

Supplementary Table S1: Somatic mutations observed in this study and clinical implication

Gene Symbol	Protein Change	OncoKB Clinical Implication	Mutation Type	Cohort
APC	L34F	Unknown	missense_variant	MSKCC
APC	S104Ifs*35	Likely Oncogenic	frameshift_variant	MSKCC
APC	A146V	Unknown	missense_variant	MSKCC
APC	W157*	Likely Oncogenic	stop_gained	COH/UCD
APC	D170Vfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	X177_splice	Likely Oncogenic	splice_region_variant	MSKCC
APC	X178_splice	Likely Oncogenic	splice_region_variant	MSKCC
APC	L180*	Likely Oncogenic	stop_gained	MSKCC
APC	D183Rfs*10	Likely Oncogenic	frameshift_variant	MSKCC
APC	E190*	Likely Oncogenic	stop_gained	MSKCC
APC	Y191*	Likely Oncogenic	stop_gained	MSKCC
APC	R194Gfs*11	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q195*	Likely Oncogenic	stop_gained	MSKCC
APC	A199fs*53	Likely Oncogenic	frameshift_variant	COH/UCD
APC	R213*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	R213Tfs*39	Likely Oncogenic	frameshift_variant	MSKCC
APC	X215_splice	Likely Oncogenic	splice_region_variant	MSKCC
APC	R216*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	X216_splice	Likely Oncogenic	splice_region_variant	MSKCC
APC	Q222_Q223delinsH*	Unknown	inframe_deletion	MSKCC
APC	Q223*	Likely Oncogenic	stop_gained	COH/UCD
APC	Q223H	Unknown	missense_variant	COH/UCD
APC	K226fs*67	Likely Oncogenic	frameshift_variant	COH/UCD
APC	R230fs*20	Likely Oncogenic	frameshift_variant	COH/UCD
APC	R232*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	Q233Pfs*25	Likely Oncogenic	frameshift_variant	MSKCC
APC	L235*	Likely Oncogenic	stop_gained	MSKCC
APC	L235Yfs*58	Likely Oncogenic	frameshift_variant	MSKCC
APC	X244_splice	Likely Oncogenic	splice_region_variant	MSKCC
APC	S245*	Likely Oncogenic	stop_gained	MSKCC
APC	Q247Efs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	G253S	Unknown	missense_variant	COH/UCD
APC	S254*	Likely Oncogenic	stop_gained	MSKCC
APC	Q260*	Likely Oncogenic	stop_gained	COH/UCD
APC	Q260_N261delins*	Unknown	inframe_deletion	MSKCC
APC	E262*	Likely Oncogenic	stop_gained	MSKCC
APC	Q264*	Likely Oncogenic	stop_gained	MSKCC
APC	E268*	Likely Oncogenic	stop_gained	MSKCC
APC	X278_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC
APC	G279fs*12	Likely Oncogenic	frameshift_variant	COH/UCD
APC	R283*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	T297Qfs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	H298Lfs*28	Likely Oncogenic	frameshift_variant	MSKCC
APC	S299Cfs*27	Likely Oncogenic	frameshift_variant	MSKCC
APC	A300fs*26	Likely Oncogenic	frameshift_variant	COH/UCD
APC	R302*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	G309*	Likely Oncogenic	stop_gained	COH/UCD
APC	G309Efs*27	Likely Oncogenic	frameshift_variant	MSKCC
APC	X311_splice	Likely Oncogenic	splice_region_variant	COH/UCD
APC	L318Ffs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	R332*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	R348*	Likely Oncogenic	stop_gained	COH/UCD
APC	K365N	Unknown	missense_variant	MSKCC
APC	E403fs*51	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E403Kfs*51	Likely Oncogenic	frameshift_variant	MSKCC
APC	R405*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	Q412*	Likely Oncogenic	stop_gained	MSKCC
APC	R414Tfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	C417Wfs*37	Likely Oncogenic	frameshift_variant	MSKCC
APC	W423*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	N436fs*8	Likely Oncogenic	frameshift_variant	COH/UCD
APC	N436Kfs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	M438Sfs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	X438_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC
APC	A440T	Unknown	missense_variant	COH/UCD
APC	V442D	Unknown	missense_variant	MSKCC
APC	E443*	Likely Oncogenic	stop_gained	COH/UCD
APC	Q445*	Likely Oncogenic	stop_gained	MSKCC
APC	V452fs*7	Likely Oncogenic	frameshift_variant	COH/UCD
APC	V452Sfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	L456Sfs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	S457fs*2	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S457*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E460*	Likely Oncogenic	stop_gained	COH/UCD
APC	X470_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC

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APC	C483fs*1	Likely Oncogenic	frameshift_variant	COH/UCD
APC	T489Lfs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	Y493fs*44	Likely Oncogenic	frameshift_variant	COH/UCD
APC	R499*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	V513*	Likely Oncogenic	stop_gained	MSKCC
APC	X516_splice	Likely Oncogenic	splice_region_variant	COH/UCD
APC	L533R	Unknown	missense_variant	COH/UCD
APC	K534fs*15	Likely Oncogenic	frameshift_variant	COH/UCD
APC	K534*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	L540fs*20	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Q541*	Likely Oncogenic	stop_gained	MSKCC
APC	Q541Tfs*19	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q542fs*19	Likely Oncogenic	frameshift_variant	COH/UCD
APC	W553*	Likely Oncogenic	stop_gained	MSKCC
APC	W553Gfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	R554*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	R554Qfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	A555fs*2	Likely Oncogenic	frameshift_variant	COH/UCD
APC	R564*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	V569Efs*11	Likely Oncogenic	frameshift_variant	MSKCC
APC	K570fs*11	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E574*	Likely Oncogenic	stop_gained	MSKCC
APC	E578*	Likely Oncogenic	stop_gained	MSKCC
APC	X582_splice	Likely Oncogenic	splice_region_variant	MSKCC
APC	S583*	Likely Oncogenic	stop_gained	MSKCC
APC	L592*	Likely Oncogenic	stop_gained	MSKCC
APC	S596*	Likely Oncogenic	stop_gained	MSKCC
APC	C599*	Likely Oncogenic	stop_gained	COH/UCD
APC	F615fs*19	Likely Oncogenic	frameshift_variant	MSKCC
APC	L616Ffs*17	Likely Oncogenic	frameshift_variant	MSKCC
APC	T621fs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	Y622fs*7	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Y622*	Likely Oncogenic	stop_gained	MSKCC
APC	Q625*	Likely Oncogenic	stop_gained	MSKCC
APC	N627Lfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	N627Tfs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	L629fs*4	Likely Oncogenic	frameshift_variant	COH/UCD
APC	L629*	Likely Oncogenic	stop_gained	MSKCC
APC	L629Sfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	G637R	Unknown	missense_variant	MSKCC
APC	I638Yfs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	R640W	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
APC	R653K	Unknown	missense_variant	COH/UCD; MSKCC
APC	X653_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC
APC	R657Kfs*18	Likely Oncogenic	frameshift_variant	MSKCC
APC	L662Tfs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q663*	Likely Oncogenic	stop_gained	MSKCC
APC	K670*	Likely Oncogenic	stop_gained	MSKCC
APC	W685*	Likely Oncogenic	stop_gained	MSKCC
APC	A689fs*10	Likely Oncogenic	frameshift_variant	COH/UCD
APC	D694N	Unknown	missense_variant	MSKCC
APC	Q695*	Likely Oncogenic	stop_gained	COH/UCD
APC	E696*	Likely Oncogenic	stop_gained	MSKCC
APC	E696V	Unknown	missense_variant	MSKCC
APC	L698*	Likely Oncogenic	stop_gained	COH/UCD
APC	S713*	Likely Oncogenic	stop_gained	MSKCC
APC	G721Efs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	N728Kfs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	A735P	Unknown	missense_variant	MSKCC
APC	Y737*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	N741fs*20	Likely Oncogenic	frameshift_variant	MSKCC
APC	S747*	Likely Oncogenic	stop_gained	MSKCC
APC	L749Ffs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	K758Ifs*17	Likely Oncogenic	frameshift_variant	MSKCC
APC	A759fs*16	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E761Kfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	A762Gfs*13	Likely Oncogenic	frameshift_variant	MSKCC
APC	E763*	Likely Oncogenic	stop_gained	MSKCC
APC	L764*	Likely Oncogenic	stop_gained	MSKCC
APC	Q767*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	S770fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S770*	Likely Oncogenic	stop_gained	COH/UCD
APC	S770Qfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	T772Lfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	F773Lfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	N775Yfs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	A783Efs*11	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q789*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	R790Tfs*8	Likely Oncogenic	frameshift_variant	MSKCC

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APC	H791Qfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	K792*	Likely Oncogenic	stop_gained	COH/UCD
APC	S794Kfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	Y796fs*2	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Y796Wfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	D802*	Likely Oncogenic	stop_gained	MSKCC
APC	R805*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	F814fs*6	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S823Hfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	P824Hfs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	P824Tfs*20	Likely Oncogenic	frameshift_variant	MSKCC
APC	Y825Ffs*13	Likely Oncogenic	frameshift_variant	MSKCC
APC	S833Afs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	R838*	Likely Oncogenic	stop_gained	MSKCC
APC	E847*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	D849fs*12	Likely Oncogenic	frameshift_variant	COH/UCD
APC	D849fs*2	Likely Oncogenic	frameshift_variant	COH/UCD
APC	D849fs*62	Likely Oncogenic	frameshift_variant	COH/UCD
APC	D849Rfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	E853Gfs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	R854Efs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	R856fs*6	Likely Oncogenic	frameshift_variant	COH/UCD
APC	T867Nfs*46	Likely Oncogenic	frameshift_variant	MSKCC
APC	E868*	Likely Oncogenic	stop_gained	MSKCC
APC	G871Efs*45	Likely Oncogenic	frameshift_variant	MSKCC
APC	R876*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	R876Afs*36	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q879*	Likely Oncogenic	stop_gained	MSKCC
APC	Q886*	Likely Oncogenic	stop_gained	MSKCC
APC	V890Sfs*26	Likely Oncogenic	frameshift_variant	MSKCC
APC	E892*	Likely Oncogenic	stop_gained	MSKCC
APC	E893*	Likely Oncogenic	stop_gained	MSKCC
APC	S895*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E902*	Likely Oncogenic	stop_gained	MSKCC
APC	D903Efs*13	Likely Oncogenic	frameshift_variant	MSKCC
APC	S906Ffs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	V915fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	T916Kfs*39	Likely Oncogenic	frameshift_variant	MSKCC
APC	D917fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E918Rfs*37	Likely Oncogenic	frameshift_variant	MSKCC
APC	R919*	Likely Oncogenic	stop_gained	COH/UCD
APC	R919Kfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	R923*	Likely Oncogenic	stop_gained	MSKCC
APC	S932*	Likely Oncogenic	stop_gained	MSKCC
APC	Y935fs*1	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Y935fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Y935*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	Y935Ifs*19	Likely Oncogenic	frameshift_variant	MSKCC
APC	N936Kfs*14	Likely Oncogenic	frameshift_variant	MSKCC
APC	N936S	Unknown	missense_variant	MSKCC
APC	F937Sfs*18	Likely Oncogenic	frameshift_variant	MSKCC
APC	E941*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	N942Ifs*13	Likely Oncogenic	frameshift_variant	MSKCC
APC	S943*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	M949Yfs*15	Likely Oncogenic	frameshift_variant	MSKCC
APC	Y951*	Likely Oncogenic	stop_gained	MSKCC
APC	L954*	Likely Oncogenic	stop_gained	MSKCC
APC	L954S	Unknown	missense_variant	COH/UCD
APC	E955*	Likely Oncogenic	stop_gained	COH/UCD
APC	N961Mfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	R976fs*9	Likely Oncogenic	frameshift_variant	COH/UCD
APC	R976*	Likely Oncogenic	stop_gained	MSKCC
APC	K980*	Likely Oncogenic	stop_gained	MSKCC
APC	E984*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	Y986*	Likely Oncogenic	stop_gained	COH/UCD
APC	K993*	Likely Oncogenic	stop_gained	MSKCC
APC	D1003N	Unknown	missense_variant	COH/UCD
APC	L1004Nfs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1007fs*2	Likely Oncogenic	frameshift_variant	COH/UCD
APC	I1008Nfs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	I1008Yfs*14	Likely Oncogenic	frameshift_variant	MSKCC
APC	N1012fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1020*	Likely Oncogenic	stop_gained	MSKCC
APC	L1021Rfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1022H	Unknown	missense_variant	MSKCC
APC	T1023Nfs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	N1026Kfs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1028Ifs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1030*	Likely Oncogenic	stop_gained	MSKCC

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APC	K1030Nfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	Y1031*	Likely Oncogenic	stop_gained	COH/UCD
APC	S1032*	Likely Oncogenic	stop_gained	MSKCC
APC	Q1035*	Likely Oncogenic	stop_gained	MSKCC
APC	N1037Tfs*19	Likely Oncogenic	frameshift_variant	MSKCC
APC	G1039*	Likely Oncogenic	stop_gained	MSKCC
APC	Q1041*	Likely Oncogenic	stop_gained	MSKCC
APC	P1043Ffs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1044*	Likely Oncogenic	stop_gained	COH/UCD
APC	E1047*	Likely Oncogenic	stop_gained	MSKCC
APC	W1049*	Likely Oncogenic	stop_gained	MSKCC
APC	I1056Kfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	I1056Mfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1058G	Unknown	missense_variant	COH/UCD
APC	E1059*	Likely Oncogenic	stop_gained	MSKCC
APC	I1060Tfs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1062fs*1	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Q1062*	Likely Oncogenic	stop_gained	MSKCC
APC	Q1065*	Likely Oncogenic	stop_gained	MSKCC
APC	Q1067*	Likely Oncogenic	stop_gained	MSKCC
APC	S1068Gfs*57	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1071*	Likely Oncogenic	stop_gained	MSKCC
APC	S1072Rfs*11	Likely Oncogenic	frameshift_variant	MSKCC
APC	Y1075*	Likely Oncogenic	stop_gained	COH/UCD
APC	P1076Lfs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	V1077Hfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1080*	Likely Oncogenic	stop_gained	MSKCC
APC	K1088*	Likely Oncogenic	stop_gained	COH/UCD
APC	Q1090*	Likely Oncogenic	stop_gained	COH/UCD
APC	Q1095*	Likely Oncogenic	stop_gained	MSKCC
APC	Q1096*	Likely Oncogenic	stop_gained	MSKCC
APC	E1097*	Likely Oncogenic	stop_gained	MSKCC
APC	V1099Ffs*19	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1100Ffs*26	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1111*	Likely Oncogenic	stop_gained	COH/UCD
APC	E1111Gfs*15	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1114*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	R1114Efs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1117Lfs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1123fs*12	Likely Oncogenic	frameshift_variant	COH/UCD
APC	V1125A	Unknown	missense_variant	COH/UCD
APC	Q1127*	Likely Oncogenic	stop_gained	MSKCC
APC	D1134Efs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	Y1135*	Likely Oncogenic	stop_gained	MSKCC
APC	Y1143*	Likely Oncogenic	stop_gained	MSKCC
APC	Y1147fs*1	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1150*	Likely Oncogenic	stop_gained	COH/UCD
APC	E1151*	Likely Oncogenic	stop_gained	MSKCC
APC	E1156fs*8	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1156*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1157del	Unknown	inframe_deletion	COH/UCD
APC	R1158*	Likely Oncogenic	stop_gained	MSKCC
APC	Y1162fs*3	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1163fs*2	Likely Oncogenic	frameshift_variant	COH/UCD
APC	K1165*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	Y1166*	Likely Oncogenic	stop_gained	MSKCC
APC	Y1166Ifs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1170*	Likely Oncogenic	stop_gained	COH/UCD
APC	R1171C	Unknown	missense_variant	COH/UCD
APC	V1173Lfs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1175*	Likely Oncogenic	stop_gained	MSKCC
APC	L1181fs*1	Likely Oncogenic	frameshift_variant	COH/UCD
APC	K1182*	Likely Oncogenic	stop_gained	MSKCC
APC	K1182Nfs*83	Likely Oncogenic	frameshift_variant	MSKCC
APC	Y1183*	Likely Oncogenic	stop_gained	MSKCC
APC	T1185Qfs*80	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1192*	Likely Oncogenic	stop_gained	MSKCC
APC	K1192Tfs*15	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1193*	Likely Oncogenic	stop_gained	MSKCC
APC	S1194*	Likely Oncogenic	stop_gained	COH/UCD
APC	S1198*	Likely Oncogenic	stop_gained	MSKCC
APC	Q1204*	Likely Oncogenic	stop_gained	MSKCC
APC	S1206fs*59	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1206Rfs*59	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1208Nfs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1208Pfs*57	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1213*	Likely Oncogenic	stop_gained	MSKCC
APC	H1232Pfs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1237*	Likely Oncogenic	stop_gained	MSKCC

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APC	Q1237Efs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1239*	Likely Oncogenic	stop_gained	MSKCC
APC	Q1244*	Likely Oncogenic	stop_gained	MSKCC
APC	K1245*	Likely Oncogenic	stop_gained	MSKCC
APC	C1249Wfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1250Sfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1256fs*9	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1257*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	Q1260fs*15	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Q1260*	Likely Oncogenic	stop_gained	COH/UCD
APC	Q1260Dfs*15	Likely Oncogenic	frameshift_variant	MSKCC
APC	I1269Mfs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	C1270*	Likely Oncogenic	stop_gained	MSKCC
APC	S1272Ffs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1273fs*13	Likely Oncogenic	frameshift_variant	COH/UCD
APC	C1274Lfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1276*	Likely Oncogenic	stop_gained	MSKCC
APC	S1276Tfs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1282*	Likely Oncogenic	stop_gained	COH/UCD
APC	E1284D	Unknown	missense_variant	MSKCC
APC	E1286*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1286Kfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	I1287*	Likely Oncogenic	stop_gained	MSKCC
APC	G1288*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	Q1291fs*9	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Q1291*	Likely Oncogenic	stop_gained	MSKCC
APC	Q1291E	Unknown	missense_variant	MSKCC
APC	T1292Nfs*15	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1294*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1295*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1295Rfs*11	Likely Oncogenic	frameshift_variant	MSKCC
APC	A1296Gfs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1297Efs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1297Efs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1298Lfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	A1299fs*6	Likely Oncogenic	frameshift_variant	COH/UCD
APC	A1299Lfs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1301Nfs*14	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1301Sfs*10	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1302fs*3	Likely Oncogenic	frameshift_variant	COH/UCD
APC	L1302Pfs*13	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1303fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Q1303*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1306*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1306Kfs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	I1307K	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
APC	I1307Nfs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1308*	Likely Oncogenic	stop_gained	COH/UCD
APC	E1309fs*4	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1309fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1309fs*6	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1309*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1309Dfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1309Kfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1309Rfs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1309Rfs*11	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1310fs*11	Likely Oncogenic	frameshift_variant	COH/UCD
APC	K1310*	Likely Oncogenic	stop_gained	COH/UCD
APC	I1311Dfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	I1311Lfs*10	Likely Oncogenic	frameshift_variant	MSKCC
APC	I1311Mfs*10	Likely Oncogenic	frameshift_variant	MSKCC
APC	G1312*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	G1312Efs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1314Sfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1315*	Likely Oncogenic	stop_gained	MSKCC
APC	A1316fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1317*	Likely Oncogenic	stop_gained	MSKCC
APC	P1319fs*12	Likely Oncogenic	frameshift_variant	COH/UCD
APC	P1319Lfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	V1320fs*11	Likely Oncogenic	frameshift_variant	COH/UCD
APC	V1320Afs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	V1320Efs*11	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1322*	Likely Oncogenic	stop_gained	MSKCC
APC	E1322Kfs*93	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1322Pfs*10	Likely Oncogenic	frameshift_variant	MSKCC
APC	V1323Afs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1324fs*91	Likely Oncogenic	frameshift_variant	COH/UCD
APC	V1326fs*4	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1327*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC

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APC	Q1328*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	Q1328Afs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1328Pfs*11	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1328Tfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1330Qfs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1331*	Likely Oncogenic	stop_gained	MSKCC
APC	T1332Nfs*10	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1333*	Likely Oncogenic	stop_gained	MSKCC
APC	S1334lfs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1338*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	G1339lfs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1342fs*12	Likely Oncogenic	frameshift_variant	COH/UCD
APC	L1342Yfs*73	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1344fs*10	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1344*	Likely Oncogenic	stop_gained	MSKCC
APC	E1345*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	S1346*	Likely Oncogenic	stop_gained	MSKCC
APC	S1346lfs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1346_E1353delins*	Unknown	inframe_deletion	MSKCC
APC	A1347Qfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	H1349Y	Unknown	missense_variant	MSKCC
APC	K1350T	Unknown	missense_variant	MSKCC
APC	A1351_V1352insQAQ	Unknown	inframe_insertion	MSKCC
APC	E1353fs*20	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1353*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1353Dfs*21	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1353Vfs*20	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1353Vfs*19	Likely Oncogenic	frameshift_variant	MSKCC
APC	F1354fs*15	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1355fs*19	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1355Ffs*19	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1355lfs*15	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1356*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	G1357*	Likely Oncogenic	stop_gained	MSKCC
APC	A1358_K1359delinsS*	Unknown	inframe_deletion	MSKCC
APC	K1359*	Likely Oncogenic	stop_gained	MSKCC
APC	K1363*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	K1363lfs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1364fs*11	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Q1367fs*7	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Q1367*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	Q1367Pfs*10	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1372Tfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1374fs*11	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1374*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1374Dfs*41	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1374Gfs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	H1375fs*10	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Y1376fs*10	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Y1376fs*9	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Y1376*	Likely Oncogenic	stop_gained	MSKCC
APC	Y1376Cfs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	V1377Sfs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1378*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1379*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1379Gfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1382Hfs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1382Tfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	M1383Vfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1386*	Likely Oncogenic	stop_gained	MSKCC
APC	R1386S	Unknown	missense_variant	MSKCC
APC	T1388Qfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1389fs*26	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1392fs*1	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1392*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	L1393Nfs*23	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1393R	Unknown	missense_variant	COH/UCD
APC	D1394lfs*21	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1394Vfs*21	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1395fs*3	Likely Oncogenic	frameshift_variant	COH/UCD
APC	F1396fs*19	Likely Oncogenic	frameshift_variant	COH/UCD
APC	F1396Lfs*19	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1397fs*1	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1397*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1397Gfs*18	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1399fs*9	Likely Oncogenic	frameshift_variant	COH/UCD
APC	R1399Ffs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1399Lfs*16	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1400fs*1	Likely Oncogenic	frameshift_variant	COH/UCD

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APC	S1400*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	A1402Cfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1403Afs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1406*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	S1407*	Likely Oncogenic	stop_gained	MSKCC
APC	S1407_P1639del	Unknown	inframe_deletion	MSKCC
APC	E1408*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	S1411fs*3	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1411Rfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	G1412*	Likely Oncogenic	stop_gained	MSKCC
APC	M1413Wfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	V1414fs*1	Likely Oncogenic	frameshift_variant	COH/UCD
APC	V1414fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	V1414*	Likely Oncogenic	stop_gained	MSKCC
APC	V1414Afs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1415fs*3	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1415fs*4	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1415Ifs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1415Kfs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1415Nfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1415Rfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	I1418*	Likely Oncogenic	stop_gained	MSKCC
APC	I1418Nfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1421Vfs*52	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1423fs*50	Likely Oncogenic	frameshift_variant	COH/UCD
APC	P1424Qfs*49	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1427Qfs*40	Likely Oncogenic	frameshift_variant	MSKCC
APC	G1428Dfs*45	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1429*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	Q1429Kfs*44	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1430fs*43	Likely Oncogenic	frameshift_variant	COH/UCD
APC	M1431Efs*38	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1432fs*41	Likely Oncogenic	frameshift_variant	COH/UCD
APC	R1435Hfs*32	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1435Kfs*38	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1435Nfs*32	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1436Kfs*38	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1436Vfs*37	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1438fs*35	Likely Oncogenic	frameshift_variant	COH/UCD
APC	T1438Hfs*35	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1438Nfs*36	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1438Yfs*35	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1439Lfs*34	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1440fs*33	Likely Oncogenic	frameshift_variant	COH/UCD
APC	P1440Sfs*17	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1441fs*31	Likely Oncogenic	frameshift_variant	COH/UCD
APC	P1441fs*32	Likely Oncogenic	frameshift_variant	COH/UCD
APC	P1441fs*34	Likely Oncogenic	frameshift_variant	COH/UCD
APC	P1442Tfs*33	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1443fs*30	Likely Oncogenic	frameshift_variant	COH/UCD
APC	Q1444*	Likely Oncogenic	stop_gained	MSKCC
APC	T1445Qfs*28	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1447*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	T1448Nfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1449Sfs*24	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1450fs*23	Likely Oncogenic	frameshift_variant	COH/UCD
APC	R1450*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	E1451*	Likely Oncogenic	stop_gained	COH/UCD
APC	V1452fs*3	Likely Oncogenic	frameshift_variant	COH/UCD
APC	V1452Yfs*21	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1453Lfs*20	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1453Tfs*21	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1454fs*20	Likely Oncogenic	frameshift_variant	COH/UCD
APC	K1454N	Unknown	missense_variant	MSKCC
APC	N1455fs*18	Likely Oncogenic	frameshift_variant	COH/UCD
APC	N1455Ifs*18	Likely Oncogenic	frameshift_variant	MSKCC
APC	N1455Kfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1456*	Likely Oncogenic	stop_gained	MSKCC
APC	P1458fs*4	Likely Oncogenic	frameshift_variant	COH/UCD
APC	T1459Kfs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	A1460Lfs*13	Likely Oncogenic	frameshift_variant	MSKCC
APC	R1463fs*6	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1464fs*8	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1464Vfs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1464V	Unknown	missense_variant	MSKCC
APC	S1465fs*3	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1465fs*8	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1465fs*9	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1465Rfs*9	Likely Oncogenic	frameshift_variant	MSKCC

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APC	S1465Rfs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1465Wfs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	K1468*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
APC	Q1469*	Likely Oncogenic	stop_gained	COH/UCD
APC	Q1469Mfs*34	Likely Oncogenic	frameshift_variant	MSKCC
APC	V1472Efs*35	Likely Oncogenic	frameshift_variant	MSKCC
APC	N1473Mfs*34	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1477*	Likely Oncogenic	stop_gained	MSKCC
APC	Q1477H	Unknown	missense_variant	COH/UCD
APC	P1483fs*16	Likely Oncogenic	frameshift_variant	COH/UCD
APC	A1485Dfs*26	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1486fs*21	Likely Oncogenic	frameshift_variant	COH/UCD
APC	D1486Efs*21	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1486Efs*30	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1486Ifs*21	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1487Ifs*25	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1487Lfs*16	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1487Nfs*20	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1487Nfs*27	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1487Yfs*18	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1488fs*18	Likely Oncogenic	frameshift_variant	COH/UCD
APC	L1488fs*19	Likely Oncogenic	frameshift_variant	COH/UCD
APC	L1488fs*25	Likely Oncogenic	frameshift_variant	COH/UCD
APC	L1488fs*26	Likely Oncogenic	frameshift_variant	COH/UCD
APC	L1488*	Likely Oncogenic	stop_gained	COH/UCD
APC	L1488Ffs*19	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1488Ffs*26	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1488Ffs*25	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1488Ffs*23	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1488Ffs*27	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1488Yfs*19	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1488Yfs*18	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1489fs*23	Likely Oncogenic	frameshift_variant	COH/UCD
APC	L1489Ffs*18	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1489Pfs*15	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1489Yfs*18	Likely Oncogenic	frameshift_variant	MSKCC
APC	H1490fs*24	Likely Oncogenic	frameshift_variant	COH/UCD
APC	H1490Ffs*23	Likely Oncogenic	frameshift_variant	MSKCC
APC	H1490Pfs*15	Likely Oncogenic	frameshift_variant	MSKCC
APC	H1490Qfs*18	Likely Oncogenic	frameshift_variant	MSKCC
APC	F1491fs*22	Likely Oncogenic	frameshift_variant	COH/UCD
APC	F1491Lfs*16	Likely Oncogenic	frameshift_variant	MSKCC
APC	A1492Cfs*22	Likely Oncogenic	frameshift_variant	MSKCC
APC	A1492Dfs*22	Likely Oncogenic	frameshift_variant	MSKCC
APC	A1492Vfs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1493fs*14	Likely Oncogenic	frameshift_variant	COH/UCD
APC	T1493Rfs*14	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1494Vfs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1495fs*19	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1495Vfs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1496fs*18	Likely Oncogenic	frameshift_variant	COH/UCD
APC	P1497fs*14	Likely Oncogenic	frameshift_variant	COH/UCD
APC	P1497Ffs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1497Qfs*10	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1498fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	G1499A	Unknown	missense_variant	COH/UCD
APC	G1499Dfs*8	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1501fs*6	Likely Oncogenic	frameshift_variant	COH/UCD
APC	S1501Lfs*6	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1511Hfs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1511Rfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1512N	Unknown	missense_variant	COH/UCD
APC	E1513Dfs*10	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1519Y	Unknown	missense_variant	COH/UCD
APC	E1521*	Likely Oncogenic	stop_gained	MSKCC
APC	V1528Ffs*37	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1530*	Likely Oncogenic	stop_gained	COH/UCD
APC	N1531fs*2	Likely Oncogenic	frameshift_variant	COH/UCD
APC	N1531Kfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	N1531Mfs*34	Likely Oncogenic	frameshift_variant	MSKCC
APC	N1533Mfs*30	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1536*	Likely Oncogenic	stop_gained	COH/UCD
APC	E1538fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	E1538K	Unknown	missense_variant	COH/UCD
APC	E1538Nfs*27	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1540*	Likely Oncogenic	stop_gained	COH/UCD
APC	E1540Afs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1540Kfs*22	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1544Kfs*74	Likely Oncogenic	frameshift_variant	MSKCC

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APC	E1544Rfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1545*	Likely Oncogenic	stop_gained	COH/UCD
APC	E1547*	Likely Oncogenic	stop_gained	COH/UCD
APC	K1551Rfs*13	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1554*	Likely Oncogenic	stop_gained	COH/UCD
APC	E1554Kfs*11	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1556fs*3	Likely Oncogenic	frameshift_variant	COH/UCD
APC	T1556fs*9	Likely Oncogenic	frameshift_variant	COH/UCD
APC	T1556Lfs*9	Likely Oncogenic	frameshift_variant	MSKCC
APC	T1556Nfs*3	Likely Oncogenic	frameshift_variant	MSKCC
APC	I1557fs*1	Likely Oncogenic	frameshift_variant	COH/UCD
APC	K1561Rfs*4	Likely Oncogenic	frameshift_variant	MSKCC
APC	D1562fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
APC	D1562Cfs*5	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1573*	Likely Oncogenic	stop_gained	COH/UCD
APC	I1574Yfs*2	Likely Oncogenic	frameshift_variant	MSKCC
APC	L1575Rfs*67	Likely Oncogenic	frameshift_variant	MSKCC
APC	E1577*	Likely Oncogenic	stop_gained	COH/UCD
APC	C1578fs*71	Likely Oncogenic	frameshift_variant	COH/UCD
APC	C1578Lfs*72	Likely Oncogenic	frameshift_variant	MSKCC
APC	C1578Yfs*12	Likely Oncogenic	frameshift_variant	MSKCC
APC	I1580fs*9	Likely Oncogenic	frameshift_variant	COH/UCD
APC	I1580*	Likely Oncogenic	stop_gained	MSKCC
APC	I1580Ffs*70	Likely Oncogenic	frameshift_variant	MSKCC
APC	S1581Lfs*69	Likely Oncogenic	frameshift_variant	MSKCC
APC	Q1627P	Unknown	missense_variant	MSKCC
APC	T1633Yfs*7	Likely Oncogenic	frameshift_variant	MSKCC
APC	P1639S	Unknown	missense_variant	MSKCC
APC	V1641M	Unknown	missense_variant	MSKCC
APC	S1652P	Unknown	missense_variant	MSKCC
APC	E1673G	Unknown	missense_variant	MSKCC
APC	E1673_R1676del	Unknown	inframe_deletion	MSKCC
APC	G1702E	Unknown	missense_variant	COH/UCD
APC	C1727*	Likely Oncogenic	stop_gained	COH/UCD
APC	E1891K	Unknown	missense_variant	MSKCC
APC	D1939Y	Unknown	missense_variant	COH/UCD
APC	S2125F	Unknown	missense_variant	MSKCC
APC	R2166Q	Unknown	missense_variant	MSKCC
APC	R2237*	Likely Oncogenic	stop_gained	MSKCC
APC	A2286V	Unknown	missense_variant	COH/UCD
APC	P2346S	Unknown	missense_variant	COH/UCD
APC	P2369S	Unknown	missense_variant	COH/UCD
APC	R2439C	Unknown	missense_variant	MSKCC
APC	R2505Q	Unknown	missense_variant	MSKCC
APC	R2530W	Unknown	missense_variant	MSKCC
APC	H2551L	Unknown	missense_variant	COH/UCD
APC	S2594C	Unknown	missense_variant	COH/UCD
APC	R2714C	Unknown	missense_variant	MSKCC
APC	V2777A	Unknown	missense_variant	COH/UCD
APC	HOMDEL	Likely Oncogenic	gene_loss	COH/UCD; MSKCC
APC	intron fusion	Likely Oncogenic	rearrangement	COH/UCD
APC	APC-intragenic	Likely Oncogenic	rearrangement	MSKCC
APC	APC-PCSK1 fusion	Likely Oncogenic	rearrangement	MSKCC
APC	APC-PRMT8 fusion	Likely Oncogenic	rearrangement	MSKCC
APC	MCC-APC fusion	Likely Oncogenic	rearrangement	COH/UCD
APC	REEP5-APC fusion	Likely Oncogenic	rearrangement	MSKCC
KRAS	K5E	Likely Oncogenic	missense_variant	MSKCC
KRAS	G10_A11insE	Oncogenic	inframe_insertion	MSKCC
KRAS	G12A	Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	G12C	Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	G12D	Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	G12F	Likely Oncogenic	missense_variant	MSKCC
KRAS	G12R	Oncogenic	missense_variant	MSKCC
KRAS	G12S	Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	G12V	Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	G13C	Oncogenic	missense_variant	MSKCC
KRAS	G13D	Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	G13V	Likely Oncogenic	missense_variant	MSKCC
KRAS	L19F	Oncogenic	missense_variant	COH/UCD
KRAS	T20M	Unknown	missense_variant	MSKCC
KRAS	Q22K	Oncogenic	missense_variant	COH/UCD
KRAS	D33E	Oncogenic	missense_variant	MSKCC
KRAS	K42R	Unknown	missense_variant	COH/UCD
KRAS	A59T	Likely Oncogenic	missense_variant	COH/UCD
KRAS	Q61H	Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	Q61K	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	Q61L	Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	Q61R	Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	E63K	Likely Oncogenic	missense_variant	COH/UCD

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KRAS	R68S	Predicted Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	N116H	Inconclusive	missense_variant	COH/UCD
KRAS	N116T	Unknown	missense_variant	COH/UCD
KRAS	K117N	Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	A146P	Likely Oncogenic	missense_variant	MSKCC
KRAS	A146T	Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	A146V	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
KRAS	Q150R	Unknown	missense_variant	COH/UCD
KRAS	G179S	Unknown	missense_variant	COH/UCD
KRAS	K179N	Unknown	missense_variant	COH/UCD
KRAS	AMP	Likely Oncogenic	amplification	COH/UCD; MSKCC
NRAS	G12A	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
NRAS	G12C	Likely Oncogenic	missense_variant	MSKCC
NRAS	G12D	Oncogenic	missense_variant	COH/UCD; MSKCC
NRAS	G12V	Oncogenic	missense_variant	MSKCC
NRAS	G13C	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
NRAS	G13D	Oncogenic	missense_variant	MSKCC
NRAS	G13R	Likely Oncogenic	missense_variant	MSKCC
NRAS	G60V	Likely Oncogenic	missense_variant	MSKCC
NRAS	Q61H	Oncogenic	missense_variant	MSKCC
NRAS	Q61K	Oncogenic	missense_variant	COH/UCD; MSKCC
NRAS	Q61L	Oncogenic	missense_variant	COH/UCD; MSKCC
NRAS	Q61R	Oncogenic	missense_variant	COH/UCD; MSKCC
NRAS	A91V	Unknown	missense_variant	MSKCC
NRAS	HOMDEL	Unknown	gene_loss	COH/UCD; MSKCC
NRAS	AMP	Unknown	amplification	COH/UCD
BRAF	E26D	Unknown	missense_variant	COH/UCD
BRAF	M53I	Unknown	missense_variant	COH/UCD
BRAF	F247L	Likely Oncogenic	missense_variant	MSKCC
BRAF	D284Efs*4	Unknown	frameshift_variant	MSKCC
BRAF	H353Y	Unknown	missense_variant	COH/UCD
BRAF	A404Cfs*9	Unknown	frameshift_variant	MSKCC
BRAF	R424Q	Unknown	missense_variant	COH/UCD
BRAF	G466E	Oncogenic	missense_variant	COH/UCD
BRAF	G466V	Oncogenic	missense_variant	COH/UCD; MSKCC
BRAF	G469A	Oncogenic	missense_variant	MSKCC
BRAF	G469E	Oncogenic	missense_variant	COH/UCD; MSKCC
BRAF	G469R	Oncogenic	missense_variant	COH/UCD
BRAF	Y472S	Likely Oncogenic	missense_variant	MSKCC
BRAF	E501K	Inconclusive	missense_variant	MSKCC
BRAF	R558Q	Unknown	missense_variant	MSKCC
BRAF	H574Y	Likely Oncogenic	missense_variant	MSKCC
BRAF	N581S	Oncogenic	missense_variant	MSKCC
BRAF	F583C	Unknown	missense_variant	MSKCC
BRAF	E586K	Likely Oncogenic	missense_variant	COH/UCD
BRAF	D594G	Oncogenic	missense_variant	COH/UCD; MSKCC
BRAF	D594N	Oncogenic	missense_variant	COH/UCD; MSKCC
BRAF	D594V	Likely Oncogenic	missense_variant	MSKCC
BRAF	G596R	Oncogenic	missense_variant	MSKCC
BRAF	L597R	Likely Oncogenic	missense_variant	COH/UCD
BRAF	T599delinsIP	Oncogenic	inframe_insertion	MSKCC
BRAF	V600E	Oncogenic	missense_variant	COH/UCD; MSKCC
BRAF	K601E	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
BRAF	F642C	Unknown	missense_variant	COH/UCD
BRAF	AMP	Unknown	amplification	MSKCC
BRAF	CUL1-BRAF fusion	Likely Oncogenic	rearrangement	MSKCC
BRAF	AGAP3-BRAF fusion	Likely Oncogenic	rearrangement	MSKCC
BRAF	MAP3K9-BRAFfusion	Likely Oncogenic	rearrangement	COH/UCD
TP53	M1K	Likely Oncogenic	start_loss	COH/UCD
TP53	S20fs*24	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	K24Nfs*20	Likely Oncogenic	frameshift_variant	MSKCC
TP53	E28Cfs*63	Likely Oncogenic	frameshift_variant	MSKCC
TP53	N30Kfs*13	Likely Oncogenic	frameshift_variant	MSKCC
TP53	V31I	Unknown	missense_variant	COH/UCD
TP53	X32_splice	Likely Oncogenic	splice_region_variant	MSKCC
TP53	S33Ffs*12	Likely Oncogenic	frameshift_variant	MSKCC
TP53	X33_splice	Likely Oncogenic	splice_region_variant	MSKCC
TP53	L35*	Likely Oncogenic	stop_gained	MSKCC
TP53	L35Cfs*9	Likely Oncogenic	frameshift_variant	MSKCC
TP53	E51fs*72	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	Q52fs*73	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	Q52*	Likely Oncogenic	stop_gained	COH/UCD
TP53	TP53-GPS2 fusion	Likely Oncogenic	rearrangement	MSKCC
TP53	TP53-intragenic	Likely Oncogenic	rearrangement	MSKCC
TP53	W53*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
TP53	D61Vfs*62	Likely Oncogenic	frameshift_variant	MSKCC
TP53	E62*	Likely Oncogenic	stop_gained	COH/UCD
TP53	R65*	Likely Oncogenic	stop_gained	MSKCC
TP53	P67Lfs*54	Likely Oncogenic	frameshift_variant	MSKCC

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TP53	E68fs*57	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	E68Gfs*80	Likely Oncogenic	frameshift_variant	MSKCC
TP53	V73Gfs*50	Likely Oncogenic	frameshift_variant	MSKCC
TP53	V73Rfs*76	Likely Oncogenic	frameshift_variant	MSKCC
TP53	V73Wfs*50	Likely Oncogenic	frameshift_variant	MSKCC
TP53	A74Gfs*75	Likely Oncogenic	frameshift_variant	MSKCC
TP53	P75Lfs*48	Likely Oncogenic	frameshift_variant	MSKCC
TP53	T81Nfs*68	Likely Oncogenic	frameshift_variant	MSKCC
TP53	P87Lfs*59	Likely Oncogenic	frameshift_variant	MSKCC
TP53	S90Lfs*59	Likely Oncogenic	frameshift_variant	MSKCC
TP53	S90Pfs*33	Likely Oncogenic	frameshift_variant	MSKCC
TP53	W91*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
TP53	L93Cfs*30	Likely Oncogenic	frameshift_variant	MSKCC
TP53	L93Vfs*55	Likely Oncogenic	frameshift_variant	MSKCC
TP53	S94*	Likely Oncogenic	stop_gained	COH/UCD
TP53	S94T	Unknown	missense_variant	COH/UCD
TP53	S96del	Unknown	inframe_deletion	MSKCC
TP53	S96fs*72	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	S96fs*57	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	V97fs*25	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	Q100fs*23	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	T102Nfs*47	Likely Oncogenic	frameshift_variant	MSKCC
TP53	Q104*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
TP53	G105C	Likely Oncogenic	missense_variant	MSKCC
TP53	S106Qfs*43	Likely Oncogenic	frameshift_variant	MSKCC
TP53	Y107*	Likely Oncogenic	stop_gained	MSKCC
TP53	F109I	Likely Oncogenic	missense_variant	COH/UCD
TP53	F109Sfs*14	Likely Oncogenic	frameshift_variant	MSKCC
TP53	F109_R110insK	Likely Oncogenic	inframe_insertion	MSKCC
TP53	R110C	Likely Oncogenic	missense_variant	COH/UCD
TP53	R110L	Likely Oncogenic	missense_variant	MSKCC
TP53	R110P	Likely Oncogenic	missense_variant	COH/UCD
TP53	L111Ffs*40	Likely Oncogenic	frameshift_variant	MSKCC
TP53	L111P	Likely Oncogenic	missense_variant	MSKCC
TP53	F113C	Likely Oncogenic	missense_variant	COH/UCD
TP53	F113S	Likely Oncogenic	missense_variant	COH/UCD
TP53	L114fs*9	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	L114Cfs*9	Likely Oncogenic	frameshift_variant	MSKCC
TP53	H115fs*34	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	H115Afs*34	Likely Oncogenic	frameshift_variant	MSKCC
TP53	H115Ffs*33	Likely Oncogenic	frameshift_variant	MSKCC
TP53	A119fs*2	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	V122fs*26	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	V122Dfs*26	Likely Oncogenic	frameshift_variant	MSKCC
TP53	C124G	Likely Oncogenic	missense_variant	MSKCC
TP53	C124Wfs*25	Likely Oncogenic	frameshift_variant	MSKCC
TP53	T125fs*26	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	T125A	Likely Oncogenic	missense_variant	MSKCC
TP53	T125M	Likely Oncogenic	missense_variant	MSKCC
TP53	X125_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC
TP53	X126_splice	Likely Oncogenic	splice_region_variant	MSKCC
TP53	Y126delinsCN	Likely Oncogenic	inframe_insertion	MSKCC
TP53	Y126*	Likely Oncogenic	stop_gained	MSKCC
TP53	Y126C	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	Y126D	Likely Oncogenic	missense_variant	COH/UCD
TP53	Y126H	Likely Oncogenic	missense_variant	COH/UCD
TP53	S127F	Likely Oncogenic	missense_variant	MSKCC
TP53	L130F	Likely Oncogenic	missense_variant	MSKCC
TP53	L130Sfs*40	Likely Oncogenic	frameshift_variant	MSKCC
TP53	L130V	Likely Oncogenic	missense_variant	MSKCC
TP53	N131del	Likely Oncogenic	inframe_deletion	MSKCC
TP53	N131fs*27	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	N131S	Likely Oncogenic	missense_variant	MSKCC
TP53	K132E	Likely Oncogenic	missense_variant	MSKCC
TP53	K132N	Likely Oncogenic	missense_variant	MSKCC
TP53	K132R	Likely Oncogenic	missense_variant	MSKCC
TP53	M133Dfs*16	Likely Oncogenic	frameshift_variant	MSKCC
TP53	M133Efs*38	Likely Oncogenic	frameshift_variant	MSKCC
TP53	M133K	Likely Oncogenic	missense_variant	COH/UCD
TP53	F134C	Likely Oncogenic	missense_variant	MSKCC
TP53	F134L	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	C135Afs*35	Likely Oncogenic	frameshift_variant	MSKCC
TP53	C135F	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	C135R	Likely Oncogenic	missense_variant	MSKCC
TP53	C135S	Likely Oncogenic	missense_variant	MSKCC
TP53	C135Y	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	Q136*	Likely Oncogenic	stop_gained	COH/UCD
TP53	A138P	Likely Oncogenic	missense_variant	MSKCC
TP53	A138V	Likely Oncogenic	missense_variant	COH/UCD; MSKCC

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TP53	C141Afs*29	Likely Oncogenic	frameshift_variant	MSKCC
TP53	C141Y	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	P142Afs*5	Likely Oncogenic	frameshift_variant	MSKCC
TP53	V143A	Likely Oncogenic	missense_variant	MSKCC
TP53	Q144Sfs*26	Likely Oncogenic	frameshift_variant	MSKCC
TP53	L145P	Likely Oncogenic	missense_variant	MSKCC
TP53	L145R	Oncogenic	missense_variant	MSKCC
TP53	W146*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
TP53	P151A	Likely Oncogenic	missense_variant	MSKCC
TP53	P151R	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	P151S	Oncogenic	missense_variant	MSKCC
TP53	P152fs*14	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	P152fs*18	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	P152Afs*14	Likely Oncogenic	frameshift_variant	MSKCC
TP53	P152L	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	P153fs*28	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	P153Afs*28	Likely Oncogenic	frameshift_variant	MSKCC
TP53	G154Afs*28	Likely Oncogenic	frameshift_variant	MSKCC
TP53	G154V	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	T155Hfs*26	Likely Oncogenic	frameshift_variant	MSKCC
TP53	T155N	Likely Oncogenic	missense_variant	COH/UCD
TP53	T155Pfs*28	Likely Oncogenic	frameshift_variant	MSKCC
TP53	R156Afs*14	Likely Oncogenic	frameshift_variant	MSKCC
TP53	R156P	Likely Oncogenic	missense_variant	MSKCC
TP53	V157F	Likely Oncogenic	missense_variant	MSKCC
TP53	V157_R158del	Likely Oncogenic	inframe_deletion	MSKCC
TP53	R158C	Likely Oncogenic	missense_variant	COH/UCD
TP53	R158H	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R158L	Likely Oncogenic	missense_variant	COH/UCD
TP53	A159V	Likely Oncogenic	missense_variant	MSKCC
TP53	A161S	Likely Oncogenic	missense_variant	MSKCC
TP53	A161T	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	Y163C	Likely Oncogenic	missense_variant	MSKCC
TP53	Y163Hfs*4	Likely Oncogenic	frameshift_variant	MSKCC
TP53	K164*	Likely Oncogenic	stop_gained	MSKCC
TP53	K164E	Likely Oncogenic	missense_variant	MSKCC
TP53	K164M	Likely Oncogenic	missense_variant	COH/UCD
TP53	S166*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
TP53	Q167*	Likely Oncogenic	stop_gained	MSKCC
TP53	H168P	Likely Oncogenic	missense_variant	MSKCC
TP53	H168R	Likely Oncogenic	missense_variant	MSKCC
TP53	M169del	Likely Oncogenic	inframe_deletion	MSKCC
TP53	M169Ifs*12	Likely Oncogenic	frameshift_variant	MSKCC
TP53	X169_splice	Likely Oncogenic	splice_region_variant	MSKCC
TP53	E171*	Likely Oncogenic	stop_gained	MSKCC
TP53	E171Rfs*3	Likely Oncogenic	frameshift_variant	MSKCC
TP53	V172F	Likely Oncogenic	missense_variant	MSKCC
TP53	V173fs*68	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	V173L	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	V173M	Likely Oncogenic	missense_variant	MSKCC
TP53	V173W	Likely Oncogenic	missense_variant	COH/UCD
TP53	R175H	Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	C176fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	C176*	Likely Oncogenic	stop_gained	MSKCC
TP53	C176F	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	C176R	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	C176S	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	C176Y	Likely Oncogenic	missense_variant	MSKCC
TP53	P177_C182del	Likely Oncogenic	inframe_deletion	MSKCC
TP53	H178fs*69	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	H179D	Likely Oncogenic	missense_variant	MSKCC
TP53	H179P	Likely Oncogenic	missense_variant	MSKCC
TP53	H179Q	Likely Oncogenic	missense_variant	MSKCC
TP53	H179R	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	H179Y	Likely Oncogenic	missense_variant	MSKCC
TP53	R181H	Likely Oncogenic	missense_variant	MSKCC
TP53	S185Tfs*62	Likely Oncogenic	frameshift_variant	MSKCC
TP53	X187_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC
TP53	A189Gfs*20	Likely Oncogenic	frameshift_variant	MSKCC
TP53	P190L	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	P190T	Likely Oncogenic	missense_variant	MSKCC
TP53	Q192*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
TP53	H193R	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	H193Y	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	L194fs*13	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	L194F	Likely Oncogenic	missense_variant	MSKCC
TP53	L194P	Likely Oncogenic	missense_variant	COH/UCD
TP53	L194R	Likely Oncogenic	missense_variant	COH/UCD
TP53	I195Nfs*14	Likely Oncogenic	frameshift_variant	MSKCC

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TP53	I195N	Likely Oncogenic	missense_variant	MSKCC
TP53	I195T	Likely Oncogenic	missense_variant	COH/UCD
TP53	I195Yfs*14	Likely Oncogenic	frameshift_variant	MSKCC
TP53	R196*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
TP53	V197M	Likely Oncogenic	missense_variant	MSKCC
TP53	E198*	Likely Oncogenic	stop_gained	MSKCC
TP53	G199_E204del	Likely Oncogenic	inframe_deletion	MSKCC
TP53	N200fs*47	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	N200Kfs*48	Likely Oncogenic	frameshift_variant	MSKCC
TP53	L201Afs*7	Likely Oncogenic	frameshift_variant	MSKCC
TP53	V203M	Likely Oncogenic	missense_variant	COH/UCD
TP53	E204*	Likely Oncogenic	stop_gained	COH/UCD
TP53	Y205C	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	Y205D	Likely Oncogenic	missense_variant	COH/UCD
TP53	Y205S	Likely Oncogenic	missense_variant	MSKCC
TP53	W206R	Likely Oncogenic	missense_variant	COH/UCD
TP53	D208Ffs*42	Likely Oncogenic	frameshift_variant	MSKCC
TP53	R209Kfs*6	Likely Oncogenic	frameshift_variant	MSKCC
TP53	N210Rfs*14	Likely Oncogenic	frameshift_variant	MSKCC
TP53	N210Tfs*37	Likely Oncogenic	frameshift_variant	MSKCC
TP53	T211I	Likely Oncogenic	missense_variant	COH/UCD
TP53	F212Sfs*3	Likely Oncogenic	frameshift_variant	MSKCC
TP53	R213*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
TP53	R213Dfs*34	Likely Oncogenic	frameshift_variant	MSKCC
TP53	R213L	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R213Q	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	H214Qfs*7	Likely Oncogenic	frameshift_variant	MSKCC
TP53	H214R	Likely Oncogenic	missense_variant	MSKCC
TP53	S215G	Oncogenic	missense_variant	MSKCC
TP53	S215I	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	S215N	Likely Oncogenic	missense_variant	MSKCC
TP53	S215R	Likely Oncogenic	missense_variant	MSKCC
TP53	V216L	Likely Oncogenic	missense_variant	COH/UCD
TP53	V216M	Likely Oncogenic	missense_variant	COH/UCD
TP53	V217Gfs*30	Likely Oncogenic	frameshift_variant	MSKCC
TP53	V217_V218insIVVVV	Likely Oncogenic	inframe_insertion	MSKCC
TP53	Y220C	Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	E221*	Likely Oncogenic	stop_gained	MSKCC
TP53	P223Lfs*24	Likely Oncogenic	frameshift_variant	MSKCC
TP53	E224D	Likely Oncogenic	missense_variant	COH/UCD
TP53	X224_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC
TP53	X225_splice	Likely Oncogenic	splice_region_variant	MSKCC
TP53	C229Yfs*10	Likely Oncogenic	frameshift_variant	MSKCC
TP53	C229_H233del	Likely Oncogenic	inframe_deletion	MSKCC
TP53	I232N	Likely Oncogenic	missense_variant	MSKCC
TP53	I232S	Likely Oncogenic	missense_variant	COH/UCD
TP53	I232T	Likely Oncogenic	missense_variant	COH/UCD
TP53	Y234C	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	Y234H	Likely Oncogenic	missense_variant	MSKCC
TP53	N235del	Likely Oncogenic	inframe_deletion	MSKCC
TP53	Y236*	Likely Oncogenic	stop_gained	MSKCC
TP53	Y236C	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	Y236D	Likely Oncogenic	missense_variant	MSKCC
TP53	Y236N	Likely Oncogenic	missense_variant	MSKCC
TP53	Y236_M237insTT	Likely Oncogenic	inframe_insertion	MSKCC
TP53	M237I	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	C238Y	Likely Oncogenic	missense_variant	MSKCC
TP53	C238_S240del	Likely Oncogenic	inframe_deletion	MSKCC
TP53	N239*	Likely Oncogenic	stop_gained	MSKCC
TP53	N239D	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	S241C	Likely Oncogenic	missense_variant	MSKCC
TP53	S241F	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	S241P	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	C242F	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	C242S	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	C242Y	Likely Oncogenic	missense_variant	MSKCC
TP53	G244C	Likely Oncogenic	missense_variant	COH/UCD
TP53	G244D	Likely Oncogenic	missense_variant	MSKCC
TP53	G244S	Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	G244V	Likely Oncogenic	missense_variant	COH/UCD
TP53	G245A	Likely Oncogenic	missense_variant	COH/UCD
TP53	G245C	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	G245D	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	G245S	Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	G245V	Likely Oncogenic	missense_variant	MSKCC
TP53	M246K	Likely Oncogenic	missense_variant	COH/UCD
TP53	M246V	Likely Oncogenic	missense_variant	MSKCC
TP53	N247I	Likely Oncogenic	missense_variant	COH/UCD
TP53	N247Y	Likely Oncogenic	missense_variant	COH/UCD

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TP53	R248Q	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R248W	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R249M	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R249S	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R249W	Oncogenic	missense_variant	MSKCC
TP53	P250L	Likely Oncogenic	missense_variant	MSKCC
TP53	I251fs*97	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	L252_T253insS	Likely Oncogenic	inframe_insertion	MSKCC
TP53	T253Nfs*11	Likely Oncogenic	frameshift_variant	MSKCC
TP53	I254del	Likely Oncogenic	inframe_deletion	COH/UCD
TP53	I254N	Likely Oncogenic	missense_variant	MSKCC
TP53	I255del	Likely Oncogenic	inframe_deletion	MSKCC
TP53	I255N	Likely Oncogenic	missense_variant	MSKCC
TP53	I255_T256insS	Likely Oncogenic	inframe_insertion	MSKCC
TP53	L257P	Likely Oncogenic	missense_variant	MSKCC
TP53	L257Q	Likely Oncogenic	missense_variant	MSKCC
TP53	L257Rfs*6	Likely Oncogenic	frameshift_variant	MSKCC
TP53	L257R	Likely Oncogenic	missense_variant	MSKCC
TP53	E258fs*87	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	E258*	Likely Oncogenic	stop_gained	MSKCC
TP53	E258D	Likely Oncogenic	missense_variant	COH/UCD
TP53	E258G	Likely Oncogenic	missense_variant	MSKCC
TP53	E258K	Likely Oncogenic	missense_variant	COH/UCD
TP53	X258_splice	Likely Oncogenic	splice_region_variant	MSKCC
TP53	D259H	Likely Oncogenic	missense_variant	MSKCC
TP53	D259Y	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	X261_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC
TP53	G262V	Likely Oncogenic	missense_variant	MSKCC
TP53	L264del	Likely Oncogenic	inframe_deletion	COH/UCD
TP53	L265P	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	L265R	Likely Oncogenic	missense_variant	MSKCC
TP53	G266E	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	G266R	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R267Q	Likely Oncogenic	missense_variant	MSKCC
TP53	R267W	Likely Oncogenic	missense_variant	MSKCC
TP53	N268fs*4	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	N268K	Likely Oncogenic	missense_variant	COH/UCD
TP53	S269_E271del	Likely Oncogenic	inframe_deletion	MSKCC
TP53	F270C	Likely Oncogenic	missense_variant	MSKCC
TP53	F270L	Likely Oncogenic	missense_variant	COH/UCD
TP53	E271*	Likely Oncogenic	stop_gained	MSKCC
TP53	E271V	Likely Oncogenic	missense_variant	COH/UCD
TP53	V272E	Likely Oncogenic	missense_variant	MSKCC
TP53	V272L	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	V272M	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R273C	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R273H	Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R273L	Likely Oncogenic	missense_variant	MSKCC
TP53	R273P	Likely Oncogenic	missense_variant	MSKCC
TP53	C275*	Likely Oncogenic	stop_gained	COH/UCD
TP53	C275F	Likely Oncogenic	missense_variant	MSKCC
TP53	C275Lfs*31	Likely Oncogenic	frameshift_variant	MSKCC
TP53	C275Y	Likely Oncogenic	missense_variant	COH/UCD
TP53	C275_A276insFV	Likely Oncogenic	inframe_insertion	MSKCC
TP53	C277*	Likely Oncogenic	stop_gained	MSKCC
TP53	P278R	Likely Oncogenic	missense_variant	MSKCC
TP53	P278S	Likely Oncogenic	missense_variant	MSKCC
TP53	P278T	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R280Efs*65	Likely Oncogenic	frameshift_variant	MSKCC
TP53	R280G	Likely Oncogenic	missense_variant	MSKCC
TP53	R282W	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R283fs*63	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	R283C	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R283P	Likely Oncogenic	missense_variant	COH/UCD
TP53	E285K	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	E286K	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	E286V	Likely Oncogenic	missense_variant	MSKCC
TP53	E287*	Likely Oncogenic	stop_gained	MSKCC
TP53	N288lfs*57	Likely Oncogenic	frameshift_variant	MSKCC
TP53	N288Tfs*55	Likely Oncogenic	frameshift_variant	MSKCC
TP53	R290H	Likely Oncogenic	missense_variant	MSKCC
TP53	K292*	Likely Oncogenic	stop_gained	MSKCC
TP53	G293Rfs*13	Likely Oncogenic	frameshift_variant	MSKCC
TP53	E294*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
TP53	E294Sfs*51	Likely Oncogenic	frameshift_variant	MSKCC
TP53	T304Rfs*44	Likely Oncogenic	frameshift_variant	MSKCC
TP53	R306*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
TP53	X307_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC
TP53	N310fs*36	Likely Oncogenic	frameshift_variant	COH/UCD

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TP53	S315Lfs*30	Likely Oncogenic	frameshift_variant	MSKCC
TP53	Q317*	Likely Oncogenic	stop_gained	MSKCC
TP53	K320*	Likely Oncogenic	stop_gained	COH/UCD
TP53	P322Hfs*23	Likely Oncogenic	frameshift_variant	MSKCC
TP53	Q331*	Likely Oncogenic	stop_gained	MSKCC
TP53	X331_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC
TP53	X332_splice	Likely Oncogenic	splice_region_variant	MSKCC
TP53	R333Vfs*12	Likely Oncogenic	frameshift_variant	MSKCC
TP53	R335Pfs*2	Likely Oncogenic	frameshift_variant	MSKCC
TP53	E336fs*10	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	R337fs*10	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	R337C	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
TP53	R337L	Likely Oncogenic	missense_variant	MSKCC
TP53	R342*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
TP53	R342Efs*3	Likely Oncogenic	frameshift_variant	MSKCC
TP53	R342Qfs*3	Likely Oncogenic	frameshift_variant	MSKCC
TP53	A347D	Likely Oncogenic	missense_variant	MSKCC
TP53	L350Afs*3	Likely Oncogenic	frameshift_variant	MSKCC
TP53	H380Ifs*42	Likely Oncogenic	frameshift_variant	MSKCC
TP53	K382fs*13+	Likely Oncogenic	frameshift_variant	COH/UCD
TP53	K382Nfs*40	Likely Oncogenic	frameshift_variant	MSKCC
TP53	P390Lfs*79	Likely Oncogenic	frameshift_variant	MSKCC
TP53	*394Rext*9	Unknown	stop_loss	MSKCC
TP53	HOMDEL	Likely Oncogenic	gene_loss	COH/UCD; MSKCC
TP53	rearrangement	Unknown	rearrangement	COH/UCD
TP53	MUTATED	Unknown	mutated	MSKCC
TP53	loss exons 2-11	Likely Oncogenic	exon_loss	COH/UCD
TP53	loss exons 7-11	Likely Oncogenic	exon_loss	COH/UCD
TP53	intron 9 truncation	Likely Oncogenic	truncation	COH/UCD
ARID1A	P21del	Unknown	inframe_deletion	COH/UCD
ARID1A	A45del	Unknown	inframe_deletion	MSKCC
ARID1A	A53T	Unknown	missense_variant	MSKCC
ARID1A	G95D	Unknown	missense_variant	COH/UCD
ARID1A	R110Yfs*6	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	S128T	Unknown	missense_variant	COH/UCD
ARID1A	P223H	Unknown	missense_variant	COH/UCD
ARID1A	P225Afs*175	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	A246_A247insA	Unknown	inframe_insertion	COH/UCD
ARID1A	G276*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	T294fs*69	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	D315Rfs*85	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	A339Lfs*24	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	H358Y	Unknown	missense_variant	COH/UCD
ARID1A	Q372fs*19	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	P418fs*15	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	P568Gfs*52	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	S621fs*1	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	S645*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	M651Hfs*25	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	Q758fs*59	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	Q802fs*15	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	S825Vfs*8	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	Q840*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	S862Lfs*10	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	P870Qfs*62	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	G889D	Unknown	missense_variant	MSKCC
ARID1A	N906S	Unknown	missense_variant	COH/UCD
ARID1A	N935S	Unknown	missense_variant	COH/UCD
ARID1A	Y948*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	X1067_splice	Likely Oncogenic	splice_region_variant	MSKCC
ARID1A	S1182fs*24	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	M1220T	Unknown	missense_variant	MSKCC
ARID1A	D1258*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	R1276*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	R1276Ifs*10	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	P1326fs*155	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	Q1331*	Likely Oncogenic	stop_gained	COH/UCD
ARID1A	Q1332*	Likely Oncogenic	stop_gained	COH/UCD
ARID1A	R1335*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
ARID1A	F1343L	Unknown	missense_variant	COH/UCD
ARID1A	R1371W	Unknown	missense_variant	MSKCC
ARID1A	E1385*	Likely Oncogenic	stop_gained	COH/UCD
ARID1A	Q1420*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	N1433_A1437del	Unknown	inframe_deletion	MSKCC
ARID1A	G1450S	Unknown	missense_variant	COH/UCD
ARID1A	R1461*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	Q1473fs*17	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	Q1493*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	M1595L	Unknown	missense_variant	COH/UCD

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ARID1A	E1733fs*3	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	L1745Wfs*25	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	S1751fs*5	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	L1769Rfs*3	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	E1787*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	N1820S	Unknown	missense_variant	MSKCC
ARID1A	G1848Wfs*6	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	D1850fs*4	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	D1850fs*33	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	Q1856*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	R1869W	Unknown	missense_variant	COH/UCD
ARID1A	Q1947*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	P1959S	Unknown	missense_variant	COH/UCD
ARID1A	V1982I	Unknown	missense_variant	COH/UCD
ARID1A	S1985fs*30	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	N1986D	Unknown	missense_variant	COH/UCD
ARID1A	R1989*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	K2003Pfs*28	Likely Oncogenic	frameshift_variant	MSKCC
ARID1A	G2087R	Predicted Oncogenic	missense_variant	MSKCC
ARID1A	W2091*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	C2094F	Unknown	missense_variant	MSKCC
ARID1A	N2109S	Unknown	missense_variant	COH/UCD
ARID1A	F2141fs*59	Likely Oncogenic	frameshift_variant	COH/UCD
ARID1A	R2158*	Likely Oncogenic	stop_gained	MSKCC
ARID1A	N2220S	Unknown	missense_variant	COH/UCD
ARID1A	HOMDEL	Likely Oncogenic	gene_loss	COH/UCD
ARID1A	truncation intron 13	Likely Oncogenic	truncation	COH/UCD
CTNNB1	X5_splice	Unknown	splice_region_variant	MSKCC
CTNNB1	X6_splice	Unknown	splice_region_variant	MSKCC
CTNNB1	X10_splice	Unknown	splice_region_variant	MSKCC
CTNNB1	M12_+140delinsI	Unknown	missense_variant	MSKCC
CTNNB1	X13_splice	Unknown	splice_region_variant	MSKCC
CTNNB1	K19_E77del	Likely Oncogenic	inframe_deletion	COH/UCD
CTNNB1	V22_T40del	Predicted Oncogenic	inframe_deletion	COH/UCD
CTNNB1	V22_S33del	Predicted Oncogenic	inframe_deletion	MSKCC
CTNNB1	S23_G34del	Predicted Oncogenic	inframe_deletion	COH/UCD
CTNNB1	S23_S33del	Predicted Oncogenic	inframe_deletion	MSKCC
CTNNB1	W25_D32del	Predicted Oncogenic	inframe_deletion	MSKCC
CTNNB1	X29_splice	Unknown	splice_region_variant	MSKCC
CTNNB1	D32H	Likely Oncogenic	missense_variant	MSKCC
CTNNB1	S33F	Likely Oncogenic	missense_variant	MSKCC
CTNNB1	S37Y	Likely Oncogenic	missense_variant	COH/UCD
CTNNB1	S45del	Likely Oncogenic	inframe_deletion	COH/UCD
CTNNB1	S45F	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
CTNNB1	S45P	Likely Oncogenic	missense_variant	COH/UCD
CTNNB1	S71fs*11	Unknown	frameshift_variant	COH/UCD
CTNNB1	X81_splice	Unknown	splice_region_variant	MSKCC
CTNNB1	Q108H	Unknown	missense_variant	COH/UCD
CTNNB1	A116V	Unknown	missense_variant	COH/UCD
CTNNB1	Q123*	Unknown	stop_gained	MSKCC
CTNNB1	A152T	Unknown	missense_variant	COH/UCD
CTNNB1	L159P	Unknown	missense_variant	MSKCC
CTNNB1	T257I	Unknown	missense_variant	COH/UCD
CTNNB1	K270_V273del	Unknown	inframe_deletion	MSKCC
CTNNB1	F293Y	Unknown	missense_variant	COH/UCD
CTNNB1	I303F	Unknown	missense_variant	COH/UCD
CTNNB1	E334K	Unknown	missense_variant	COH/UCD
CTNNB1	K335I	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
CTNNB1	W383R	Likely Oncogenic	missense_variant	MSKCC
CTNNB1	D412H	Unknown	missense_variant	MSKCC
CTNNB1	G422V	Unknown	missense_variant	MSKCC
CTNNB1	S425fs*11	Unknown	frameshift_variant	COH/UCD
CTNNB1	R469C	Unknown	missense_variant	MSKCC
CTNNB1	Q545K	Unknown	missense_variant	MSKCC
CTNNB1	E567K	Unknown	missense_variant	MSKCC
CTNNB1	R582W	Unknown	missense_variant	MSKCC
CTNNB1	R587Q	Unknown	missense_variant	COH/UCD
CTNNB1	A615E	Unknown	missense_variant	MSKCC
CTNNB1	A622del	Unknown	inframe_deletion	COH/UCD
CTNNB1	R661Q	Unknown	missense_variant	MSKCC
CTNNB1	A728T	Unknown	missense_variant	MSKCC
CTNNB1	M739I	Unknown	missense_variant	COH/UCD
CTNNB1	Q773*	Unknown	stop_gained	MSKCC
CTNNB1	AMP	Unknown	amplification	MSKCC
CTNNB1	HOMDEL	Unknown	gene_loss	MSKCC
CTNNB1	CTNNB1-intragenic	Unknown	rearrangement	MSKCC
CTNNB1	deletion exons 3-4	Unknown	exon_loss	COH/UCD
FBXW7	S7F	Unknown	missense_variant	MSKCC
FBXW7	R14*	Likely Oncogenic	stop_gained	COH/UCD

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FBXW7	T15_G16insL	Likely Neutral	inframe_insertion	MSKCC
FBXW7	N22S	Unknown	missense_variant	COH/UCD
FBXW7	E51*	Likely Oncogenic	stop_gained	MSKCC
FBXW7	F77S	Unknown	missense_variant	COH/UCD
FBXW7	Y86fs*12	Likely Oncogenic	frameshift_variant	COH/UCD
FBXW7	E117*	Likely Oncogenic	stop_gained	MSKCC
FBXW7	M118Efs*8	Likely Oncogenic	frameshift_variant	MSKCC
FBXW7	G184*	Likely Oncogenic	stop_gained	MSKCC
FBXW7	E192A	Unknown	missense_variant	COH/UCD
FBXW7	X195_splice	Likely Oncogenic	splice_region_variant	MSKCC
FBXW7	Q218*	Likely Oncogenic	stop_gained	MSKCC
FBXW7	R224*	Likely Oncogenic	stop_gained	MSKCC
FBXW7	R278*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
FBXW7	S282*	Likely Oncogenic	stop_gained	MSKCC
FBXW7	E287D	Predicted Oncogenic	missense_variant	MSKCC
FBXW7	X287_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC
FBXW7	Y291Lfs*26	Likely Oncogenic	frameshift_variant	MSKCC
FBXW7	V292A	Unknown	missense_variant	COH/UCD
FBXW7	E316*	Likely Oncogenic	stop_gained	MSKCC
FBXW7	X329_splice	Likely Oncogenic	splice_region_variant	MSKCC
FBXW7	R360K	Unknown	missense_variant	COH/UCD
FBXW7	W365*	Likely Oncogenic	stop_gained	MSKCC
FBXW7	R367*	Likely Oncogenic	stop_gained	MSKCC
FBXW7	X374_splice	Likely Oncogenic	splice_region_variant	MSKCC
FBXW7	H382del	Unknown	inframe_deletion	MSKCC
FBXW7	R393*	Likely Oncogenic	stop_gained	COH/UCD
FBXW7	G397D	Unknown	missense_variant	MSKCC
FBXW7	N401del	Unknown	inframe_deletion	MSKCC
FBXW7	X412_splice	Likely Oncogenic	splice_region_variant	COH/UCD; MSKCC
FBXW7	X413_splice	Likely Oncogenic	splice_region_variant	MSKCC
FBXW7	H420D	Unknown	missense_variant	MSKCC
FBXW7	G423V	Likely Oncogenic	missense_variant	MSKCC
FBXW7	G437V	Predicted Oncogenic	missense_variant	MSKCC
FBXW7	R465C	Oncogenic	missense_variant	COH/UCD; MSKCC
FBXW7	R465H	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
FBXW7	R465S	Likely Oncogenic	missense_variant	MSKCC
FBXW7	R473Kfs*4	Likely Oncogenic	frameshift_variant	MSKCC
FBXW7	G477S	Unknown	missense_variant	COH/UCD
FBXW7	S478F	Unknown	missense_variant	MSKCC
FBXW7	R479*	Likely Oncogenic	stop_gained	MSKCC
FBXW7	R479P	Likely Oncogenic	missense_variant	MSKCC
FBXW7	R479Q	Oncogenic	missense_variant	COH/UCD; MSKCC
FBXW7	L497S	Unknown	missense_variant	MSKCC
FBXW7	A503V	Likely Neutral	missense_variant	COH/UCD
FBXW7	R505C	Oncogenic	missense_variant	COH/UCD; MSKCC
FBXW7	R505G	Likely Oncogenic	missense_variant	COH/UCD
FBXW7	R505L	Oncogenic	missense_variant	COH/UCD
FBXW7	A518T	Unknown	missense_variant	MSKCC
FBXW7	Y519D	Unknown	missense_variant	COH/UCD
FBXW7	D520G	Likely Oncogenic	missense_variant	MSKCC
FBXW7	D520N	Likely Oncogenic	missense_variant	MSKCC
FBXW7	Y545C	Likely Oncogenic	missense_variant	COH/UCD; MSKCC
FBXW7	G557V	Unknown	missense_variant	COH/UCD
FBXW7	I563V	Unknown	missense_variant	MSKCC
FBXW7	R564C	Unknown	missense_variant	MSKCC
FBXW7	H580R	Unknown	missense_variant	MSKCC
FBXW7	H580Y	Unknown	missense_variant	COH/UCD
FBXW7	S582L	Predicted Oncogenic	missense_variant	COH/UCD; MSKCC
FBXW7	S582P	Predicted Oncogenic	missense_variant	MSKCC
FBXW7	D591fs*37	Likely Oncogenic	frameshift_variant	COH/UCD
FBXW7	L594F	Unknown	missense_variant	MSKCC
FBXW7	S596F	Unknown	missense_variant	MSKCC
FBXW7	N598H	Unknown	missense_variant	MSKCC
FBXW7	D600E	Unknown	missense_variant	COH/UCD; MSKCC
FBXW7	D600N	Unknown	missense_variant	MSKCC
FBXW7	H623Y	Unknown	missense_variant	MSKCC
FBXW7	T653M	Unknown	missense_variant	COH/UCD
FBXW7	R658*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
FBXW7	E664*	Likely Oncogenic	stop_gained	COH/UCD
FBXW7	W673*	Likely Oncogenic	stop_gained	MSKCC
FBXW7	W673S	Unknown	missense_variant	MSKCC
FBXW7	R674Q	Unknown	missense_variant	MSKCC
FBXW7	A677V	Unknown	missense_variant	COH/UCD
FBXW7	R689W	Likely Oncogenic	missense_variant	MSKCC
FBXW7	HOMDEL	Unknown	gene_loss	MSKCC
RNF43	M1V	Likely Oncogenic	start_loss	COH/UCD
RNF43	W15*	Likely Oncogenic	stop_gained	COH/UCD
RNF43	R27H	Unknown	missense_variant	COH/UCD
RNF43	V31Gfs*9	Likely Oncogenic	frameshift_variant	MSKCC

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RNF43	A46V	Unknown	missense_variant	MSKCC
RNF43	V50Efs*31	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	N62D	Unknown	missense_variant	MSKCC
RNF43	A73F	Unknown	missense_variant	MSKCC
RNF43	Q84*	Likely Oncogenic	stop_gained	MSKCC
RNF43	X84_splice	Likely Oncogenic	splice_region_variant	MSKCC
RNF43	F103Cfs*19	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	R113*	Likely Oncogenic	stop_gained	MSKCC
RNF43	A115Rfs*11	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	R117fs*8	Likely Oncogenic	frameshift_variant	COH/UCD
RNF43	A126V	Unknown	missense_variant	COH/UCD
RNF43	R132*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
RNF43	R145*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
RNF43	R145Q	Unknown	missense_variant	COH/UCD
RNF43	V161fs*6	Likely Oncogenic	frameshift_variant	COH/UCD
RNF43	R185fs*3	Likely Oncogenic	frameshift_variant	COH/UCD
RNF43	A193Gfs*6	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	Y197*	Likely Oncogenic	stop_gained	MSKCC
RNF43	W200Sfs*60	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	F210Lfs*2	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	P229S	Unknown	missense_variant	COH/UCD
RNF43	A244Pfs*175	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	A255fs*4	Likely Oncogenic	frameshift_variant	COH/UCD
RNF43	R286Q	Unknown	missense_variant	MSKCC
RNF43	C290F	Unknown	missense_variant	MSKCC
RNF43	R296H	Unknown	missense_variant	MSKCC
RNF43	D300A	Unknown	missense_variant	MSKCC
RNF43	D300G	Unknown	missense_variant	COH/UCD
RNF43	D300Gfs*120	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	R307W	Unknown	missense_variant	COH/UCD
RNF43	S323fs*120	Likely Oncogenic	frameshift_variant	COH/UCD
RNF43	A356Cfs*87	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	P361Lfs*58	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	P370Hfs*49	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	H388Y	Unknown	missense_variant	COH/UCD
RNF43	H427Y	Unknown	missense_variant	MSKCC
RNF43	R436C	Unknown	missense_variant	MSKCC
RNF43	P441fs*61	Likely Oncogenic	frameshift_variant	COH/UCD
RNF43	P441Lfs*61	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	E453*	Likely Oncogenic	stop_gained	MSKCC
RNF43	V479fs*25	Likely Oncogenic	frameshift_variant	COH/UCD
RNF43	P569S	Unknown	missense_variant	COH/UCD
RNF43	E572D	Unknown	missense_variant	COH/UCD
RNF43	R609W	Unknown	missense_variant	MSKCC
RNF43	V627A	Unknown	missense_variant	COH/UCD
RNF43	G659fs*41	Likely Oncogenic	frameshift_variant	COH/UCD
RNF43	P660fs*41	Likely Oncogenic	frameshift_variant	COH/UCD
RNF43	P660fs*87	Likely Oncogenic	frameshift_variant	COH/UCD
RNF43	P660Sfs*87	Likely Oncogenic	frameshift_variant	MSKCC
RNF43	R668Q	Unknown	missense_variant	MSKCC
RNF43	K708R	Unknown	missense_variant	MSKCC
RNF43	AMP	Unknown	amplification	COH/UCD; MSKCC
RNF43	HOMDEL	Unknown	gene_loss	MSKCC
RNF43	MTMR4-RNF43 fusion	Likely Oncogenic	rearrangement	MSKCC
SOX9	D12fs*240	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	E28*	Likely Oncogenic	stop_gained	MSKCC
SOX9	S33Lfs*219	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	S39C	Unknown	missense_variant	MSKCC
SOX9	K55fs*197	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	E57Gfs*50	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	K61Efs*191	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	P70L	Likely Oncogenic	missense_variant	COH/UCD
SOX9	C72Afs*27	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	I73N	Unknown	missense_variant	COH/UCD
SOX9	G83fs*169	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	Y84D	Unknown	missense_variant	MSKCC
SOX9	K106*	Likely Oncogenic	stop_gained	MSKCC
SOX9	F112fs*36	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	M113T	Unknown	missense_variant	MSKCC
SOX9	A118T	Unknown	missense_variant	COH/UCD; MSKCC
SOX9	A118_A124del	Unknown	inframe_deletion	MSKCC
SOX9	X138_splice	Likely Oncogenic	splice_region_variant	MSKCC
SOX9	K141E	Unknown	missense_variant	MSKCC
SOX9	L142R	Likely Oncogenic	missense_variant	MSKCC
SOX9	W143*	Likely Oncogenic	stop_gained	MSKCC
SOX9	W143Lfs*109	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	R144fs	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	E159Gfs*25	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	K167del	Predicted Oncogenic	inframe_deletion	COH/UCD

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SOX9	D168Efs*84	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	D171fs*81	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	P176R	Unknown	missense_variant	COH/UCD
SOX9	Q186R	Unknown	missense_variant	COH/UCD
SOX9	E190*	Likely Oncogenic	stop_gained	MSKCC
SOX9	E191Rfs*28	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	N201fs*51	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	Q208*	Likely Oncogenic	stop_gained	MSKCC
SOX9	S211fs*8	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	S215Pfs*4	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	S228*	Likely Oncogenic	stop_gained	MSKCC
SOX9	Q230Nfs*23	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	G233Afs*20	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	V245Gfs*9	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	V245Gfs*7	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	Q246*	Likely Oncogenic	stop_gained	COH/UCD
SOX9	K253Efs*43	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	E255Gfs*34	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	R257Afs*23	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	L259*	Likely Oncogenic	stop_gained	MSKCC
SOX9	E261*	Likely Oncogenic	stop_gained	MSKCC
SOX9	G263fs*16	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	G263Afs*16	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	P267fs*12	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	P267Sfs*9	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	I268fs*28	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	F270fs*7	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	V273Gfs*7	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	I275Mfs*4	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	E277D	Unknown	missense_variant	MSKCC
SOX9	L278Pfs*2	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	S279Afs*104	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	D281Gfs*15	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	D290Mfs*93	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	D295G	Unknown	missense_variant	COH/UCD
SOX9	Q296*	Likely Oncogenic	stop_gained	MSKCC
SOX9	Y297*	Likely Oncogenic	stop_gained	MSKCC
SOX9	L298Pfs*86	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	H303fs*273	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	V306fs*77	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	P307fs*271	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	Q312*	Likely Oncogenic	stop_gained	MSKCC
SOX9	Y319*	Likely Oncogenic	stop_gained	COH/UCD
SOX9	I321fs*64	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	H333fs*179+	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	W335*	Likely Oncogenic	stop_gained	MSKCC
SOX9	S337Pfs*46	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	Q339*	Likely Oncogenic	stop_gained	MSKCC
SOX9	Q340*	Likely Oncogenic	stop_gained	MSKCC
SOX9	P346fs*37	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	Q348Hfs*35	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	P354_P356del	Unknown	inframe_deletion	COH/UCD
SOX9	P374fs*9	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	P374Rfs*9	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	Q375Rfs*9	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	Q376Rfs*4	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	L382Gfs*2	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	T384Sfs*2	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	E388*	Likely Oncogenic	stop_gained	MSKCC
SOX9	Q393*	Likely Oncogenic	stop_gained	MSKCC
SOX9	Q393Sfs*10	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	H396Gfs*8	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	H396L	Unknown	missense_variant	MSKCC
SOX9	I397fs*7	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	E400fs*4	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	E400*	Likely Oncogenic	stop_gained	MSKCC
SOX9	S403Efs*175	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	P404Sfs*59	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	H406Sfs*58	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	Y407*	Likely Oncogenic	stop_gained	COH/UCD
SOX9	Q410*	Likely Oncogenic	stop_gained	MSKCC
SOX9	Q412*	Likely Oncogenic	stop_gained	COH/UCD; MSKCC
SOX9	H413Lfs*57	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	I418Mfs*52	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	S421fs*49	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	S421Kfs*157	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	N424fs*47	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	S438*	Likely Oncogenic	stop_gained	COH/UCD
SOX9	Q439fs*32	Likely Oncogenic	frameshift_variant	COH/UCD

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SOX9	Y451*	Likely Oncogenic	stop_gained	MSKCC
SOX9	Y451Lfs*128	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	Y452fs*127	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	Y463fs*8	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	M469lfs*109	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	A472Vfs*51	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	Y477Lfs*101	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	T478fs*33+	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	V486fs*26+	Likely Oncogenic	frameshift_variant	COH/UCD
SOX9	V486Gfs*92	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	H493Pfs*85	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	Q500Hfs*74	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	*510fs*	Likely Oncogenic	frameshift_variant	MSKCC
SOX9	HOMDEL	Oncogenic	gene_loss	COH/UCD; MSKCC
SOX9	AMP	Unknown	amplification	COH/UCD; MSKCC
SOX9	SOX9-intragenic	Oncogenic	rearrangement	MSKCC

Supplementary Table S2. APC mutation distribution in different age groups

APC vs. Age	COH/UCD				MSKCC					
	< 40 years old		> 50 years old		p-value	< 40 years old		> 50 years old		p-value
	n=27		n=228			n=109		n=550		
APC-WT	16	59.3%	58	25.4%	0.000563	33	30.3%	121	22.0%	0.064
APC-MT	11	40.7%	170	74.6%		76	69.7%	429	78.0%	

Supplementary Table S3. Alterations in genes in APC-WT patients with BRAF^{V600E} vs. non-BRAF^{V600E}

Characteristics	COH/UCD					MSKCC									
	Total (%) (N=86)		BRAF ^{V600E} (N=20)		Non-BRAF ^{V600E} (N=66)		p-value	Total (%) (N=216)		BRAF ^{V600E} (N=31)		Non-BRAF ^{V600E} (N=185)		p-value	
KRAS	Mutated	30	34.9%	0	0.0%	30	45.5%	7.80E-05	92	42.6%	0	0.0%	92	49.7%	8.92E-09
	Non-mutated	56	65.1%	20	100.0%	36	54.5%		124	57.4%	31	100.0%	93	50.3%	
NRAS	Mutated	3	3.5%	0	0.0%	3	4.5%	1	1	0.5%	0	0.0%	1	0.5%	1
	Non-mutated	83	96.5%	20	100.0%	63	95.5%		215	99.5%	31	100.0%	184	99.5%	
TP53	Mutated	69	80.2%	17	85.0%	52	78.8%	0.75	169	78.2%	27	87.1%	142	76.8%	0.24
	Non-mutated	17	19.8%	3	15.0%	14	21.2%		47	21.8%	4	12.9%	43	23.2%	
ARID1A	Mutated	3	3.5%	0	0.0%	3	4.5%	1	3	1.4%	0	0.0%	3	1.6%	1
	Non-mutated	83	96.5%	20	100.0%	63	95.5%		213	98.6%	31	100.0%	182	98.4%	
CTNNB1	Mutated	4	4.7%	0	0.0%	4	6.1%	0.57	8	3.7%	1	3.2%	7	3.8%	1
	Non-mutated	82	95.3%	20	100.0%	62	93.9%		208	96.3%	30	96.8%	178	96.2%	
FBXW7	Mutated	7	8.1%	0	0.0%	7	10.6%	0.19	7	3.2%	1	3.2%	6	3.2%	1
	Non-mutated	79	91.9%	20	100.0%	59	89.4%		209	96.8%	30	96.8%	179	96.8%	
RNF43	Mutated	6	7.0%	4	20.0%	2	3.0%	0.02	21	9.7%	10	32.3%	11	5.9%	1.07E-04
	Non-mutated	80	93.0%	16	80.0%	64	97.0%		195	90.3%	21	67.7%	174	94.1%	
SOX9	Mutated	2	2.3%	0	0.0%	2	3.0%	1	10	4.6%	1	3.2%	9	4.9%	1
	Non-mutated	84	97.7%	20	100.0%	64	97.0%		206	95.4%	30	96.8%	176	95.1%	