57,92
#13	PIK3CA	p.Glu542Lys	snv	chr3	178936082	178936082	G	A/A	c.1624G>A	rs121913273	COSM125369	1169	1165	99,66
	APC	p.Thr182IlefsTer2	deletion	chr5	112116494	112116494	TACAA	TACAA/T	c.540_543delACAA			9299	4146	44,59
	APC	p.Arg259Trp	snv	chr5	112137021	112137021	C	C/T	c.775C>T			3996	2265	56,68
	APC	p.Glu1284Ter	snv	chr5	112175141	112175141	G	G/T	c.3850G>T		COSM19069	9807	6156	62,77
	APC	p.Glu1317Gln	snv	chr5	112175240	112175240	G	G/C	c.3949G>C	rs1801166	COSM19099	15300	6032	39,42
	TCF7L2	p.Leu200ProfsTer10	insertion	chr10	114900983	114900983	A	A/AC	c.593_594insC			4558	2157	47,32
	SMAD4	p.Arg361Cys	snv	chr18	48591918	48591918	C	T/T	c.1081C>T	rs80338963	COSM1158192	11068	11017	99,54
#14	KIAA1804	p.Arg345GlyfsTer12	deletion	chr1	233489598	233489598	TC	TC/T	c.1033delC			13900	9961	71,66
	FBXW7	p.Lys647Glu	snv	chr4	153244218	153244218	T	T/C	c.1939A>G			8075	3936	48,74
	APC	p.Ala199Val	snv	chr5	112116551	112116551	C	C/T	c.596C>T		COSM201287	7847	3945	50,27
	APC	p.Gly2250Asp	snv	chr5	112178040	112178040	G	G/A	c.6749G>A			12450	6248	50,18
	PTEN	p.Asn323MetfsTer21	deletion	chr10	89720811	89720811	CA	CA/C	c.963delA	rs121913291	COSM5823	14576	7415	50,87
	TCF7L2	p.Ser569ProfsTer33	deletion	chr10	114925621	114925621	GC	GC/G	c.1700delC			7268	4338	59,69
	KRAS	p.Gly12Val	snv	chr12	25398284	25398284	C	C/A	c.35G>T	rs121913529	COSM1135366	25468	12357	48,52
	ACVR1B	p.Trp501Ter	snv	chr12	52385765	52385765	G	G/A	c.1503G>A			14867	7559	50,84
	TP53	p.Asp148Ter	insertion	chr17	7578488	7578488	C	C/CA	c.441dupT		COSM44778	4826	1983	41,09
#15	APC	p.Arg283Ter	snv	chr5	112151204	112151204	C	C/T	c.847C>T		COSM19679	17202	7900	45,92
	APC	p.Ser1415ArgfsTer4	deletion	chr5	112175535	112175535	GT	GT/G	c.4245delT		COSM18952	26020	12432	47,78
	PTEN	p.Val54Ala	snv	chr10	89653863	89653863	T	T/C	c.161T>C		COSM1349482	7509	4070	54,2
	KRAS	p.Ala146Thr	snv	chr12	25378562	25378562	C	C/T	c.436G>A	rs121913527	COSM1165198	22892	19124	83,54
	TP53	p.Trp23Arg	snv	chr17	7579846	7579846	A	A/G	c.67T>C			248	35	14,11
	SMAD4	p.Arg361Cys	snv	chr18	48591918	48591918	C	T/T	c.1081C>T	rs80338963	COSM1158192	4931	4921	99,8
#16	KIAA1804	p.Glu563Asp	snv	chr1	233511675	233511675	A	A/C	c.1689A>C	rs35758282		17251	9381	54,38
	FBXW7	p.Gln612Leu	snv	chr4	153245356	153245356	T	T/A	c.1835A>T			2755	693	25,15
	FBXW7	p.Glu316Lys	snv	chr4	153253787	153253787	C	C/T	c.946G>A			559	236	42,22
	APC	p.Gly265Glu	snv	chr5	112137040	112137040	G	G/A	c.794G>A			1846	375	20,31
	APC	p.Arg876Ter	snv	chr5	112173917	112173917	C	C/T	c.2626C>T	rs121913333	COSM18852	11533	7266	63
	APC	p.Gln1429Ter	snv	chr5	112175576	112175576	C	C/T	c.4285C>T	rs121913330, rs74535574	COSM18836	24064	10214	42,45
	TCF7L2	p.Lys45Thr	snv	chr10	114710649	114710649	A	A/C	c.134A>C			1271	559	43,98
	KRAS	p.Gly12Cys	snv	chr12	25398285	25398285	C	C/A	c.34G>T	rs121913530	COSM1140136	4515	2937	65,05
	ACVR1B	p.Gly194Arg	snv	chr12	52370359	52370359	G	G/A	c.580G>A			4056	667	16,44
	TP53	p.Arg248Gln	snv	chr17	7577538	7577538	C	T/T	c.743G>A	rs11540652	COSM10662	1320	1312	99,39
	SMAD4	p.Asp355Gly	snv	chr18	48591901	48591901	A	G/G	c.1064A>G		COSM14232	4204	4201	99,93
	SMAD4	p.Pro514Gln	snv	chr18	48604719	48604719	C	C/A	c.1541C>A			2956	378	12,79
	AMER1	p.Tyr599Cys	snv	chrX	63411371	63411371	T	T/C	c.1796A>G	rs144896730		1811	412	22,75
#17	KIAA1804	p.His118Tyr	snv	chr1	233464126	233464126	C	C/T	c.352C>T			264	137	51,89
	KRAS	p.Ala146Thr	snv	chr12	25378562	25378562	C	C/T	c.436G>A	rs121913527	COSM1165198	36566	30593	83,67
	TP53	p.Val272Leu	snv	chr17	7577124	7577124	C	A/A	c.814G>T	rs121912657	COSM10859	960	958	99,79
#18	NRAS	p.Asn116Tyr	snv	chr1	115252294	115252294	T	T/A	c.346A>T			566	341	60,25
	CTNNB1	p.Arg225His	snv	chr3	41267003	41267003	G	G/A	c.674G>A	rs144087793		3419	1711	50,04
	FBXW7	p.Val555Leu	snv	chr4	153245528	153245528	C	C/A	c.1663G>T			2478	897	36,2
	FBXW7	p.Arg479Gln	snv	chr4	153247366	153247366	C	C/T	c.1436G>A		COSM1133712	7157	3783	52,86
	APC	p.Thr1556AsnfsTer3	insertion	chr5	112175951	112175951	G	G/GA	c.4660_4661insA		COSM19695	6090	4336	71,2
	BRAF	p.Val600Glu	snv	chr7	140453136	140453136	A	A/T	c.1799T>A	rs113488022	COSM18443	19800	10587	53,47
	PTEN	p.Gly143Asp	snv	chr10	89692944	89692944	G	G/A	c.428G>A			4684	641	13,68
	PTEN	p.Lys267ArgfsTer9	deletion	chr10	89717769	89717769	TA	TA/T	c.795delA	rs121913289	COSM30622	5736	3635	63,37
	TCF7L2	p.Pro199His	snv	chr10	114900986	114900986	C	C/A	c.596C>A			1932	335	17,34
	ACVR1B	p.Pro279Leu	snv	chr12	52376494	52376494	C	C/T	c.836C>T			1582	257	16,25
	TP53	p.His178ThrfsTer69	deletion	chr17	7578397	7578397	TG	TG/T	c.532delC	rs68130327	COSM111495	2320	450	19,4
	TP53	p.Arg175Cys	snv	chr17	7578407	7578407	G	G/A	c.523C>T	rs138729528	COSM10870	2319	1135	48,94
	SMAD2	p.Glu185Gly	snv	chr18	45394795	45394795	T	T/C	c.554A>G			1297	135	10,41
	SMAD4	p.Ala309Thr	snv	chr18	48586256	48586256	G	G/A	c.925G>A			3194	483	15,12
	SMAD4	p.Ala463GlufsTer13	deletion	chr18	48603086	48603086	GC	GC/G	c.1388delC			439	61	13,9
	AMER1	p.His1025Tyr	snv	chrX	63410094	63410094	G	G/A	c.3073C>T			2702	295	10,92
#19	NRAS	p.Ala134Val	snv	chr1	115252239	115252239	G	G/A	c.401C>T			9299	1188	12,78
	KIAA1804	p.Val168Met	snv	chr1	233464276	233464276	G	G/A	c.502G>A			911	151	16,58
	KIAA1804	p.Gly594Glu	snv	chr1	233511767	233511767	G	G/A	c.1781G>A			12211	1780	14,58
	KIAA1804	p.Ser643Pro	snv	chr1	233514679	233514679	T	T/C	c.1927T>C			3317	380	11,46
	KIAA1804	p.Pro980Ser	snv	chr1	233518284	233518284	C	C/T	c.2938C>T			6221	627	10,08
	KIAA1804	p.Ser1008Cys	snv	chr1	233518368	233518368	A	A/T	c.3022A>T			2333	289	12,39
	CTNNB1	p.Tyr331Cys	snv	chr3	41268754	41268754	A	A/G	c.992A>G			2430	266	10,95
	CTNNB1	p.Glu479Gly	snv	chr3	41275270	41275270	A	A/G	c.1436A>G			3920	439	11,2
	CTNNB1	p.His578Arg	snv	chr3	41277264	41277264	A	A/G	c.1733A>G			478	71	14,85
	PIK3CA	p.Arg765Trp	snv	chr3	178941974	178941974	A	A/T	c.2293A>T			571	62	10,86
	APC	p.His1013Arg	snv	chr5	112174329	112174329	A	A/G	c.3038A>G			8008	3296	41,16
	APC	p.Tyr1135Ter	deletion	chr5	112174693	112174693	CTA	CTA/C	c.3403_3404delTA			4199	1941	46,23
	APC	p.Gln1406Ter	snv	chr5	112175507	112175507	C	C/T	c.4216C>T		COSM19087	45626	29177	63,95
	APC	p.Thr2442Ser	snv	chr5	112178616	112178616	C	C/G	c.7325C>G			5777	1217	21,07
	BRAF	p.Phe516Ser	snv	chr7	140476859	140476859	A	A/G	c.1547T>C			3113	514	16,51
	PTEN	c.209+1G>T	snv	chr10	89685315	89685315	G	G/T	c.209+1G>T		COSM5974	3922	1058	26,98
	TCF7L2	c.1162-2A>T	snv	chr10	114912090	114912090	A	A/T	c.1162-2A>T			988	391	39,57
	KRAS	p.Gly12Asp	snv	chr12	25398284	25398284	C	C/T	c.35G>A	rs121913529	COSM1135366	18680	14585	78,08
	TP53	p.Pro67GlnfsTer56	deletion	chr17	7579486	7579486	TG	TG/T	c.200delC			1205	1195	99,17
	SMAD2	p.Cys380Tyr	snv	chr18	45371852	45371852	C	C/T	c.1139G>A			5499	688	12,51
	SMAD4	p.Arg361Cys	snv	chr18	48591918	48591918	C	T/T	c.1081C>T	rs80338963	COSM1158192	4036	4018	99,55
#20	NRAS	p.Gln150Glu	snv	chr1	115252192	115252192	G	G/C	c.448C>G			2818	822	29,17
	KIAA1804	p.Gln452Lys	snv	chr1	233497841	233497841	C	C/A	c.1354C>A			5232	729	13,93
	CTNNB1	p.Ile357Val	snv	chr3	41268831	41268831	A	A/G	c.1069A>G			1019	416	40,82
	PIK3CA	p.His1047Leu	snv	chr3	178952085	178952085	A	A/T	c.3140A>T	rs121913279	COSM249874	1681	902	53,66
	FBXW7	c.1645-2A>G	snv	chr4	153245548	153245548	T	T/C	c.1645-2A>G			2048	470	22,95
	APC	p.Glu109Gly	snv	chr5	112102991	112102991	A	A/G	c.326A>G			1711	273	15,96
	APC	p.Tyr158His	snv	chr5	112111375	112111375	T	T/C	c.472T>C			6709	734	10,94
	APC	p.Glu941Lys	snv	chr5	112174112	112174112	G	G/A	c.2821G>A		COSM18853	20001	2233	11,16
	APC	p.Asp2490Asn	snv	chr5	112178759	112178759	G	G/A	c.7468G>A			5171	633	12,24
	TP53	p.Arg158_Ala158insLeu	insertion	chr17	7578457	7578457	C	C/CGGA	c.470_472dupTCC			1565	1538	98,27
	SMAD2	p.Tyr225Cys	snv	chr18	45391486	45391486	T	T/C	c.674A>G			3400	548	16,12
	SMAD4	p.His287Leu	snv	chr18	48584782	48584782	A	A/T	c.860A>T			155	25	16,13
	SMAD4	p.Pro293LeufsTer43	deletion	chr18	48584797	48584797	CG	CG/C	c.876delG			3306	500	15,12
	SMAD4	p.Val465Met	snv	chr18	48603092	48603092	G	G/A	c.1393G>A			229	30	13,1
	AMER1	p.Cys125LeufsTer20	insertion	chrX	63412794	63412794	A	A/AG	c.372dupC			2727	334	12,25
#21	KIAA1804	p.Ser267Gly	snv	chr1	233464573	233464573	A	A/G	c.799A>G			1170	142	12,14
	KIAA1804	p.Leu799Pro	snv	chr1	233515148	233515148	T	T/C	c.2396T>C			551	82	14,88
	CTNNB1	p.Met194Val	snv	chr3	41266909	41266909	A	A/G	c.580A>G			2458	357	14,52
	PIK3CA	p.Pro449Thr	snv	chr3	178928067	178928067	C	C/A	c.1345C>A		COSM18601	9889	4683	47,36
	APC	p.Thr39Pro	snv	chr5	112090702	112090702	A	A/C	c.115A>C			303	95	31,35
	APC	p.Glu853Ter	snv	chr5	112173848	112173848	G	G/T	c.2557G>T		COSM1432207	18098	5094	28,15
	APC	p.Glu1047Ter	snv	chr5	112174430	112174430	G	G/T	c.3139G>T		COSM98437	3694	1406	38,06
	APC	p.Thr1556AsnfsTer3	insertion	chr5	112175951	112175951	G	G/GA	c.4660_4661insA		COSM19695	9931	6403	64,47
	BRAF	p.Val600Glu	snv	chr7	140453136	140453136	A	A/T	c.1799T>A	rs113488022	COSM18443	24308	6426	26,44

Sample_ID[1]	Hugo_Symbol	Protein_Change	Mutation_Type	Chromosome	Start_Position	End_Position	Reference_Allele	Variant_Allele	Mutation_type_2	SNP_id	COSMIC_ID	Overall_Coverage	Mutation_Coverage	Allele_Frequency
	PTEN	p.Glu114Lys	snv	chr10	89692856	89692856	G	G/A	c.340G>A		COSM5320	6311	1199	19
	TCF7L2	p.Pro69Ser	snv	chr10	114710981	114710981	C	C/T	c.205C>T			2450	433	17,67
	TCF7L2	p.His255Tyr	snv	chr10	114903759	114903759	C	C/T	c.763C>T			1345	502	37,32
	TCF7L2	p.Phe276Ile	snv	chr10	114905807	114905807	T	T/A	c.826T>A			1374	327	23,8
	TCF7L2	p.Ala507Val	snv	chr10	114925442	114925442	C	C/T	c.1520C>T			1993	401	20,12
	KRAS	p.Thr148Ile	snv	chr12	25378555	25378555	G	G/A	c.443C>T			8231	1039	12,62
	ACVR1B	p.Met514Ile	snv	chr12	52387795	52387795	G	G/T	c.1542G>T			3626	567	15,64
	TP53	p.Arg273His	snv	chr17	7577120	7577120	C	T/T	c.818G>A	rs28934576	COSM10660	2589	2580	99,65
	SMAD4	p.Ala36Thr	snv	chr18	48573522	48573522	G	G/A	c.106G>A			1352	234	17,31
	SMAD4	p.Ser42Gly	snv	chr18	48573540	48573540	A	A/G	c.124A>G			1356	192	14,16
	SMAD4	p.Ile179Val	snv	chr18	48581231	48581231	A	A/G	c.535A>G		COSM318051	1253	182	14,53
	SMAD4	p.Thr181Ala	snv	chr18	48581237	48581237	A	A/G	c.541A>G			1256	243	19,35
	SMAD4	p.Gln311Ter	snv	chr18	48586262	48586262	C	T/T	c.931C>T		COSM14163	8982	8953	99,68
	SMAD4	p.Asp332Asn	snv	chr18	48591831	48591831	G	G/A	c.994G>A		COSM1389052	3418	434	12,7
	AMER1	p.Gln1086Ter	snv	chrX	63409911	63409911	G	G/A	c.3256C>T			194	26	13,4
	AMER1	p.Asp376Val	snv	chrX	63412040	63412040	T	T/A	c.1127A>T			2737	422	15,42
	AMER1	p.Gly355Ala	snv	chrX	63412103	63412103	C	C/G	c.1064G>C			3877	540	13,93
	AMER1	p.Gly28GlufsTer25	deletion	chrX	63413085	63413085	CT	CT/C	c.81delA			1272	143	11,24
#22	KIAA1804	p.Ala374Val	snv	chr1	233489687	233489687	C	C/T	c.1121C>T			878	99	11,28
	CTNNB1	p.Val175Phe	snv	chr3	41266852	41266852	G	T/T	c.523G>T			5789	5750	99,33
	PIK3CA	p.Cys420Arg	snv	chr3	178927980	178927980	T	C/C	c.1258T>C	rs121913272	COSM267862	20925	20893	99,85
	APC	p.Arg24Gln	snv	chr5	112090658	112090658	G	G/A	c.71G>A			2264	343	15,15
	APC	p.Arg805Ter	snv	chr5	112173704	112173704	C	C/T	c.2413C>T		COSM19058	9511	4523	47,56
	APC	p.Lys1456Ter	snv	chr5	112175657	112175657	A	A/T	c.4366A>T			507	396	78,11
	TCF7L2	p.Leu413Val	snv	chr10	114912167	114912167	C	C/G	c.1237C>G			3610	787	21,8
	KRAS	p.Gly13Asp	snv	chr12	25398281	25398281	C	C/T	c.38G>A	rs112445441	COSM1140132	8831	6176	69,94
	TP53	p.Lys351Glu	snv	chr17	7573976	7573976	T	T/C	c.1051A>G	rs141402957	COSM107991	218	33	15,14
	TP53	c.559+1G>A	snv	chr17	7578370	7578370	C	T/T	c.559+1G>A		COSM131534	1444	1443	99,93
	SMAD4	p.Leu536Arg	snv	chr18	48604785	48604785	T	G/G	c.1607T>G		COSM218563	7410	7400	99,87
	AMER1	p.Arg586Ter	snv	chrX	63411411	63411411	G	G/A	c.1756C>T		COSM1468846	6879	4818	70,04
#23	CTNNB1	p.Met553TrpfsTer17	deletion	chr3	41275759	41275759	TC	TC/T	c.1655delC			314	45	14,33
	APC	p.Lys2698Asn	snv	chr5	112179385	112179385	A	A/C	c.8094A>C			13066	5841	44,7
	BRAF	p.Val600Glu	snv	chr7	140453136	140453136	A	A/T	c.1799T>A	rs113488022	COSM18443	20459	10274	50,22
	TP53	p.Tyr220Cys	snv	chr17	7578190	7578190	T	T/C	c.659A>G	rs121912666	COSM10758	18407	8512	46,24
	SMAD4	p.Pro511Leu	snv	chr18	48604710	48604710	C	C/T	c.1532C>T			4675	3332	71,27
#24	KIAA1804	p.Pro982Leu	snv	chr1	233518291	233518291	C	C/T	c.2945C>T	rs34794284		10226	2988	29,22
	PIK3CA	p.Cys378Trp	snv	chr3	178922365	178922365	T	T/G	c.1134T>G		COSM1420801	16873	16617	98,48
	APC	p.Gln1367Ter	snv	chr5	112175390	112175390	C	T/T	c.4099C>T	rs121913328	COSM13121	10882	10796	99,21
	TP53	p.Phe270Cys	snv	chr17	7577129	7577129	A	C/C	c.809T>G		COSM11305	1959	1953	99,69
#25	APC	p.Ser1315Ter	snv	chr5	112175235	112175235	C	A/A	c.3944C>A		COSM18777	9992	9977	99,85
	TP53	p.Tyr234Cys	snv	chr17	7577580	7577580	T	C/C	c.701A>G		COSM10725	2327	2327	100
#26	CTNNB1	p.Pro606Ala	snv	chr3	41277852	41277852	C	C/G	c.1816C>G			5387	2288	42,47
	PIK3CA	p.Glu542Lys	snv	chr3	178936082	178936082	G	G/A	c.1624G>A	rs121913273	COSM125369	1123	1038	92,43
	APC	p.Thr1821lefsTer2	deletion	chr5	112116494	112116494	TACAA	TACAA/T	c.540_543delACAA			8951	4412	49,29
	APC	p.Arg259Trp	snv	chr5	112137021	112137021	C	C/T	c.775C>T			3804	2003	52,66
	APC	p.Glu1284Ter	snv	chr5	112175141	112175141	G	G/T	c.3850G>T		COSM19069	9694	5754	59,36
	APC	p.Glu1317Gln	snv	chr5	112175240	112175240	G	G/C	c.3949G>C	rs1801166	COSM19099	15541	6937	44,64
	TCF7L2	p.Leu200ProfsTer10	insertion	chr10	114900983	114900983	A	A/AC	c.593_594insC			5042	2332	46,25
	SMAD4	p.Arg361Cys	snv	chr18	48591918	48591918	C	T/T	c.1081C>T	rs80338963	COSM1158192	9636	9585	99,47
#27	WT for all the 16 genes analyzed. A novel deep sequencing and a WES are ongoing to confirm this result													
#28	The deep sequencing is ongoing													

[1] Correspondence between the nomenclature of CRC-SC reported here (#n) and that reported in ***(1)*** (n): #1 = 11; #2 = 28; #3 = 8; #4 = 9; #5 = 1; #6 = 13; #7 = 20; #8 = 10; #9 = 15; #10 = 7; #11 = 25; #12 = 16; #14 = 2; #15 = 5; #16 = 23; #17 = 22; #19 = 26; #23 = 6; #24 = 18; #25 = 12

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