

## Mutations in HT-29

HT29_LARGE_INTESTINE													
Gene	Protein Change	Chr	Start	End	NCBI Build	Variant Classification	Variant Type	Reference Allele	Tumor Allele 1	dbSNP ID	Annotation Transcript	Other Transcripts	Mutation Assessor
<a href="#">ACACA</a>		17	35766564	35766564	37	5'UTR	Del	A	-		uc002hno.2	ACACA_uc002hnn....	
<a href="#">ACACB</a>	p.T1536M	12	109675130	109675130	37	Missense_Mutation	SNP	C	T		uc001tob.2	ACACB_uc001toc....	<a href="#">view</a>
<a href="#">ADAM17</a>		2	9630245	9630245	37	3'UTR	Del	T	-		uc002qzu.2	IAH1_uc010yiz.1...	
<a href="#">ADAM28</a>		8	24211994	24211997	37	3'UTR	Del	CTAT	-	rs10610134	uc003xdy.2	ADAM28_uc011laa...	
<a href="#">ADRBK2</a>	p.S41I	22	26000352	26000352	37	Missense_Mutation	SNP	G	T		uc003abx.3	ADRBK2_uc010gux...	<a href="#">view</a>
<a href="#">AFF4</a>		5	132216568	132216568	37	3'UTR	SNP	G	A		uc003kyd.2	AFF4_uc011cxk.1...	<a href="#">view</a>
<a href="#">AKAP12</a>	p.1531_1532insE	6	151674116	151674117	37	In_Frame_Ins	Ins	-	GAG	rs34737819	uc011eep.1	AKAP12_uc003qoe...	
<a href="#">AKAP9</a>	p.1335_1336insQ	7	91652178	91652179	37	In_Frame_Ins	Ins	-	AAC	rs34756483	uc003ulg.2	AKAP9_uc003ule....	
<a href="#">ALPK2</a>	p.EDTST1006del	18	56204388	56204402	37	In_Frame_Del	Del	CAGT...	-	rs44017;rs11762	uc002lhj.3	ALPK2_uc002lhk....	
<a href="#">APC</a>	p.E1554fs	5	112175951	112175952	37	Frame_Shift_Ins	Ins	-	A		uc010jby.2	APC_uc011cvt.1_...	
<a href="#">APC</a>	p.E853*	5	112173848	112173848	37	Nonsense_Mutation	SNP	G	T		uc010jby.2	APC_uc011cvt.1_...	<a href="#">view</a>
<a href="#">ARHGEF7</a>	p.K22T	13	111767938	111767938	37	Missense_Mutation	SNP	A	C		uc001vrs.2	ARHGEF7_uc001vr...	<a href="#">view</a>
<a href="#">ASTN1</a>	p.A24T	1	177133743	177133743	37	Missense_Mutation	SNP	C	T		uc001glc.2	ASTN1_uc001glb....	<a href="#">view</a>
<a href="#">AXL</a>	p.T112M	19	41727077	41727077	37	Missense_Mutation	SNP	C	T	rs35202236	uc010ehj.2	CYP2F1_uc010xvw...	<a href="#">view</a>
<a href="#">BCR</a>		22	23631813	23631814	37	Intron	Ins	-	C	rs66503844	uc002zww.2	BCR_uc002zwx.2_...	
<a href="#">BRAF</a>	p.V600E	7	140453136	140453136	37	Missense_Mutation	SNP	A	T	rs113488022	uc003vvc.3		<a href="#">view</a>
<a href="#">BRAF</a>	p.T119S	7	140534557	140534557	37	Missense_Mutation	SNP	G	C		uc003vvc.3		<a href="#">view</a>
<a href="#">BRD3</a>	p.P149A	9	136916738	136916738	37	Missense_Mutation	SNP	G	C		uc004cew.2	BRD3_uc004cex.2...	<a href="#">view</a>
<a href="#">BRSK2</a>	p.P323L	11	1466541	1466541	37	Missense_Mutation	SNP	C	T		uc001itm.2	BRSK2_uc009ycv....	<a href="#">view</a>
<a href="#">CABC1</a>		1	227171585	227171585	37	Intron	Del	T	-		uc001hqm.1	CABC1_uc001hqn....	
<a href="#">CACNB2</a>		10	18828721	18828722	37	3'UTR	Ins	-	AA	rs3841459	uc001ipr.2	CACNB2_uc009xjz...	
<a href="#">CDC42BPB</a>	p.Q301*	14	103447349	103447350	37	Nonsense_Mutation	DNP	GG	AA		uc001ymi.1		
<a href="#">CDK11B</a>		1	1654066	1654068	37	Intron	Del	GCG	-		uc001agv.1	CDK11B_uc001aha...	
<a href="#">CDK18</a>		1	205495890	205495891	37	Intron	Del	CT	-		uc001hcr.2	CDK18_uc010pri....	
<a href="#">CDKL5</a>	p.P295H	X	18616640	18616640	37	Missense_Mutation	SNP	C	A		uc004cym.2	CDKL5_uc004cyn....	<a href="#">view</a>
<a href="#">CHD1</a>	p.P1684del	5	98192165	98192167	37	In_Frame_Del	Del	AGG	-	rs67787;rs6174	uc003knf.2	CHD1_uc010jbn.2...	
<a href="#">CHD9</a>	p.Q288*	16	53190863	53190863	37	Nonsense_Mutation	SNP	C	T		uc002ehb.2	CHD9_uc002egy.2...	<a href="#">view</a>
<a href="#">CHIC2</a>		4	54876132	54876132	37	3'UTR	Del	C	-	rs4437313	uc003haj.1	PDGFRA_uc003haa...	
<a href="#">CHRNA3</a>		15	78888783	78888783	37	3'UTR	Del	T	-		uc002bec.2	CHRNA3_uc002bea...	
<a href="#">CHUK</a>	p.I619T	10	101953859	101953859	37	Missense_Mutation	SNP	A	G		uc001kqp.2		<a href="#">view</a>
<a href="#">CLTCL1</a>	p.V1201_splice	22	19189003	19189004	37	Splice_Site_Ins	Ins	-	C	rs11386977	uc002zpb.2	CLTCL1_uc011agv...	
<a href="#">CREB3L2</a>	p.T100del	7	137612914	137612916	37	In_Frame_Del	Del	TGG	-		uc003vtw.2	CREB3L2_uc003vt...	
<a href="#">CTDSPL</a>	p.A92T	3	38006068	38006068	37	Missense_Mutation	SNP	G	A		uc003chg.2	CTDSPL_uc003chh...	<a href="#">view</a>
<a href="#">CYB5R4</a>	p.D371H	6	84649777	84649777	37	Missense_Mutation	SNP	G	C		uc003pkf.2		<a href="#">view</a>
<a href="#">CYP2B6</a>	p.P167A	19	41512824	41512824	37	Missense_Mutation	SNP	C	G	rs3826711	uc002opr.1	CYP2A7_uc002opo...	<a href="#">view</a>
<a href="#">DYRK3</a>	p.R540W	1	206822161	206822161	37	Missense_Mutation	SNP	C	T		uc001hej.2	DYRK3_uc001hek....	<a href="#">view</a>
<a href="#">E2F1</a>	p.R166H	20	32267636	32267636	37	Missense_Mutation	SNP	C	T		uc002wzu.3		<a href="#">view</a>
<a href="#">EDN1</a>		6	12290729	12290729	37	5'UTR	Del	A	-		uc003nae.3	EDN1_uc010jpb.2...	
<a href="#">EDN1</a>		6	12296150	12296151	37	Intron	Ins	-	T	rs66570617	uc003nae.3	EDN1_uc003nad.2...	

<a href="#">EDNRB</a>	p.R216*	13	78492312	78492312	37	Nonsense_Mutation	SNP	G	A		uc001vqp.1	EDNRB_uc001vqk....	<a href="#">view</a>
<a href="#">EP300</a>		22	41574970	41574972	37	3'UTR	Del	GTA	-	rs76489032	uc003azl.3		
<a href="#">EPHA2</a>	p.E911K	1	16456023	16456023	37	Missense_Mutation	SNP	C	T		uc001aya.1		<a href="#">view</a>
<a href="#">EPHA8</a>	p.W545*	1	22921753	22921753	37	Nonsense_Mutation	SNP	G	A		uc001bfk.1		<a href="#">view</a>
<a href="#">EPHB4</a>	p.T775M	7	100404997	100404997	37	Missense_Mutation	SNP	G	A		uc003uwn.1	EPHB4_uc003uwm....	<a href="#">view</a>
<a href="#">ERG</a>		21	39772387	39772387	37	Intron	SNP	T	C		uc010gnw.2	ERG_uc002yxa.2_...	<a href="#">view</a>
<a href="#">ETV1</a>		7	14028708	14028708	37	5'UTR	Del	A	-	rs77190713	uc011jxq.1	ETV1_uc011jxn.1...	
<a href="#">ETV6</a>	p.R396G	12	12038893	12038893	37	Missense_Mutation	SNP	A	G		uc001qzz.2	ETV6_uc001raa.1...	<a href="#">view</a>
<a href="#">FANCM</a>	p.Q1333fs	14	45645955	45645955	37	Frame_Shift_Del	Del	A	-		uc001wwd.3	FANCM_uc010anf....	
<a href="#">FGFR10P</a>		6	167453519	167453520	37	3'UTR	Ins	-	T	rs115519488	uc003qvj.2	CCR6_uc003qvl.2...	
<a href="#">FGFR3</a>		4	1809128	1809129	37	3'UTR	Del	GT	-		uc003gdu.2	FGFR3_uc003gdr....	
<a href="#">FLI1</a>		11	128638217	128638217	37	Intron	Del	G	-		uc010sbu.1	FLI1_uc010sbt.1...	
<a href="#">FMN2</a>	p.PGAGIPPPPL1096de	1	240371023	240371055	37	In_Frame_Del	Del	CCCGG...	-		uc010pye.1	FMN2_uc010pyd.1...	
<a href="#">FN1</a>		2	216244182	216244185	37	Intron	Del	GTAC	-		uc002vfa.2	FN1_uc002vfb.2_...	
<a href="#">GHR</a>	p.D144N	5	42695182	42695182	37	Missense_Mutation	SNP	G	A		uc003jmt.2	GHR_uc011cpq.1_...	<a href="#">view</a>
<a href="#">GOLGA5</a>	p.D289N	14	93275737	93275737	37	Missense_Mutation	SNP	G	A		uc001yaz.1		<a href="#">view</a>
<a href="#">GOLGA5</a>		14	93305991	93305991	37	3'UTR	SNP	A	G		uc001yaz.1	GOLGA5_uc001yba...	<a href="#">view</a>
<a href="#">GRB2</a>		17	73389763	73389763	37	5'UTR	SNP	C	T		uc002jnx.3	GRB2_uc002jny.3...	<a href="#">view</a>
<a href="#">GRIA3</a>		X	122318386	122318387	37	Splice_Site_Ins	Ins	-	G	rs66632982	uc004etq.3	GRIA3_uc004etr....	
<a href="#">HIPK4</a>	p.S406R	19	40886680	40886680	37	Missense_Mutation	SNP	A	C	rs56094851	uc002onp.2		<a href="#">view</a>
<a href="#">HNF1A</a>		12	121434630	121434631	37	Intron	Ins	-	TCATTCAT	rs75100977	uc010szn.1	HNF1A_uc001tze....	
<a href="#">HOXD10</a>	p.A21V	2	176981623	176981623	37	Missense_Mutation	SNP	C	T		uc002ukj.2		<a href="#">view</a>
<a href="#">HSP90AA1</a>	p.E390del	14	102551195	102551197	37	In_Frame_Del	Del	TTC	-		uc001ykv.3	HSP90AA1_uc001y...	
<a href="#">HSPB1</a>	p.D93N	7	75932306	75932306	37	Missense_Mutation	SNP	G	A		uc003uew.2	HSPB1_uc010ldj....	<a href="#">view</a>
<a href="#">IL3</a>		5	131396399	131396399	37	5'UTR	SNP	C	T		uc003kwe.1		<a href="#">view</a>
<a href="#">ILK</a>		11	6630029	6630029	37	Intron	Del	C	-		uc001mee.2	ILK_uc001mef.2_...	
<a href="#">ISG15</a>		1	948846	948847	37	5'UTR	Ins	-	A	rs33916361	uc001acj.3		
<a href="#">ITGA7</a>	p.R351H	12	56092319	56092319	37	Missense_Mutation	SNP	C	T		uc001shh.2	ITGA7_uc001shg....	<a href="#">view</a>
<a href="#">ITPR2</a>	p.R470_splice	12	26834804	26834805	37	Splice_Site_Ins	Ins	-	ACTC	696203;rs5919	uc001rhg.2		
<a href="#">KLK7</a>		19	51480672	51480675	37	3'UTR	Del	GGTT	-		uc002puo.2	KLK7_uc002pup.2...	
<a href="#">LRRC7</a>	p.E471K	1	70486792	70486792	37	Missense_Mutation	SNP	G	A		uc001dep.2	LRRC7_uc009wbg....	<a href="#">view</a>
<a href="#">MAF</a>		16	79628325	79628325	37	3'UTR	Del	A	-		uc002ffm.2	MAF_uc002ffn.2_...	
<a href="#">MAF</a>		16	79628537	79628537	37	Intron	Del	T	-		uc002ffm.2	MAF_uc002ffn.2_...	
<a href="#">MAML3</a>	p.P623L	4	140810710	140810710	37	Missense_Mutation	SNP	G	A		uc003ihz.1	MAML3_uc011chd....	<a href="#">view</a>
<a href="#">MAML3</a>	p.Q767_splice	4	140651585	140651587	37	Splice_Site_Del	Del	CTG	-		uc003ihz.1	MGST2_uc010ioi....	
<a href="#">MAP2K1</a>		15	66679649	66679650	37	5'UTR	Ins	-	C	rs67229745	uc010bhq.2		
<a href="#">MAPKBP1</a>		15	42111753	42111754	37	Intron	Ins	-	C	rs3034891	uc001zok.3	MAPKBP1_uc001zo...	
<a href="#">MLL3</a>	p.P2415S	7	151877118	151877118	37	Missense_Mutation	SNP	G	A		uc003wla.2	MLL3_uc003wkz.2...	<a href="#">view</a>
<a href="#">MST1R</a>	p.R627_splice	3	49935482	49935482	37	Splice_Site_SNP	SNP	A	G		uc003cxy.3	MST1R_uc011bdd....	<a href="#">view</a>
<a href="#">MTUS2</a>	p.N489K	13	29600272	29600272	37	Missense_Mutation	SNP	C	G		uc001ust.3		<a href="#">view</a>
<a href="#">NCAM1</a>		11	112832307	112832308	37	5'UTR	Ins	-	A	rs117108942	uc009yyq.1	NCAM1_uc001pno....	
<a href="#">NCAM1</a>		11	112832340	112832340	37	5'UTR	Del	C	-		uc009yyq.1	NCAM1_uc001pno....	
<a href="#">NCOA3</a>	p.Q1276del	20	46279837	46279839	37	In_Frame_Del	Del	CAG	-	rs2664555	uc002xtk.2	NCOA3_uc010ght....	

<a href="#">NEK3</a>	p.K313_splice	13	52718050	52718051	37	Splice_Site_Ins	Ins	-	T	rs72514762	uc001vgh.2	NEK3_uc001vvg.2...	
<a href="#">NOTCH4</a>		6	32170465	32170465	37	Intron	Del	G	-		uc003obb.2	NOTCH4_uc003oba...	
<a href="#">NR1H2</a>	p.176_177insQ	19	50881820	50881821	37	In_Frame_Ins	Ins	-	AAC	783852;rs11235	uc010enw.2	NR1H2_uc002prv...	
<a href="#">OMD</a>		9	95177248	95177248	37	3'UTR	SNP	A	G		uc004asd.3	CENPP_uc004arz...	<a href="#">view</a>
<a href="#">PAX3</a>		2	223066017	223066018	37	Intron	Ins	-	C	rs115619343	uc002vmt.1	PAX3_uc002vmy.1...	
<a href="#">PAX3</a>		2	223158653	223158653	37	Intron	Del	T	-	rs112753212	uc002vmt.1	PAX3_uc002vmy.1...	
<a href="#">PAX8</a>	p.G384S	2	113984771	113984771	37	Missense_Mutation	SNP	C	T		uc010yxt.1	PAX8_uc010yxu.1...	<a href="#">view</a>
<a href="#">PGR</a>		11	100933598	100933599	37	Intron	Ins	-	AATGA	rs35148438	uc001pgh.2	PGR_uc001pgg.2_...	
<a href="#">PIK3C2G</a>	p.P129del	12	18435399	18435401	37	In_Frame_Del	Del	CCC	-		uc010sib.1	PIK3C2G_uc001rd...	
<a href="#">PIK3CA</a>	p.P449T	3	178928067	178928067	37	Missense_Mutation	SNP	C	A		uc003fjk.2		<a href="#">view</a>
<a href="#">PNCK</a>		X	152938410	152938411	37	Intron	Del	AC	-		uc011myu.1	PNCK_uc011myt.1...	
<a href="#">POU2AF1</a>	p.S66F	11	111228429	111228429	37	Missense_Mutation	SNP	G	A		uc001plg.3		<a href="#">view</a>
<a href="#">PPM1E</a>	p.43_44insEP	17	56833457	56833458	37	In_Frame_Ins	Ins	-	GAACCC	rs74256772	uc002iwx.2	PPM1E_uc010ddd...	
<a href="#">PRDM16</a>	p.L151V	1	3301728	3301728	37	Missense_Mutation	SNP	C	G		uc001akf.2	PRDM16_uc001akc...	<a href="#">view</a>
<a href="#">PRKCA</a>		17	64298959	64298960	37	5'UTR	Ins	-	G	rs71160558	uc002jfp.1	PRKCA_uc002jfo...	
<a href="#">PRKDC</a>	p.L1244fs	8	48805816	48805817	37	Frame_Shift_Ins	Ins	-	G	rs67588121	uc003xqi.2	PRKDC_uc003xqj...	
<a href="#">PRKG1</a>		10	53227690	53227690	37	Intron	SNP	A	G		uc001jjo.2	PRKG1_uc001jjm...	<a href="#">view</a>
<a href="#">PXK</a>	p.A369V	3	58385029	58385029	37	Missense_Mutation	SNP	C	T		uc003djz.1	PXK_uc003djx.1_...	<a href="#">view</a>

