

Data Sheet

Product Name: CancerSeq AMS Paraffin Tissue Curl

Catalog No.: T2235152-AC

Lot No.: C202164

Species: Human Mouse Rat Monkey (Rh) Guinea Pig Porcine
 Bovine Hamster Dog Monkey (Cy) Rabbit Plant

Tissue Type: Normal Adult Fetal Tumor Disease Cell line

Tissue Name: Lung

Donor Information:

Male: 59 year(s) old
Female: _____ year(s) old

Pathological Diagnosis: non-keratinizing squamous cell cancer

Tumor Size: N/A

Location: lung

Components:

1. 5 curls per package
2. Certificate of Analysis

FOR IN VITRO RESEARCH USE ONLY

APPROVED BY: _____



35 Genes Targeted

AKT1	FGFR2	MAP2K1
ALK	FGFR3	MAP2K2
AR	GNA11	MET
BRAF	GNAQ	MTOR
CDK4	HRAS	NRAS
CTNNB1	IDH1	PDGFRA
DDR2	IDH2	PIK3CA
EGFR	JAK1	RAF1
ERBB2	JAK2	RET
ERBB3	JAK3	ROS1
ERBB4	KIT	SMO
ESR1	KRAS	

Details of Variants

Column Header	Definition
Gene ID	The Gene symbol for the gene located at this position
Chrom	The chromosome where the target region is located
Position	The genomic position of the variant in the build of the genome database
Ref	The reference allele of the variation
Variant	The alternate allele of the variation
Allele Call	The type of variation, either heterozygous or homozygous
Frequency	The percentage of reads for the sample that includes the variant
Quality	The quality score of the variant
Type	The variant type, which can be SNP, MNP, Ins, Del, and Complex
Allele Source	Listed as Hotspot for alleles found within the hotspots sequencing file and Novel for all other alleles
Coverage	The number of reads that cover the region
Allele Name	The allele name that is defined within the hotspots sequencing file (if Novel allele, then there is no name)

C202164

Gene ID	Chrom	Position	Ref	Variant	Allele Call	Frequency	Quality	Type	Allele Source	Coverage	Allele Name
MTOR	chr1	11188024	C	T	Heterozygous	14.5	144	SNP	Novel	214	---
MTOR	chr1	11188048	G	A	Heterozygous	5.5	24	SNP	Novel	219	---
MTOR	chr1	11188049	G	A	Heterozygous	11	90	SNP	Novel	219	---
MTOR	chr1	11188050	C	T	Heterozygous	4.1	13	SNP	Novel	219	---
MTOR	chr1	11188052	C	T	Heterozygous	4.1	13	SNP	Novel	217	---
MTOR	chr1	11188054	G	A	Heterozygous	5.4	23	SNP	Novel	221	---
MTOR	chr1	11188073	C	T	Heterozygous	4.1	13	SNP	Novel	218	---
MTOR	chr1	11188159	C	A	Heterozygous	18.6	50	SNP	Novel	43	---
MTOR	chr1	11188171	G	A	Heterozygous	25.6	80	SNP	Novel	43	---
MTOR	chr1	11188228	G	A	Heterozygous	28.6	109	SNP	Novel	42	---
MTOR	chr1	11217208	C	T	Heterozygous	10.2	50	SNP	Novel	127	---
MTOR	chr1	11217283	C	T	Heterozygous	6.6	28	SNP	Novel	151	---
JAK1	chr1	65310492	G	A	Heterozygous	51.5	163	SNP	Novel	33	---
JAK1	chr1	65311177	G	A	Heterozygous	6	74	SNP	Novel	771	---
JAK1	chr1	65311210	C	T	Heterozygous	3.2	11	SNP	Novel	774	---
JAK1	chr1	65311212	C	T	Heterozygous	3.7	19	SNP	Novel	774	---
JAK1	chr1	65311214	G	C	Heterozygous	6	77	SNP	Novel	777	---
NRAS	chr1	115252199	C	T	Heterozygous	21.4	92	SNP	Novel	70	---
NRAS	chr1	115252206	G	A	Heterozygous	22.9	101	SNP	Novel	70	---
NRAS	chr1	115252285	C	T	Heterozygous	18.6	75	SNP	Novel	70	---
NRAS	chr1	115256508	C	T	Heterozygous	5.7	34	SNP	Novel	335	---
NRAS	chr1	115256515	C	T	Heterozygous	3.9	14	SNP	Novel	335	---
NRAS	chr1	115256517	C	T	Heterozygous	3.9	14	SNP	Novel	335	---
NRAS	chr1	115256538	G	A	Heterozygous	3.6	11	SNP	Novel	336	---
NRAS	chr1	115256555	C	T	Heterozygous	3.9	14	SNP	Novel	335	---
NRAS	chr1	115256581	C	T	Heterozygous	7.2	56	SNP	Novel	332	---
NRAS	chr1	115258691	C	T	Heterozygous	6.9	34	SNP	Novel	203	---
NRAS	chr1	115258730	C	T	Heterozygous	12.3	105	SNP	Novel	204	---
NRAS	chr1	115258751	C	T	Heterozygous	7.5	42	SNP	Novel	200	---
NRAS	chr1	115258757	C	T	Heterozygous	5.1	19	SNP	Novel	198	---
NRAS	chr1	115258758	C	T	Heterozygous	12.1	100	SNP	Novel	198	---
ALK	chr2	29416353	C	T	Heterozygous	48.8	232	SNP	Novel	41	---
ALK	chr2	29416362	C	T	Heterozygous	36.4	168	SNP	Novel	44	---
ALK	chr2	29416366	G	C	Heterozygous	54.2	285	SNP	Novel	48	---
ALK	chr2	29416381	C	T	Heterozygous	6	13	SNP	Novel	50	---

ALK	chr2	29416560	C	T	Heterozygous	37	326	SNP	Novel	108	---
ALK	chr2	29416572	T	C	Homozygous	100	1660	SNP	Novel	110	---
ALK	chr2	29420401	G	A	Heterozygous	9.5	94	SNP	Novel	305	---
ALK	chr2	29420419	G	A	Heterozygous	9.2	87	SNP	Novel	304	---
ALK	chr2	29432672	C	T	Heterozygous	4.3	22	SNP	Novel	460	---
ALK	chr2	29436932	G	A	Heterozygous	37.7	185	SNP	Novel	61	---
ALK	chr2	29436935	A	G	Heterozygous	4.9	11	SNP	Novel	61	---
ALK	chr2	29436950	G	A	Heterozygous	21	80	SNP	Novel	62	---
ALK	chr2	29443602	C	T	Heterozygous	38.2	107	SNP	Novel	34	---
IDH1	chr2	209113135	C	T	Heterozygous	12.4	96	SNP	Novel	186	---
IDH1	chr2	209113142	C	T	Heterozygous	12.4	96	SNP	Novel	186	---
IDH1	chr2	209113176	C	T	Heterozygous	12.4	96	SNP	Novel	186	---
IDH1	chr2	209113181	C	T	Heterozygous	12.4	96	SNP	Novel	186	---
ERBB4	chr2	212488784	G	A	Heterozygous	13.2	115	SNP	Novel	204	---
RAF1	chr3	12632399	C	T	Heterozygous	11.8	89	SNP	Novel	187	---
RAF1	chr3	12645658	G	A	Heterozygous	3.7	19	SNP	Novel	776	---
RAF1	chr3	12645692	G	A	Heterozygous	3.5	15	SNP	Novel	776	---
CTNNB1	chr3	41266034	G	A	Heterozygous	68.2	148	SNP	Novel	22	---
PIK3CA	chr3	178921564	G	A	Heterozygous	75	237	SNP	Novel	28	---
PIK3CA	chr3	178927948	G	A	Heterozygous	44	88	SNP	Novel	25	---
PIK3CA	chr3	178927950	G	A	Heterozygous	44	88	SNP	Novel	25	---
PIK3CA	chr3	178928141	G	A	Heterozygous	8.3	29	SNP	Novel	96	---
FGFR3	chr4	1797719	C	T	Heterozygous	3.3	10	SNP	Novel	509	---
FGFR3	chr4	1797741	T	C	Heterozygous	38.3	1664	SNP	Novel	496	---
FGFR3	chr4	1797744	C	T	Heterozygous	3.6	13	SNP	Novel	496	---
FGFR3	chr4	1797746	C	T	Heterozygous	3.5	13	SNP	Novel	491	---
FGFR3	chr4	1801148	C	T	Heterozygous	25.7	128	SNP	Novel	74	---
FGFR3	chr4	1801198	C	T	Heterozygous	5.3	13	SNP	Novel	76	---
FGFR3	chr4	1801219	C	T	Heterozygous	12.1	39	SNP	Novel	66	---
FGFR3	chr4	1803557	C	T	Heterozygous	6.7	209	SNP	Novel	690	---
FGFR3	chr4	1803561	G	A	Heterozygous	4.6	33	SNP	Novel	701	---
FGFR3	chr4	1803576	C	T	Heterozygous	6.8	95	SNP	Novel	707	---
FGFR3	chr4	1803633	G	A	Heterozygous	4	22	SNP	Novel	707	---
FGFR3	chr4	1803642	C	T	Heterozygous	4.3	27	SNP	Novel	703	---
FGFR3	chr4	1805807	G	A	Heterozygous	5.9	32	SNP	Novel	273	---
FGFR3	chr4	1805811	C	T	Heterozygous	5.5	28	SNP	Novel	273	---
FGFR3	chr4	1805870	C	T	Heterozygous	6.6	39	SNP	Novel	273	---
FGFR3	chr4	1805872	C	T	Heterozygous	6.6	41	SNP	Novel	273	---

FGFR3	chr4	1805881	C	T	Heterozygous	6.6	41	SNP	Novel	272	---
FGFR3	chr4	1806131	T	C	Heterozygous	4	13	SNP	Novel	277	---
FGFR3	chr4	1806134	C	T	Heterozygous	6.9	45	SNP	Novel	277	---
FGFR3	chr4	1806151	G	A	Heterozygous	6.5	39	SNP	Novel	279	---
FGFR3	chr4	1806155	G	A	Heterozygous	4.3	16	SNP	Novel	280	---
FGFR3	chr4	1806163	G	A	Heterozygous	6.4	39	SNP	Novel	281	---
FGFR3	chr4	1806172	C	T	Heterozygous	8.2	65	SNP	Novel	279	---
FGFR3	chr4	1807851	G	A	Heterozygous	3	12	SNP	Novel	463	---
FGFR3	chr4	1807860	GG	AA	Heterozygous	4	18	MNP	Novel	475	---
FGFR3	chr4	1807888	G	A	Heterozygous	3.8	15	SNP	Novel	478	---
FGFR3	chr4	1807894	G	A	Homozygous	100	7580	SNP	Novel	477	---
FGFR3	chr4	1807901	G	A	Heterozygous	5.5	40	SNP	Novel	476	---
FGFR3	chr4	1807903	G	A	Heterozygous	3.4	10	SNP	Novel	476	---
FGFR3	chr4	1807909	G	A	Heterozygous	5.3	37	SNP	Novel	471	---
FGFR3	chr4	1807924	G	A	Heterozygous	4.5	25	SNP	Novel	449	---
FGFR3	chr4	1807929	G	A	Heterozygous	5.7	43	SNP	Novel	457	---
FGFR3	chr4	1808314	G	A	Heterozygous	3.2	10	SNP	Novel	721	---
FGFR3	chr4	1808321	C	T	Heterozygous	4.9	43	SNP	Novel	754	---
FGFR3	chr4	1808338	C	T	Heterozygous	4.1	24	SNP	Novel	765	---
FGFR3	chr4	1808342	G	A	Heterozygous	4	24	SNP	Novel	766	---
FGFR3	chr4	1808346	G	A	Heterozygous	5.7	67	SNP	Novel	767	---
FGFR3	chr4	1808377	G	A	Heterozygous	3.2	11	SNP	Novel	771	---
FGFR3	chr4	1808390	C	T	Heterozygous	3.2	11	SNP	Novel	770	---
FGFR3	chr4	1809273	G	A	Heterozygous	7.1	24	SNP	Novel	84	---
FGFR3	chr4	1809469	C	T	Heterozygous	19.6	59	SNP	Novel	46	---
FGFR3	chr4	1809554	C	T	Heterozygous	37.8	153	SNP	Novel	45	---
PDGFRA	chr4	55097720	C	T	Heterozygous	11.1	98	SNP	Novel	234	---
PDGFRA	chr4	55097750	C	T	Heterozygous	10.5	90	SNP	Novel	237	---
PDGFRA	chr4	55097824	A	G	Heterozygous	4.4	15	SNP	Novel	225	---
PDGFRA	chr4	55097832	C	T	Heterozygous	7.5	48	SNP	Novel	239	---
PDGFRA	chr4	55097835	G	C	Homozygous	100	3782	SNP	Novel	238	---
PDGFRA	chr4	55104321	C	T	Heterozygous	14	40	SNP	Novel	50	---
PDGFRA	chr4	55104363	C	T	Heterozygous	14	40	SNP	Novel	50	---
PDGFRA	chr4	55126191	C	T	Heterozygous	6.3	26	SNP	Novel	158	---
PDGFRA	chr4	55126193	G	A	Heterozygous	5.7	21	SNP	Novel	158	---
PDGFRA	chr4	55126194	C	T	Heterozygous	8.2	42	SNP	Novel	158	---
PDGFRA	chr4	55126218	G	A	Heterozygous	11.1	79	SNP	Novel	153	---
PDGFRA	chr4	55126221	G	A	Heterozygous	6.4	26	SNP	Novel	157	---

PDGFRA	chr4	55133671	G	A	Heterozygous	29	142	SNP	Novel	69	---
PDGFRA	chr4	55133726	T	G	Heterozygous	98.5	943	SNP	Novel	67	---
PDGFRA	chr4	55133733	G	A	Heterozygous	30.8	147	SNP	Novel	65	---
PDGFRA	chr4	55141055	A	G	Homozygous	100	273	SNP	Novel	21	---
PDGFRA	chr4	55144104	C	T	Heterozygous	5.1	31	SNP	Novel	410	---
PDGFRA	chr4	55144115	G	A	Heterozygous	8	86	SNP	Novel	412	---
PDGFRA	chr4	55144124	G	A	Heterozygous	7.7	203	SNP	Novel	403	---
PDGFRA	chr4	55144171	C	T	Heterozygous	5	30	SNP	Novel	419	---
PDGFRA	chr4	55144188	C	T	Heterozygous	6.7	59	SNP	Novel	417	---
PDGFRA	chr4	55152040	C	T	Homozygous	100	393	SNP	Novel	28	---
PDGFRA	chr4	55152063	T	C	Heterozygous	10.7	14	SNP	Novel	28	---
PDGFRA	chr4	55152149	C	T	Homozygous	100	393	SNP	Novel	28	---
PDGFRA	chr4	55161876	C	T	Heterozygous	10.8	86	SNP	Novel	212	---
PDGFRA	chr4	55161889	C	T	Heterozygous	5.2	21	SNP	Novel	212	---
KIT	chr4	55566266	G	A	Heterozygous	57.1	319	SNP	Novel	49	---
KIT	chr4	55589738	G	A	Heterozygous	5.8	41	SNP	Novel	396	---
KIT	chr4	55589766	G	A	Heterozygous	7.7	79	SNP	Novel	418	---
KIT	chr4	55589772	C	A	Heterozygous	4.5	10	SNP	Novel	419	---
KIT	chr4	55589782	G	A	Heterozygous	6.9	63	SNP	Novel	420	---
KIT	chr4	55589784	G	A	Heterozygous	8.3	94	SNP	Novel	420	---
KIT	chr4	55589809	G	A	Heterozygous	4.6	23	SNP	Novel	417	---
KIT	chr4	55593431	G	A	Heterozygous	17.3	102	SNP	Novel	104	---
KIT	chr4	55593472	G	A	Heterozygous	10.7	44	SNP	Novel	103	---
KIT	chr4	55593481	A	G	Heterozygous	58.3	623	SNP	Novel	103	---
KIT	chr4	55593659	A	G	Heterozygous	5.7	10	SNP	Novel	87	---
KIT	chr4	55594247	C	T	Heterozygous	31.7	201	SNP	Novel	82	---
KIT	chr4	55594269	GG	AA	Heterozygous	14.8	61	MNP	Novel	81	---
KIT	chr4	55599254	G	A	Heterozygous	37	75	SNP	Novel	27	---
ROS1	chr6	117638334	G	A	Heterozygous	62.5	144	SNP	Novel	24	---
ROS1	chr6	117641120	G	A	Heterozygous	12.1	41	SNP	Novel	99	---
ESR1	chr6	152419985	G	A	Heterozygous	27.6	232	SNP	Novel	98	---
ESR1	chr6	152420020	C	T	Heterozygous	19.6	124	SNP	Novel	107	---
EGFR	chr7	55198961	G	A	Heterozygous	10.5	49	SNP	Novel	114	---
EGFR	chr7	55198974	C	T	Heterozygous	5.2	15	SNP	Novel	116	---
EGFR	chr7	55211118	G	A	Heterozygous	13.9	100	SNP	Novel	151	---
EGFR	chr7	55219921	C	T	Heterozygous	13.8	54	SNP	Novel	80	---
EGFR	chr7	55219924	C	T	Heterozygous	14.6	62	SNP	Novel	82	---
EGFR	chr7	55221869	C	T	Heterozygous	35	163	SNP	Novel	60	---

EGFR	chr7	55221911	G	A	Heterozygous	32.2	142	SNP	Novel	59	---
EGFR	chr7	55232966	G	A	Heterozygous	4.4	30	SNP	Novel	702	---
EGFR	chr7	55233050	G	A	Heterozygous	6.1	68	SNP	Novel	659	---
EGFR	chr7	55241652	C	T	Heterozygous	7.6	45	SNP	Novel	210	---
EGFR	chr7	55241653	C	T	Heterozygous	6.2	30	SNP	Novel	210	---
EGFR	chr7	55241659	C	T	Heterozygous	10.4	80	SNP	Novel	211	---
EGFR	chr7	55241703	G	A	Heterozygous	5.3	22	SNP	Novel	207	---
EGFR	chr7	55241704	C	T	Heterozygous	9.7	69	SNP	Novel	207	---
EGFR	chr7	55241718	G	A	Heterozygous	4.4	14	SNP	Novel	206	---
EGFR	chr7	55249003	C	T	Heterozygous	24.7	102	SNP	Novel	73	---
EGFR	chr7	55249017	C	T	Heterozygous	16.9	56	SNP	Novel	71	---
EGFR	chr7	55259513	G	A	Heterozygous	5.8	13	SNP	Novel	52	---
MET	chr7	116339393	G	A	Heterozygous	22.1	107	SNP	Novel	77	---
MET	chr7	116340252	G	A	Heterozygous	8.3	75	SNP	Novel	326	---
MET	chr7	116340270	G	A	Heterozygous	10	110	SNP	Novel	329	---
MET	chr7	116398765	C	T	Heterozygous	6.5	36	SNP	Novel	248	---
MET	chr7	116398767	G	A	Heterozygous	4	13	SNP	Novel	248	---
MET	chr7	116398784	G	A	Heterozygous	10.1	87	SNP	Novel	248	---
MET	chr7	116398813	G	A	Heterozygous	4.1	13	SNP	Novel	246	---
MET	chr7	116398823	C	T	Heterozygous	3.7	10	SNP	Novel	246	---
MET	chr7	116423466	G	A	Heterozygous	6.6	56	SNP	Novel	411	---
MET	chr7	116434467	C	T	Heterozygous	30.6	84	SNP	Novel	36	---
MET	chr7	116434474	C	T	Heterozygous	38.9	114	SNP	Novel	36	---
SMO	chr7	128845525	C	-	Heterozygous	12	61	DEL	Novel	117	---
SMO	chr7	128845610	C	T	Heterozygous	26.1	202	SNP	Novel	115	---
SMO	chr7	128846388	C	T	Heterozygous	4.9	51	SNP	Novel	910	---
SMO	chr7	128846412	C	T	Heterozygous	3.2	12	SNP	Novel	895	---
SMO	chr7	128849111	C	T	Heterozygous	16	129	SNP	Novel	156	---
SMO	chr7	128849197	C	T	Heterozygous	18.5	166	SNP	Novel	162	---
SMO	chr7	128849224	C	T	Heterozygous	5.9	22	SNP	Novel	153	---
SMO	chr7	128850286	G	A	Heterozygous	11.8	119	SNP	Novel	255	---
BRAF	chr7	140434425	C	T	Heterozygous	12.1	78	SNP	Novel	149	---
BRAF	chr7	140434475	C	T	Heterozygous	11.8	77	SNP	Novel	152	---
BRAF	chr7	140434485	A	G	Heterozygous	5.6	18	SNP	Novel	144	---
BRAF	chr7	140434494	C	T	Heterozygous	15.8	107	SNP	Novel	133	---
BRAF	chr7	140476703	G	A	Heterozygous	32	54	SNP	Novel	25	---
BRAF	chr7	140476707	C	T	Heterozygous	40	76	SNP	Novel	25	---
BRAF	chr7	140476711	C	T	Heterozygous	40	76	SNP	Novel	25	---

BRAF	chr7	140476718	C	T	Heterozygous	40	76	SNP	Novel	25	---
BRAF	chr7	140476733	C	T	Heterozygous	12	14	SNP	Novel	25	---
BRAF	chr7	140476936	G	A	Heterozygous	51	1877	SNP	Novel	365	---
BRAF	chr7	140481388	C	T	Heterozygous	15.4	85	SNP	Novel	104	---
BRAF	chr7	140481412	C	T	Heterozygous	18.4	89	SNP	Hotspot	103	COSM253328
BRAF	chr7	140481450	G	A	Heterozygous	7.8	28	SNP	Novel	102	---
BRAF	chr7	140482808	C	T	Heterozygous	14.3	33	SNP	Novel	42	---
BRAF	chr7	140494218	G	A	Heterozygous	8.1	50	SNP	Novel	210	---
BRAF	chr7	140494244	G	A	Heterozygous	15.2	155	SNP	Novel	210	---
BRAF	chr7	140494255	G	A	Heterozygous	15.2	155	SNP	Novel	210	---
BRAF	chr7	140494265	G	A	Heterozygous	8.1	50	SNP	Novel	209	---
BRAF	chr7	140500266	G	A	Heterozygous	5.1	50	SNP	Novel	805	---
BRAF	chr7	140500284	G	A	Heterozygous	6	77	SNP	Novel	803	---
BRAF	chr7	140501267	G	A	Heterozygous	3.4	14	SNP	Novel	920	---
BRAF	chr7	140501288	G	A	Heterozygous	5.7	77	SNP	Novel	930	---
BRAF	chr7	140501313	C	T	Heterozygous	3.3	14	SNP	Novel	926	---
BRAF	chr7	140507815	C	T	Heterozygous	6.3	49	SNP	Novel	398	---
BRAF	chr7	140507863	C	T	Heterozygous	6.2	47	SNP	Novel	387	---
GNAQ	chr9	80409440	G	A	Heterozygous	27.3	36	SNP	Novel	22	---
GNAQ	chr9	80409442	G	A	Heterozygous	27.3	36	SNP	Novel	22	---
GNAQ	chr9	80409486	T	C	Heterozygous	22.7	28	SNP	Novel	22	---
GNAQ	chr9	80412479	C	T	Heterozygous	12.1	68	SNP	Novel	132	---
GNAQ	chr9	80412544	C	T	Heterozygous	10	49	SNP	Novel	130	---
RET	chr10	43609089	G	A	Heterozygous	21.7	196	SNP	Novel	143	---
RET	chr10	43609097	G	A	Heterozygous	7	19	SNP	Hotspot	143	COSM980
RET	chr10	43609110	C	T	Heterozygous	6.3	24	SNP	Novel	143	---
RET	chr10	43609120	C	T	Heterozygous	6.3	24	SNP	Novel	143	---
RET	chr10	43609131	G	A	Heterozygous	7.6	33	SNP	Novel	145	---
RET	chr10	43609896	G	A	Heterozygous	17.3	97	SNP	Novel	98	---
RET	chr10	43609931	C	T	Heterozygous	20.2	135	SNP	Novel	114	---
RET	chr10	43609937	G	A	Heterozygous	21.9	153	SNP	Novel	114	---
RET	chr10	43613809	G	A	Heterozygous	8.1	51	SNP	Novel	210	---
RET	chr10	43613813	C	T	Heterozygous	5.7	25	SNP	Novel	210	---
RET	chr10	43613831	C	T	Heterozygous	5.3	21	SNP	Novel	208	---
RET	chr10	43613843	G	T	Heterozygous	54.7	1145	SNP	Novel	203	---
FGFR2	chr10	123247514	C	T	Heterozygous	7.5	22	SNP	Novel	160	---
FGFR2	chr10	123247555	C	T	Heterozygous	5	17	SNP	Novel	159	---
FGFR2	chr10	123274824	C	T	Heterozygous	31.7	141	SNP	Novel	63	---

FGFR2	chr10	123276905	C	T	Heterozygous	8	26	SNP	Novel	87	---
FGFR2	chr10	123279631	G	A	Heterozygous	6.1	20	SNP	Novel	115	---
FGFR2	chr10	123279638	T	C	Heterozygous	7	24	SNP	Novel	114	---
FGFR2	chr10	123279652	G	A	Heterozygous	5.9	19	SNP	Novel	118	---
FGFR2	chr10	123279687	G	A	Heterozygous	12.8	71	SNP	Novel	125	---
FGFR2	chr10	123279692	G	A	Heterozygous	11.3	58	SNP	Novel	124	---
FGFR2	chr10	123279709	G	A	Heterozygous	6.5	23	SNP	Novel	123	---
FGFR2	chr10	123279713	G	A	Heterozygous	18.9	129	SNP	Novel	122	---
FGFR2	chr10	123284104	T	C	Heterozygous	22.2	35	SNP	Novel	27	---
HRAS	chr11	533827	C	T	Heterozygous	15.8	81	SNP	Novel	95	---
HRAS	chr11	533833	C	T	Heterozygous	15.8	79	SNP	Novel	95	---
HRAS	chr11	533926	C	T	Heterozygous	17.9	99	SNP	Novel	95	---
HRAS	chr11	533930	C	T	Heterozygous	24.2	160	SNP	Novel	95	---
HRAS	chr11	534251	G	A	Heterozygous	5.6	47	SNP	Novel	535	---
HRAS	chr11	534260	G	A	Heterozygous	6.3	63	SNP	Novel	536	---
HRAS	chr11	534279	C	T	Heterozygous	9.2	140	SNP	Novel	523	---
HRAS	chr11	534280	C	T	Heterozygous	4.4	24	SNP	Novel	525	---
HRAS	chr11	534295	C	T	Heterozygous	4.9	35	SNP	Novel	465	---
HRAS	chr11	534304	C	T	Heterozygous	9.2	127	SNP	Novel	468	---
KRAS	chr12	25364838	C	T	Heterozygous	52	114	SNP	Novel	25	---
KRAS	chr12	25378562	C	T	Heterozygous	15.5	40	SNP	Hotspot	58	COSM19404
KRAS	chr12	25386061	C	T	Heterozygous	57.1	261	SNP	Novel	42	---
KRAS	chr12	25386063	C	A	Homozygous	100	651	SNP	Novel	42	---
KRAS	chr12	25398241	A	G	Heterozygous	14.8	20	SNP	Novel	27	---
ERBB3	chr12	56477602	C	T	Heterozygous	19.1	108	SNP	Novel	94	---
ERBB3	chr12	56477623	G	A	Heterozygous	13.7	64	SNP	Novel	95	---
ERBB3	chr12	56477642	G	A	Heterozygous	14	65	SNP	Novel	93	---
ERBB3	chr12	56477694	A	T	Heterozygous	86.9	1001	SNP	Novel	84	---
ERBB3	chr12	56478805	C	T	Heterozygous	10.4	93	SNP	Novel	249	---
ERBB3	chr12	56478901	C	T	Heterozygous	10.1	83	SNP	Novel	238	---
ERBB3	chr12	56482292	C	T	Heterozygous	6.9	83	SNP	Novel	597	---
ERBB3	chr12	56482310	C	T	Heterozygous	5.2	42	SNP	Novel	598	---
ERBB3	chr12	56482318	C	T	Heterozygous	8.1	117	SNP	Novel	596	---
ERBB3	chr12	56482321	C	T	Heterozygous	7	89	SNP	Novel	596	---
ERBB3	chr12	56482322	C	T	Heterozygous	4.2	23	SNP	Novel	597	---
ERBB3	chr12	56482331	C	T	Heterozygous	6.7	80	SNP	Novel	596	---
CDK4	chr12	58142135	G	A	Heterozygous	18.8	94	SNP	Novel	85	---
CDK4	chr12	58142155	G	A	Heterozygous	16.2	70	SNP	Novel	80	---

CDK4	chr12	58142258	C	T	Heterozygous	68.2	148	SNP	Novel	22	---
CDK4	chr12	58142896	C	T	Heterozygous	6.6	42	SNP	Novel	290	---
CDK4	chr12	58142909	C	T	Heterozygous	7.5	56	SNP	Novel	294	---
CDK4	chr12	58142922	C	T	Heterozygous	6.8	46	SNP	Novel	293	---
CDK4	chr12	58142945	C	T	Heterozygous	7.4	56	SNP	Novel	296	---
CDK4	chr12	58142959	C	T	Heterozygous	15.4	223	SNP	Novel	299	---
CDK4	chr12	58142961	G	A	Heterozygous	4.7	20	SNP	Novel	299	---
CDK4	chr12	58143314	C	T	Heterozygous	8.3	37	SNP	Novel	132	---
CDK4	chr12	58144896	G	A	Heterozygous	15.4	63	SNP	Novel	78	---
CDK4	chr12	58144929	C	T	Heterozygous	32.1	192	SNP	Novel	78	---
CDK4	chr12	58145964	CC	TT	Heterozygous	4.8	96	MNP	Novel	941	---
CDK4	chr12	58145989	C	T	Heterozygous	3.6	18	SNP	Novel	944	---
CDK4	chr12	58146005	C	T	Heterozygous	4.1	42	SNP	Novel	872	---
CDK4	chr12	58146021	G	A	Heterozygous	3.7	20	SNP	Novel	889	---
MAP2K1	chr15	66727483	G	A	Heterozygous	31.2	73	SNP	Novel	32	---
MAP2K1	chr15	66729131	G	A	Heterozygous	34.2	105	SNP	Novel	38	---
MAP2K1	chr15	66774172	C	T	Heterozygous	43.9	216	SNP	Novel	57	---
MAP2K1	chr15	66774175	C	T	Heterozygous	44.8	227	SNP	Novel	58	---
ERBB2	chr17	37868137	A	C	Heterozygous	5.8	20	SNP	Novel	138	---
ERBB2	chr17	37868227	C	T	Heterozygous	15	104	SNP	Novel	140	---
ERBB2	chr17	37872385	C	T	Heterozygous	8.2	94	SNP	Novel	441	---
ERBB2	chr17	37872394	C	T	Heterozygous	3.5	12	SNP	Novel	427	---
ERBB2	chr17	37872456	CC	TT	Heterozygous	5.4	64	MNP	Novel	333	---
ERBB2	chr17	37879860	G	A	Heterozygous	3.5	25	SNP	Novel	1999	---
ERBB2	chr17	37879905	G	A	Heterozygous	3	12	SNP	Novel	1998	---
ERBB2	chr17	37880221	G	A	Heterozygous	9.8	125	SNP	Novel	398	---
ERBB2	chr17	37880225	G	A	Heterozygous	8.1	86	SNP	Novel	393	---
ERBB2	chr17	37880311	G	A	Heterozygous	6.9	61	SNP	Novel	408	---
ERBB2	chr17	37880321	C	G	Heterozygous	23.3	789	SNP	Novel	532	---
ERBB2	chr17	37880967	C	T	Heterozygous	7.7	212	SNP	Novel	1230	---
ERBB2	chr17	37881373	T	C	Heterozygous	8	87	SNP	Novel	426	---
ERBB2	chr17	37881403	G	A	Heterozygous	4.7	25	SNP	Novel	426	---
ERBB2	chr17	37881411	G	A	Heterozygous	5.4	36	SNP	Novel	427	---
ERBB2	chr17	37881425	G	A	Heterozygous	5.8	43	SNP	Novel	431	---
ERBB2	chr17	37881436	G	A	Heterozygous	10.5	152	SNP	Novel	430	---
ERBB2	chr17	37881444	C	T	Heterozygous	6.7	61	SNP	Novel	430	---
ERBB2	chr17	37881446	G	A	Heterozygous	5.8	44	SNP	Novel	429	---
ERBB2	chr17	37881452	G	A	Heterozygous	5.2	31	SNP	Novel	407	---

ERBB2	chr17	37881539	C	T	Heterozygous	8.4	119	SNP	Novel	535	---
ERBB2	chr17	37881562	C	T	Heterozygous	4.1	20	SNP	Novel	537	---
ERBB2	chr17	37881571	C	T	Heterozygous	4.2	21	SNP	Novel	506	---
ERBB2	chr17	37881598	G	A	Heterozygous	4.9	30	SNP	Novel	471	---
ERBB2	chr17	37881629	C	T	Heterozygous	3.8	14	SNP	Novel	393	---
ERBB2	chr17	37881636	G	A	Heterozygous	4.6	22	SNP	Novel	395	---
ERBB2	chr17	37881638	G	A	Heterozygous	3.8	14	SNP	Novel	395	---
ERBB2	chr17	37881643	G	A	Heterozygous	5.1	30	SNP	Novel	391	---
ERBB2	chr17	37882912	G	A	Heterozygous	4.6	42	SNP	Novel	935	---
ERBB2	chr17	37882921	C	T	Heterozygous	3.5	17	SNP	Novel	931	---
ERBB2	chr17	37882936	C	T	Heterozygous	7.5	151	SNP	Novel	866	---
ERBB2	chr17	37883131	G	A	Heterozygous	8.5	77	SNP	Novel	318	---
ERBB2	chr17	37883182	G	A	Heterozygous	3.5	10	SNP	Novel	344	---
ERBB2	chr17	37883184	C	T	Heterozygous	3.5	10	SNP	Novel	342	---
ERBB2	chr17	37883219	G	A	Heterozygous	9.1	92	SNP	Novel	328	---
ERBB2	chr17	37883243	G	A	Heterozygous	11.5	144	SNP	Novel	339	---
GNA11	chr19	3115036	G	A	Heterozygous	56.9	325	SNP	Novel	58	---
GNA11	chr19	3118883	G	A	Heterozygous	3.5	11	SNP	Novel	433	---
GNA11	chr19	3118893	G	A	Heterozygous	4.9	29	SNP	Novel	448	---
GNA11	chr19	3118899	G	A	Heterozygous	10.5	160	SNP	Novel	449	---
GNA11	chr19	3118901	C	T	Heterozygous	4.9	29	SNP	Novel	450	---
GNA11	chr19	3118908	C	T	Heterozygous	7.8	88	SNP	Novel	449	---
GNA11	chr19	3118910	G	A	Heterozygous	5.1	33	SNP	Novel	449	---
GNA11	chr19	3118921	G	A	Heterozygous	4.2	20	SNP	Novel	452	---
GNA11	chr19	3118925	G	A	Heterozygous	6.6	61	SNP	Novel	453	---
GNA11	chr19	3118929	G	A	Heterozygous	7.3	76	SNP	Novel	453	---
GNA11	chr19	3118934	G	A	Heterozygous	5.1	39	SNP	Novel	448	---
GNA11	chr19	3118949	G	A	Heterozygous	7.5	81	SNP	Novel	455	---
GNA11	chr19	3118952	G	A	Heterozygous	5.7	44	SNP	Novel	453	---
GNA11	chr19	3118964	G	A	Heterozygous	5.7	42	SNP	Novel	440	---
MAP2K2	chr19	4117594	C	T	Heterozygous	27.5	132	SNP	Novel	69	---
MAP2K2	chr19	4117609	C	T	Heterozygous	39.1	225	SNP	Novel	69	---
JAK3	chr19	17948786	C	T	Heterozygous	48	340	SNP	Novel	75	---
JAK3	chr19	17948788	C	T	Heterozygous	25.3	128	SNP	Novel	75	---
JAK3	chr19	17949161	G	A	Heterozygous	4.7	30	SNP	Novel	527	---
AR	chrX	66776191	G	A	Heterozygous	5.2	15	SNP	Novel	116	---
AR	chrX	66799227	G	T	Heterozygous	7.7	14	SNP	Novel	39	---
AR	chrX	66866132	G	A	Heterozygous	48.6	161	SNP	Novel	35	---

AR	chrX	66866205	T	C	Heterozygous	17.1	34	SNP	Novel	35	---
AR	chrX	66906874	C	T	Heterozygous	5.7	26	SNP	Novel	230	---
AR	chrX	66906881	G	A	Heterozygous	4.8	18	SNP	Novel	230	---
AR	chrX	66906906	C	T	Heterozygous	4.4	15	SNP	Novel	229	---
AR	chrX	66917690	G	A	Heterozygous	34.5	74	SNP	Novel	29	---
AR	chrX	66917762	G	A	Heterozygous	63	170	SNP	Novel	27	---
AR	chrX	66938964	G	A	Heterozygous	30.8	126	SNP	Novel	52	---
AR	chrX	66943520	C	T	Heterozygous	8.1	97	SNP	Novel	468	---
AR	chrX	66943560	C	T	Heterozygous	8.1	62	SNP	Novel	480	---
AR	chrX	66943569	C	T	Heterozygous	3.3	31	SNP	Novel	481	---
AR	chrX	66943572	G	A	Heterozygous	5.2	34	SNP	Novel	482	---