

**Point mutations in HCC1954.** Genomic coordinates are indexed to the reference genome sequence NCBI 36.1 / hg18. A.A. ref, amino acid reference; A.A. var., amino acid variant.

CHR ID	Position	Change	Gene name	Mutation type	A.A. ref.	A.A. var.
CHR1	152049292	G/A	GATAD2B	Synonymous	I	I
CHR1	194728093	C/T	KCNT2	Missense	V	I
CHR1	198643877	A/G	ZNF281	Missense	I	T
CHR1	35998793	T/C	CLSPN	Missense	H	R
CHR1	64919581	C/T	CACHD1	Synonymous	D	D
CHR1	97611752	A/C	DPYD	Missense	C	G
CHR10	101492936	C/T	CUTC	Missense	P	L
CHR10	508430	G/A	DIP2C	Missense	R	C
CHR10	71970891	C/T	KIAA1274	Missense	R	W
CHR11	111415204	G/A	DLAT	Synonymous	Q	Q
CHR11	111606157	T/C	PTS	Synonymous	H	H
CHR11	123513016	A/G	VWA5A	Synonymous	K	K
CHR11	18593065	G/T	SPTY2D1	Synonymous	G	G
CHR11	34064263	C/T	CAPRIN1	Missense	A	V
CHR11	36626203	C/T	C11ORF74	Synonymous	I	I
CHR11	6848309	A/G	OR10A2	Missense	K	E
CHR11	74656380	G/C	ARRB1	Missense	T	R
CHR12	121392038	G/A	CLIP1	Nonsense	Q	*
CHR12	131078547	G/A	EP400	Synonymous	L	L
CHR13	100062697	T/C	TMTC4	Missense	M	V
CHR14	22313411	G/A	SLC7A7	Missense	P	S
CHR14	22970484	G/A	MYH7	Missense	S	F
CHR14	23844107	G/A	C14ORF21	Missense	R	Q
CHR14	34252381	T/C	CFL2	Missense	I	M
CHR14	91348597	T/C	TC2N	Missense	N	S
CHR15	39898768	C/T	MAPKBP1	Missense	P	L
CHR15	43181299	T/C	DUOX2	Synonymous	G	G
CHR15	72829495	G/A	CYP1A2	Synonymous	Q	Q
CHR16	47872714	A/C	CBLN1	Missense	V	G
CHR17	38180200	T/C	VPS25	Synonymous	P	P
CHR17	52267451	T/G	DGKE	Missense	L	R
CHR17	55858953	A/T	C17ORF64	Missense	K	M
CHR17	64698971	G/A	ABCA10	Missense	T	I
CHR17	7519167	T/C	TP53	Missense	Y	C
CHR18	13671832	C/T	C18ORF19	Missense	R	H
CHR18	54752763	C/T	ZNF532	Missense	S	L
CHR18	59456160	C/T	SERPINB4	Missense	G	S
CHR18	59735702	A/G	SERPINB10	Synonymous	K	K
CHR19	16779828	C/T	NWD1	Nonsense	R	*
CHR2	173042234	T/G	ITGA6	Missense	C	G
CHR2	17765758	G/A	SMC6	Missense	A	V
CHR2	45493931	T/C	SRBD1	Missense	Q	R
CHR21	46661077	G/C	PCNT	Missense	G	R
CHR22	41543751	T/C	ARFGAP3	Missense	E	G
CHR3	187990484	T/A	RFC4	Missense	T	S
CHR5	114888357	C/T	FEM1C	Synonymous	Q	Q
CHR5	114888374	C/T	FEM1C	Missense	D	N
CHR5	114888458	C/T	FEM1C	Missense	D	N

CHR5	145422211	C/T	SH3RF2	Synonymous	Y	Y
CHR5	96357919	A/G	LNPEP	Missense	M	V
CHR6	117228537	C/T	GPRC6A	Missense	G	E
CHR6	165623368	T/C	C6ORF118	Missense	I	M
CHR6	2638020	C/A	MYLK4	Missense	A	S
CHR6	31707884	G/A	BAT2	Missense	R	H
CHR7	134952379	A/G	NUP205	Synonymous	V	V
CHR7	6588347	C/T	ZDHC4	Missense	P	S
CHR7	83577784	C/T	SEMA3A	Missense	A	T
CHR9	118228094	C/G	ASTN2	Missense	V	L
CHR9	138940038	A/T	TRAF2	Missense	Q	L
CHRX	118487757	G/A	SLC25A5	Missense	G	S
CHRX	134817551	T/C	SAGE1	Synonymous	C	C
CHRX	141119424	C/A	MAGEC2	Missense	G	C
CHRX	150658776	G/A	CNGA2	Missense	R	H
CHR11	14257468	G/C	RRAS2	Synonymous	V	V
CHR1	114225167	A/T	BCL2L15	UTR	-	-
CHR1	145696829	G/C	GJA5	UTR	-	-
CHR12	8557537	G/A	CLEC4D	UTR	-	-
CHR15	62233989	A/G	SNX22	UTR	-	-
CHR2	38831967	T/G	SFRS7	UTR	-	-
CHR2	68544840	T/C	FBXO48	UTR	-	-
CHR3	196959618	C/A	MUC4	UTR	-	-
CHR4	178589799	C/T	AGA	UTR	-	-
CHR6	101063699	A/G	ASCC3	UTR	-	-
CHR6	15354630	T/G	JARID2	UTR	-	-
CHR6	91353348	C/A	MAP3K7	UTR	-	-
CHR7	148886687	A/G	ZNF767	UTR	-	-
CHR8	133906600	G/A	PHF20L1	UTR	-	-
CHR1	1108354	A/G	TLL10	Intronic	-	-
CHR1	114742167	A/G	TRIM33	Intronic	-	-
CHR1	151597543	G/A	S100A9	Intronic	-	-
CHR1	15262372	G/A	KIAA1026	Intronic	-	-
CHR1	156033225	A/G	FCRL1	Intronic	-	-
CHR1	163995344	T/A	TMC01	Intronic	-	-
CHR1	167808393	A/G	F5	Intronic	-	-
CHR1	190879695	G/A	RGS13	Intronic	-	-
CHR1	204497298	C/T	CTSE	Intronic	-	-
CHR1	205713942	T/C	CR2	Intronic	-	-
CHR1	21048683	A/G	EIF4G3	Intronic	-	-
CHR1	234777692	G/A	LGALS8	Intronic	-	-
CHR1	42794163	G/A	LOC728621	Intronic	-	-
CHR1	56958371	T/A	Clorf168	Intronic	-	-
CHR1	62065674	C/A	INADL	Intronic	-	-
CHR1	89347865	G/T	GBP2	Intronic	-	-
CHR1	91176246	A/T	ZNF644	Intronic	-	-
CHR10	101657706	A/T	DNMBP	Intronic	-	-
CHR10	102286546	C/G	HIF1AN	Intronic	-	-
CHR10	111627733	C/A	XPNPEP1	Intronic	-	-
CHR10	115594018	T/C	DCLRE1A	Intronic	-	-
CHR10	135195927	C/A	CYP2E1	Intronic	-	-
CHR10	26842435	G/A	APBB1IP	Intronic	-	-
CHR10	32350082	G/A	KIF5B	Intronic	-	-
CHR10	45239912	C/T	ALOX5	Intronic	-	-
CHR10	50627647	C/A	OGDHL	Intronic	-	-
CHR10	5848287	C/T	GDI2	Intronic	-	-
CHR10	6009386	C/T	FBXO18	Intronic	-	-
CHR10	98797384	G/A	SLIT1	Intronic	-	-

CHR11	107684098	C/T	ATM	Intronic	-	-
CHR11	131811987	A/C	OPCML	Intronic	-	-
CHR11	67043242	G/A	CABP2	Intronic	-	-
CHR11	74552550	G/C	SLCO2B1	Intronic	-	-
CHR12	112202673	C/T	TPCN1	Intronic	-	-
CHR12	38280866	T/A	ABCD2	Intronic	-	-
CHR12	44026961	T/G	ANO6	Intronic	-	-
CHR12	63165227	A/G	TBK1	Intronic	-	-
CHR13	102306299	A/G	ERCC5	Intronic	-	-
CHR13	27764428	A/T	PAN3	Intronic	-	-
CHR13	51945832	A/G	CKAP2	Intronic	-	-
CHR13	75232883	G/A	LMO7	Intronic	-	-
CHR13	98999210	G/T	TM9SF2	Intronic	-	-
CHR14	22632312	T/G	ACIN1	Intronic	-	-
CHR14	41437739	A/T	LRFN5	Intronic	-	-
CHR14	49676635	T/C	SOS2	Intronic	-	-
CHR14	50277732	A/G	NIN	Intronic	-	-
CHR14	88408257	G/A	TTC8	Intronic	-	-
CHR14	94644403	G/C	DICER1	Intronic	-	-
CHR14	94660165	C/T	DICER1	Intronic	-	-
CHR14	94972726	C/T	C14orf49	Intronic	-	-
CHR14	99898234	T/C	WARS	Intronic	-	-
CHR15	38853980	G/A	DNAJC17	Intronic	-	-
CHR15	41127827	G/A	UBR1	Intronic	-	-
CHR15	41835728	T/A	PDIA3	Intronic	-	-
CHR15	46312489	C/T	SLC12A1	Intronic	-	-
CHR15	51781982	C/T	WDR72	Intronic	-	-
CHR15	58579336	C/A	RORA	Intronic	-	-
CHR15	61324463	C/T	RAB8B	Intronic	-	-
CHR15	98842494	G/T	LASS3	Intronic	-	-
CHR16	2060440	T/A	TSC2	Intronic	-	-
CHR16	20976582	C/T	DNAH3	Intronic	-	-
CHR16	21005583	G/A	DNAH3	Intronic	-	-
CHR16	48664002	C/T	HEATR3	Intronic	-	-
CHR16	56066193	G/A	DOK4	Intronic	-	-
CHR16	56577258	G/A	TEPP	Intronic	-	-
CHR17	35573124	G/T	CASC3	Intronic	-	-
CHR17	3600698	T/C	ITGAE	Intronic	-	-
CHR17	39897281	T/A	GPATCH8	Intronic	-	-
CHR17	61062737	C/G	CCDC46	Intronic	-	-
CHR17	78599436	G/A	B3GNTL1	Intronic	-	-
CHR17	8102314	C/T	PFAS	Intronic	-	-
CHR18	12536608	G/A	SPIRE1	Intronic	-	-
CHR19	10876452	T/C	CARM1	Intronic	-	-
CHR19	46914182	G/A	CEACAM5	Intronic	-	-
CHR19	62026178	C/A	ZIM2	Intronic	-	-
CHR2	101240888	A/G	C2orf29	Intronic	-	-
CHR2	108433631	G/A	GCC2	Intronic	-	-
CHR2	127900314	C/T	PROC	Intronic	-	-
CHR2	158338816	A/C	ACVR1	Intronic	-	-
CHR2	178055292	T/G	AGPS	Intronic	-	-
CHR2	179355148	A/C	TTN	Intronic	-	-
CHR2	197465608	C/T	PGAP1	Intronic	-	-
CHR2	208927989	G/T	PIP5K3	Intronic	-	-
CHR2	233417533	G/A	GIGYF2	Intronic	-	-
CHR2	54020257	G/A	PSME4	Intronic	-	-
CHR2	63966685	C/G	UGP2	Intronic	-	-
CHR2	88205293	C/G	FABP1	Intronic	-	-

CHR20	25346690	C/G	GIN51	Intronic	-	-
CHR20	33760851	G/C	RBM39	Intronic	-	-
CHR20	36428767	C/A	LBP	Intronic	-	-
CHR20	48631178	A/T	PTPN1	Intronic	-	-
CHR20	57992758	T/A	CDH26	Intronic	-	-
CHR20	60860400	C/A	NTSR1	Intronic	-	-
CHR20	9348445	T/A	PLCB4	Intronic	-	-
CHR21	41761979	C/G	TMPRSS2	Intronic	-	-
CHR21	46361995	C/T	COL6A2	Intronic	-	-
CHR22	16601925	G/T	BID	Intronic	-	-
CHR22	25076912	G/A	SEZ6L	Intronic	-	-
CHR3	122821717	G/A	FBXO40	Intronic	-	-
CHR3	132367131	G/T	NEK11	Intronic	-	-
CHR3	15286208	C/A	SH3BP5	Intronic	-	-
CHR3	166241611	C/A	SI	Intronic	-	-
CHR3	168665510	A/G	SERPINI2	Intronic	-	-
CHR3	168665520	A/G	SERPINI2	Intronic	-	-
CHR3	180530238	T/C	ZNF639	Intronic	-	-
CHR3	198134458	A/T	SENP5	Intronic	-	-
CHR3	199031805	G/A	LRCH3	Intronic	-	-
CHR3	48240275	C/T	CAMP	Intronic	-	-
CHR3	48613666	A/G	UQCRC1	Intronic	-	-
CHR3	95254655	G/T	ARL13B	Intronic	-	-
CHR4	100419515	T/G	ADH1A	Intronic	-	-
CHR4	110907048	A/T	CFI	Intronic	-	-
CHR4	119869512	G/A	SEC24D	Intronic	-	-
CHR4	1674851	G/A	SLBP	Intronic	-	-
CHR4	185860023	C/A	MLF1IP	Intronic	-	-
CHR4	45762094	G/T	GABRG1	Intronic	-	-
CHR4	74236163	T/A	ANKRD17	Intronic	-	-
CHR5	10434802	A/T	MARCH6	Intronic	-	-
CHR5	112192242	C/A	APC	Intronic	-	-
CHR5	112192302	C/A	APC	Intronic	-	-
CHR5	112192356	C/G	APC	Intronic	-	-
CHR5	114906374	C/T	FEM1C	Intronic	-	-
CHR5	114906413	C/T	FEM1C	Intronic	-	-
CHR5	114906490	C/T	FEM1C	Intronic	-	-
CHR5	115179536	G/A	CDO1	Intronic	-	-
CHR5	13830280	T/C	DNAH5	Intronic	-	-
CHR5	13846575	A/C	DNAH5	Intronic	-	-
CHR5	176604192	C/T	NSD1	Intronic	-	-
CHR5	176604226	C/A	NSD1	Intronic	-	-
CHR5	176604250	C/A	NSD1	Intronic	-	-
CHR5	176606737	C/T	NSD1	Intronic	-	-
CHR5	35682930	G/A	SPEF2	Intronic	-	-
CHR5	41237587	G/C	C6	Intronic	-	-
CHR5	71552741	A/G	MRPS27	Intronic	-	-
CHR6	112616635	A/T	LAMA4	Intronic	-	-
CHR6	139155292	C/T	CCDC28A	Intronic	-	-
CHR6	145071208	G/A	UTRN	Intronic	-	-
CHR6	147674367	A/C	STXBP5	Intronic	-	-
CHR6	167267359	T/G	RNASET2	Intronic	-	-
CHR6	167366354	G/A	FGFR1OP	Intronic	-	-
CHR6	169860066	A/T	PHF10	Intronic	-	-
CHR6	24396615	G/T	DCDC2	Intronic	-	-
CHR6	30232669	T/G	TRIM10	Intronic	-	-
CHR6	34497480	C/G	RPS10	Intronic	-	-
CHR6	38758299	A/T	GLO1	Intronic	-	-

CHR6	42682657	T/C	UBR2	Intronic	-	-
CHR6	49933123	A/C	CRISP1	Intronic	-	-
CHR6	52957451	T/A	GSTA4	Intronic	-	-
CHR6	71521383	A/T	SMAP1	Intronic	-	-
CHR6	79754893	G/A	PHIP	Intronic	-	-
CHR6	79770317	T/C	PHIP	Intronic	-	-
CHR7	107493853	T/C	LAMB4	Intronic	-	-
CHR7	117030330	C/T	CFTR	Intronic	-	-
CHR7	117092925	G/A	CFTR	Intronic	-	-
CHR7	128442670	A/T	TNPO3	Intronic	-	-
CHR7	136934922	C/T	DGKI	Intronic	-	-
CHR7	16871364	G/A	AGR3	Intronic	-	-
CHR7	33913109	T/A	BMPER	Intronic	-	-
CHR7	90423157	A/C	PFTK1	Intronic	-	-
CHR8	108428304	T/A	ANGPT1	Intronic	-	-
CHR8	109070375	A/T	RSPO2	Intronic	-	-
CHR8	133886467	C/G	PHF20L1	Intronic	-	-
CHR8	144621455	C/T	ZC3H3	Intronic	-	-
CHR8	72346947	C/T	EYA1	Intronic	-	-
CHR8	87462376	G/T	WWP1	Intronic	-	-
CHR8	97961147	A/C	PGCP	Intronic	-	-
CHR9	103071848	G/A	PRG-3	Intronic	-	-
CHR9	128871247	T/C	RALGPS1	Intronic	-	-
CHR9	20708068	C/G	KIAA1797	Intronic	-	-
CHRX	134817780	T/G	SAGE1	Intronic	-	-
CHRX	151785280	A/G	NSDHL	Intronic	-	-
CHRX	15506104	C/G	ACE2	Intronic	-	-
CHRX	17002427	C/T	REPS2	Intronic	-	-
CHRX	54856729	T/G	MAGED2	Intronic	-	-
CHRX	55064545	C/T	ALAS2	Intronic	-	-
CHRX	64056549	C/T	KIAA1166	Intronic	-	-
CHRX	72713930	C/T	CHIC1	Intronic	-	-
CHRX	84449628	A/G	POF1B	Intronic	-	-
CHRX	86763669	G/A	KLHL4	Intronic	-	-
CHR12	43745237	C/T	RACGAP1P	ncRNA	-	-
CHR1	121185964	A/G	-	Intergenic	-	-
CHR1	57301249	C/T	-	Intergenic	-	-
CHR10	127957377	T/G	-	Intergenic	-	-
CHR11	86624972	T/A	-	Intergenic	-	-
CHR14	20568496	C/T	-	Intergenic	-	-
CHR17	52961747	G/A	-	Intergenic	-	-
CHR2	140809431	C/A	-	Intergenic	-	-
CHR2	162071311	C/T	-	Intergenic	-	-
CHR2	97058621	A/G	-	Intergenic	-	-
CHR20	158610	C/A	-	Intergenic	-	-
CHR21	30786400	T/G	-	Intergenic	-	-
CHR5	114876291	G/C	-	Intergenic	-	-
CHR5	114876356	G/A	-	Intergenic	-	-
CHR7	92192839	A/G	-	Intergenic	-	-
CHRX	32969262	C/A	-	Intergenic	-	-
CHRX	52908031	G/A	-	Intergenic	-	-
CHRX	52908104	C/G	-	Intergenic	-	-