

Data Sheet

Product Name: CancerSeq AMS Paraffin Tissue Curl

Catalog No.: T2235152-AC

Lot No.: C202160

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: 60 year(s) old
Female: _____ year(s) old

Pathological Diagnosis: Adenocarcinoma

Tumor Size: diameter 6 cm

Location: right lower lobe

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)

C202160

Gene ID	Chrom	Position	Ref	Variant	Allele Call	Frequency	Quality	Type	Allele Source	Coverage	Allele Name
MTOR	chr1	11174376	G	A	Heterozygous	3.7	12	SNP	Novel	352	---
MTOR	chr1	11174378	C	T	Heterozygous	4.5	21	SNP	Novel	352	---
MTOR	chr1	11174423	G	A	Heterozygous	3.7	12	SNP	Novel	355	---
MTOR	chr1	11174460	C	T	Heterozygous	3.5	10	SNP	Novel	343	---
MTOR	chr1	11184617	C	T	Heterozygous	3.6	14	SNP	Novel	525	---
MTOR	chr1	11188024	C	T	Heterozygous	3.7	16	SNP	Novel	589	---
MTOR	chr1	11188180	G	A	Heterozygous	3.9	12	SNP	Novel	258	---
MTOR	chr1	11188225	G	A	Heterozygous	5.1	24	SNP	Novel	272	---
MTOR	chr1	11188281	G	A	Heterozygous	6.9	43	SNP	Novel	260	---
MTOR	chr1	11189795	C	T	Heterozygous	6	39	SNP	Novel	331	---
MTOR	chr1	11189814	T	C	Heterozygous	4.2	16	SNP	Novel	331	---
MTOR	chr1	11189820	C	T	Heterozygous	6	39	SNP	Novel	331	---
MTOR	chr1	11189837	G	A	Heterozygous	3.6	11	SNP	Novel	331	---
MTOR	chr1	11189859	C	T	Heterozygous	6.1	40	SNP	Novel	326	---
MTOR	chr1	11189875	C	T	Heterozygous	6.1	40	SNP	Novel	326	---
MTOR	chr1	11189895	C	T	Heterozygous	7.7	65	SNP	Novel	323	---
MTOR	chr1	11190833	G	A	Heterozygous	6.8	43	SNP	Novel	176	---
JAK1	chr1	65310489	T	C	Heterozygous	84.5	2272	SNP	Novel	194	---
JAK1	chr1	65310506	C	T	Heterozygous	6.2	28	SNP	Novel	193	---
JAK1	chr1	65310521	C	T	Heterozygous	4.1	12	SNP	Novel	196	---
JAK1	chr1	65310572	C	T	Heterozygous	6.1	28	SNP	Novel	196	---
JAK1	chr1	65312286	G	A	Heterozygous	4.3	18	SNP	Novel	351	---
JAK1	chr1	65312292	C	T	Heterozygous	7.4	63	SNP	Novel	353	---
JAK1	chr1	65312353	C	T	Heterozygous	7.5	66	SNP	Novel	361	---
JAK1	chr1	65312354	G	A	Heterozygous	4.2	17	SNP	Novel	361	---
JAK1	chr1	65312366	C	T	Heterozygous	6.7	52	SNP	Novel	359	---
JAK1	chr1	65312368	C	T	Heterozygous	5.8	38	SNP	Novel	359	---
JAK1	chr1	65312399	G	A	Heterozygous	5.6	34	SNP	Novel	359	---
JAK1	chr1	65312402	G	A	Heterozygous	5.3	31	SNP	Novel	357	---
NRAS	chr1	115252204	C	T	Heterozygous	5.6	19	SNP	Hotspot	374	COSM27174
NRAS	chr1	115252246	C	T	Heterozygous	3.5	10	SNP	Novel	376	---
NRAS	chr1	115252260	G	A	Heterozygous	4.8	24	SNP	Novel	378	---
NRAS	chr1	115252300	C	T	Heterozygous	3.4	10	SNP	Novel	379	---
DDR2	chr1	162724585	G	A	Heterozygous	5.7	28	SNP	Novel	245	---
ALK	chr2	29416080	G	A	Heterozygous	5.1	19	SNP	Novel	195	---

ALK	chr2	29416151	G	A	Heterozygous	4.5	15	SNP	Novel	199	---
ALK	chr2	29416161	C	T	Heterozygous	5.5	22	SNP	Novel	201	---
ALK	chr2	29416362	C	T	Heterozygous	6.2	33	SNP	Novel	224	---
ALK	chr2	29416366	G	C	Heterozygous	36.7	707	SNP	Novel	229	---
ALK	chr2	29416374	G	A	Heterozygous	5.2	22	SNP	Novel	230	---
ALK	chr2	29416572	T	C	Heterozygous	97.3	12879	SNP	Novel	828	---
ALK	chr2	29416572	TC	CT	Heterozygous	2.7	12879	MNP	Novel	828	---
ALK	chr2	29416629	G	A	Heterozygous	3.7	20	SNP	Novel	913	---
ALK	chr2	29436861	G	A	Heterozygous	6.5	28	SNP	Novel	168	---
ALK	chr2	29436932	G	A	Heterozygous	5.9	24	SNP	Novel	169	---
ALK	chr2	29436944	G	A	Heterozygous	5.4	19	SNP	Novel	168	---
ALK	chr2	29436953	G	A	Heterozygous	5.4	20	SNP	Novel	167	---
ALK	chr2	29436957	G	A	Heterozygous	4.2	12	SNP	Novel	166	---
ALK	chr2	29443617	C	G	Heterozygous	48.2	1961	SNP	Novel	413	---
ALK	chr2	29445282	G	A	Heterozygous	3.7	18	SNP	Novel	728	---
ALK	chr2	29445284	G	A	Heterozygous	4.1	27	SNP	Novel	728	---
ALK	chr2	29445310	G	A	Heterozygous	3.7	18	SNP	Novel	721	---
ALK	chr2	29445386	C	T	Heterozygous	3	11	SNP	Novel	1774	---
ALK	chr2	29445408	G	A	Heterozygous	3.3	19	SNP	Novel	1806	---
ALK	chr2	29445458	G	T	Heterozygous	41.7	7168	SNP	Novel	1799	---
ALK	chr2	29497997	G	A	Heterozygous	4	15	SNP	Novel	323	---
IDH1	chr2	209113192	G	A	Heterozygous	3.3	13	SNP	Novel	848	---
RAF1	chr3	12632439	C	T	Heterozygous	3.8	21	SNP	Novel	873	---
CTNNB1	chr3	41266085	C	T	Heterozygous	5.1	18	SNP	Novel	175	---
PIK3CA	chr3	178916751	G	A	Heterozygous	4.2	14	SNP	Novel	240	---
PIK3CA	chr3	178916758	C	T	Heterozygous	6.7	38	SNP	Novel	240	---
PIK3CA	chr3	178921477	G	A	Heterozygous	3.3	11	SNP	Novel	541	---
PIK3CA	chr3	178922277	C	T	Heterozygous	4.8	21	SNP	Novel	83	---
PIK3CA	chr3	178922293	C	T	Heterozygous	8.8	31	SNP	Novel	91	---
PIK3CA	chr3	178927945	C	T	Heterozygous	3.8	12	SNP	Novel	262	---
PIK3CA	chr3	178936062	C	T	Heterozygous	6.4	44	SNP	Novel	326	---
PIK3CA	chr3	178936087	C	T	Heterozygous	6.9	52	SNP	Novel	333	---
PIK3CA	chr3	178936109	C	T	Heterozygous	6.3	41	SNP	Novel	331	---
PIK3CA	chr3	178938833	G	A	Heterozygous	7.8	63	SNP	Novel	309	---
PIK3CA	chr3	178938846	G	A	Heterozygous	4.5	19	SNP	Novel	313	---
PIK3CA	chr3	178938849	G	A	Heterozygous	7.3	56	SNP	Novel	314	---
PIK3CA	chr3	178938945	G	A	Heterozygous	4	15	SNP	Novel	352	---
FGFR3	chr4	1797251	G	A	Heterozygous	6	21	SNP	Novel	134	---

FGFR3	chr4	1797332	G	A	Heterozygous	6.9	26	SNP	Novel	130	---
FGFR3	chr4	1797679	C	T	Heterozygous	3.7	12	SNP	Novel	601	---
FGFR3	chr4	1801153	G	A	Heterozygous	4.1	16	SNP	Novel	317	---
FGFR3	chr4	1801183	C	T	Heterozygous	7.6	58	SNP	Novel	302	---
FGFR3	chr4	1801191	A	G	Heterozygous	3.7	11	SNP	Novel	299	---
FGFR3	chr4	1801210	C	T	Heterozygous	4.9	24	SNP	Novel	285	---
FGFR3	chr4	1805889	C	T	Heterozygous	5.4	44	SNP	Novel	555	---
FGFR3	chr4	1807894	G	A	Homozygous	98.6	12366	SNP	Novel	804	---
FGFR3	chr4	1809249	C	T	Heterozygous	6.3	41	SNP	Novel	315	---
FGFR3	chr4	1809296	G	A	Heterozygous	7.9	253	SNP	Novel	343	---
FGFR3	chr4	1809467	C	T	Heterozygous	4.8	19	SNP	Novel	251	---
FGFR3	chr4	1809478	C	T	Heterozygous	5.6	27	SNP	Novel	250	---
FGFR3	chr4	1809480	C	T	Heterozygous	6	31	SNP	Novel	250	---
FGFR3	chr4	1809496	C	T	Heterozygous	4.3	16	SNP	Novel	253	---
PDGFRA	chr4	55097757	C	T	Heterozygous	5.2	26	SNP	Novel	305	---
PDGFRA	chr4	55097782	C	T	Heterozygous	5.3	27	SNP	Novel	304	---
PDGFRA	chr4	55097827	C	T	Heterozygous	8.1	66	SNP	Novel	296	---
PDGFRA	chr4	55104325	C	T	Heterozygous	8.3	56	SNP	Novel	228	---
PDGFRA	chr4	55104335	C	T	Heterozygous	3.6	11	SNP	Novel	224	---
PDGFRA	chr4	55121540	G	A	Heterozygous	4.2	12	SNP	Novel	166	---
PDGFRA	chr4	55121583	G	A	Heterozygous	7.3	34	SNP	Novel	165	---
PDGFRA	chr4	55123750	GG	AA	Heterozygous	5.3	16	MNP	Novel	113	---
PDGFRA	chr4	55123767	C	T	Heterozygous	8.6	36	SNP	Novel	116	---
PDGFRA	chr4	55133752	G	A	Heterozygous	5.6	34	SNP	Novel	337	---
PDGFRA	chr4	55140999	C	T	Heterozygous	12.4	60	SNP	Novel	105	---
PDGFRA	chr4	55141016	G	A	Heterozygous	7.6	27	SNP	Novel	105	---
PDGFRA	chr4	55141055	A	G	Homozygous	99	1480	SNP	Novel	101	---
PDGFRA	chr4	55152037	C	T	Heterozygous	4.3	16	SNP	Novel	282	---
PDGFRA	chr4	55152116	G	A	Heterozygous	5.5	29	SNP	Novel	291	---
PDGFRA	chr4	55152125	G	A	Heterozygous	4.8	21	SNP	Novel	291	---
PDGFRA	chr4	55152129	G	A	Heterozygous	4.8	21	SNP	Novel	291	---
PDGFRA	chr4	55152154	G	A	Heterozygous	3.8	12	SNP	Novel	290	---
KIT	chr4	55529160	GAAA	-	Heterozygous	7.9	1017	DEL	Novel	89	---
KIT	chr4	55529160	GAAAA	-	Heterozygous	92.1	1017	DEL	Novel	89	---
KIT	chr4	55529200	-	A	Heterozygous	49.4	722	INS	Novel	156	---
KIT	chr4	55529211	C	T	Heterozygous	4.3	13	SNP	Novel	161	---
KIT	chr4	55566266	G	A	Homozygous	100	3738	SNP	Novel	237	---
KIT	chr4	55573094	G	A	Heterozygous	4.8	18	SNP	Novel	207	---

KIT	chr4	55593683	G	A	Heterozygous	5.4	40	SNP	Novel	461	---
KIT	chr4	55593695	C	T	Heterozygous	4.1	19	SNP	Novel	460	---
KIT	chr4	55594236	C	T	Heterozygous	5.5	34	SNP	Novel	362	---
KIT	chr4	55594272	G	A	Heterozygous	4.1	17	SNP	Novel	362	---
KIT	chr4	55598889	C	T	Heterozygous	4.8	14	SNP	Novel	124	---
KIT	chr4	55598926	G	A	Heterozygous	4.7	13	SNP	Novel	128	---
ROS1	chr6	117638338	G	A	Heterozygous	4	13	SNP	Novel	300	---
ROS1	chr6	117638344	C	T	Heterozygous	5.6	31	SNP	Novel	302	---
ROS1	chr6	117638425	G	A	Heterozygous	3.9	13	SNP	Novel	311	---
ROS1	chr6	117641073	G	A	Heterozygous	4.2	20	SNP	Novel	480	---
ROS1	chr6	117641124	G	A	Heterozygous	5.4	38	SNP	Novel	482	---
ROS1	chr6	117641146	C	T	Heterozygous	5.9	49	SNP	Novel	472	---
ESR1	chr6	152419931	C	T	Heterozygous	3.6	11	SNP	Novel	302	---
ESR1	chr6	152419961	C	T	Heterozygous	3.6	11	SNP	Novel	303	---
EGFR	chr7	55199001	C	T	Heterozygous	3.3	11	SNP	Novel	702	---
EGFR	chr7	55221825	C	T	Heterozygous	5.5	23	SNP	Novel	199	---
EGFR	chr7	55221866	C	T	Heterozygous	4.9	18	SNP	Novel	205	---
EGFR	chr7	55221889	G	A	Heterozygous	4.9	18	SNP	Novel	204	---
EGFR	chr7	55221891	C	T	Heterozygous	6.4	31	SNP	Novel	202	---
EGFR	chr7	55221917	G	A	Heterozygous	4	12	SNP	Novel	200	---
EGFR	chr7	55228053	A	-	Homozygous	100	4993	DEL	Novel	339	---
EGFR	chr7	55242433	G	A	Heterozygous	8.7	57	SNP	Novel	206	---
EGFR	chr7	55242458	C	T	Heterozygous	4.4	15	SNP	Novel	204	---
EGFR	chr7	55242522	C	T	Heterozygous	4.6	15	SNP	Novel	197	---
EGFR	chr7	55249063	G	A	Heterozygous	47.6	1861	SNP	Novel	401	---
EGFR	chr7	55249078	C	T	Heterozygous	3.5	11	SNP	Novel	400	---
EGFR	chr7	55249082	C	T	Heterozygous	6.8	58	SNP	Novel	400	---
EGFR	chr7	55249087	C	T	Heterozygous	3.8	13	SNP	Novel	400	---
EGFR	chr7	55249100	G	A	Heterozygous	6.2	48	SNP	Novel	400	---
EGFR	chr7	55259427	G	A	Heterozygous	3.6	25	SNP	Novel	1460	---
EGFR	chr7	55259430	G	A	Heterozygous	4	38	SNP	Novel	1460	---
EGFR	chr7	55259442	G	A	Heterozygous	4.3	48	SNP	Novel	1462	---
EGFR	chr7	55259477	G	A	Heterozygous	3	11	SNP	Novel	1463	---
EGFR	chr7	55259486	G	A	Heterozygous	5.2	88	SNP	Novel	1464	---
EGFR	chr7	55259498	G	A	Heterozygous	3.2	16	SNP	Novel	1466	---
MET	chr7	116313515	C	T	Heterozygous	5	17	SNP	Novel	160	---
MET	chr7	116339338	C	T	Heterozygous	4.5	15	SNP	Novel	199	---
MET	chr7	116339395	C	T	Heterozygous	3.8	11	SNP	Novel	210	---

MET	chr7	116339401	C	T	Heterozygous	6.2	30	SNP	Novel	211	---
MET	chr7	116340262	A	G	Heterozygous	56	9052	SNP	Novel	1501	---
MET	chr7	116398763	C	T	Heterozygous	64.5	6553	SNP	Novel	873	---
MET	chr7	116403158	C	T	Heterozygous	4.8	15	SNP	Novel	168	---
MET	chr7	116403217	C	T	Heterozygous	5	16	SNP	Novel	161	---
MET	chr7	116411961	G	A	Heterozygous	4.6	14	SNP	Novel	151	---
MET	chr7	116411978	G	A	Heterozygous	3.9	10	SNP	Novel	153	---
MET	chr7	116411980	G	A	Heterozygous	8.5	43	SNP	Novel	153	---
MET	chr7	116411984	G	A	Heterozygous	4.6	14	SNP	Novel	153	---
MET	chr7	116412026	G	A	Heterozygous	4	11	SNP	Novel	150	---
MET	chr7	116415108	C	T	Heterozygous	6	25	SNP	Novel	183	---
MET	chr7	116434522	A	G	Heterozygous	3.5	10	SNP	Novel	313	---
SMO	chr7	128845552	C	T	Heterozygous	4.4	17	SNP	Novel	297	---
SMO	chr7	128845588	C	T	Heterozygous	4.7	20	SNP	Novel	297	---
SMO	chr7	128849148	C	T	Heterozygous	4.9	31	SNP	Novel	512	---
SMO	chr7	128849188	C	T	Heterozygous	3.4	12	SNP	Novel	522	---
BRAF	chr7	140453196	G	A	Heterozygous	7.8	37	SNP	Novel	153	---
BRAF	chr7	140453198	G	A	Heterozygous	4.6	14	SNP	Novel	153	---
BRAF	chr7	140453213	G	A	Heterozygous	9.2	49	SNP	Novel	153	---
BRAF	chr7	140476657	C	T	Heterozygous	4.9	20	SNP	Novel	163	---
BRAF	chr7	140476667	G	A	Heterozygous	4.8	16	SNP	Novel	165	---
BRAF	chr7	140476673	C	T	Heterozygous	5.5	24	SNP	Novel	164	---
BRAF	chr7	140476704	G	A	Heterozygous	4.9	16	SNP	Novel	164	---
BRAF	chr7	140476729	C	T	Heterozygous	4.8	15	SNP	Novel	168	---
JAK2	chr9	5073824	G	A	Heterozygous	23.3	70	SNP	Novel	43	---
GNAQ	chr9	80409396	C	T	Heterozygous	4.9	18	SNP	Novel	203	---
GNAQ	chr9	80409484	C	T	Heterozygous	5.1	19	SNP	Novel	198	---
RET	chr10	43609087	G	A	Heterozygous	4.6	35	SNP	Novel	742	---
RET	chr10	43609157	C	T	Heterozygous	3.2	11	SNP	Novel	748	---
RET	chr10	43609875	C	T	Heterozygous	4.4	13	SNP	Novel	205	---
RET	chr10	43613843	G	T	Heterozygous	36.2	2469	SNP	Novel	814	---
RET	chr10	43615633	C	T	Heterozygous	4.9	12	SNP	Novel	82	---
RET	chr10	43615662	C	T	Heterozygous	6.3	17	SNP	Novel	79	---
RET	chr10	43615673	G	A	Heterozygous	9.1	29	SNP	Novel	77	---
RET	chr10	43615677	G	A	Heterozygous	9.3	29	SNP	Novel	75	---
RET	chr10	43617338	C	T	Heterozygous	4.3	17	SNP	Novel	300	---
RET	chr10	43617370	G	A	Heterozygous	6.7	45	SNP	Novel	299	---
RET	chr10	43617372	C	T	Heterozygous	7.7	60	SNP	Novel	299	---

RET	chr10	43617429	C	T	Heterozygous	10.8	105	SNP	Novel	269	---
FGFR2	chr10	123274722	C	T	Heterozygous	7.7	75	SNP	Novel	389	---
FGFR2	chr10	123274775	G	A	Heterozygous	5.5	36	SNP	Novel	399	---
FGFR2	chr10	123276963	G	A	Heterozygous	4	30	SNP	Novel	1131	---
FGFR2	chr10	123276976	G	A	Heterozygous	4.1	9	SNP	Novel	1095	---
FGFR2	chr10	123276981	G	A	Heterozygous	6.7	87	SNP	Novel	641	---
FGFR2	chr10	123284079	C	T	Heterozygous	4.5	23	SNP	Novel	419	---
FGFR2	chr10	123284107	G	A	Heterozygous	5.1	31	SNP	Novel	408	---
FGFR2	chr10	123284112	C	T	Heterozygous	8	83	SNP	Novel	400	---
FGFR2	chr10	123284171	C	T	Heterozygous	3.8	14	SNP	Novel	394	---
FGFR2	chr10	123312174	C	T	Heterozygous	3.5	16	SNP	Novel	113	---
FGFR2	chr10	123312198	C	T	Heterozygous	6	19	SNP	Novel	117	---
FGFR2	chr10	123312224	G	A	Heterozygous	5.1	15	SNP	Novel	118	---
FGFR2	chr10	123312227	C	T	Heterozygous	11	54	SNP	Novel	118	---
FGFR2	chr10	123312228	C	T	Heterozygous	5.1	15	SNP	Novel	118	---
FGFR2	chr10	123312230	C	T	Heterozygous	5.9	19	SNP	Novel	118	---
FGFR2	chr10	123350046	C	T	Heterozygous	4.4	13	SNP	Novel	159	---
HRAS	chr11	533826	C	T	Heterozygous	5.3	25	SNP	Novel	265	---
HRAS	chr11	533906	C	T	Heterozygous	4.3	15	SNP	Novel	255	---
HRAS	chr11	534290	G	A	Heterozygous	4.8	44	SNP	Novel	831	---
HRAS	chr11	534305	C	T	Heterozygous	3.9	22	SNP	Novel	821	---
KRAS	chr12	25364787	C	T	Heterozygous	4.8	15	SNP	Novel	145	---
KRAS	chr12	25378598	C	T	Heterozygous	7.2	48	SNP	Novel	263	---
KRAS	chr12	25380316	C	T	Heterozygous	3.4	12	SNP	Novel	613	---
KRAS	chr12	25380364	C	T	Heterozygous	3.4	13	SNP	Novel	610	---
KRAS	chr12	25386054	C	T	Heterozygous	5.2	20	SNP	Novel	193	---
KRAS	chr12	25386063	C	A	Heterozygous	96.9	2994	SNP	Novel	192	---
KRAS	chr12	25386063	CC	AT	Heterozygous	3.1	2994	MNP	Novel	192	---
KRAS	chr12	25386088	C	T	Heterozygous	5.6	23	SNP	Novel	196	---
KRAS	chr12	25386935	G	A	Heterozygous	3.8	15	SNP	Novel	478	---
KRAS	chr12	25387190	G	A	Heterozygous	5	26	SNP	Novel	340	---
KRAS	chr12	25387207	G	A	Heterozygous	5.5	33	SNP	Novel	344	---
KRAS	chr12	25387219	G	A	Heterozygous	3.9	14	SNP	Novel	331	---
KRAS	chr12	25387258	G	A	Heterozygous	4.7	21	SNP	Novel	321	---
KRAS	chr12	25391193	G	A	Heterozygous	4.4	14	SNP	Novel	204	---
KRAS	chr12	25398231	C	T	Heterozygous	11.9	82	SNP	Novel	168	---
KRAS	chr12	25398241	A	G	Heterozygous	4	11	SNP	Novel	176	---
KRAS	chr12	25398265	G	A	Heterozygous	4.5	14	SNP	Novel	176	---

KRAS	chr12	25398282	C	T	Heterozygous	8	28	SNP	Hotspot	174	COSM528
KRAS	chr12	25398284	C	A	Heterozygous	37.9	473	SNP	Hotspot	174	COSM520
KRAS	chr12	25400195	G	A	Heterozygous	4.5	11	SNP	Novel	89	---
ERBB3	chr12	56477621	G	A	Heterozygous	4	12	SNP	Novel	253	---
ERBB3	chr12	56477642	G	A	Heterozygous	4	13	SNP	Novel	250	---
ERBB3	chr12	56477694	A	T	Heterozygous	61.5	1635	SNP	Novel	234	---
ERBB3	chr12	56478853	C	T	Heterozygous	3.8	30	SNP	Novel	1511	---
ERBB3	chr12	56481582	C	T	Heterozygous	5.5	54	SNP	Novel	694	---
ERBB3	chr12	56481599	C	T	Heterozygous	5.6	58	SNP	Novel	696	---
ERBB3	chr12	56481661	CGGGGGC	TGGGGGT	Heterozygous	2.8	31	MNP	Novel	708	---
ERBB3	chr12	56482645	C	T	Heterozygous	5.2	34	SNP	Novel	465	---
CDK4	chr12	58142121	G	A	Heterozygous	3.5	11	SNP	Novel	431	---
CDK4	chr12	58144665	C	T	Heterozygous	50.4	2076	SNP	Novel	411	---
CDK4	chr12	58144888	G	A	Heterozygous	3.7	18	SNP	Novel	776	---
CDK4	chr12	58145382	G	A	Heterozygous	5	30	SNP	Novel	417	---
CDK4	chr12	58145384	G	A	Heterozygous	5	30	SNP	Novel	417	---
CDK4	chr12	58145438	G	A	Heterozygous	5.4	32	SNP	Novel	372	---
CDK4	chr12	58145715	C	T	Heterozygous	4.5	22	SNP	Novel	398	---
CDK4	chr12	58145729	C	T	Heterozygous	4.5	22	SNP	Novel	404	---
CDK4	chr12	58145777	C	T	Heterozygous	4	16	SNP	Novel	430	---
CDK4	chr12	58145792	G	A	Heterozygous	4	16	SNP	Novel	427	---
CDK4	chr12	58145795	G	A	Heterozygous	3.5	11	SNP	Novel	426	---
CDK4	chr12	58145802	C	T	Heterozygous	5.4	36	SNP	Novel	425	---
CDK4	chr12	58145809	G	A	Heterozygous	5.4	36	SNP	Novel	425	---
AKT1	chr14	105246447	G	A	Heterozygous	7.8	20	SNP	Novel	64	---
AKT1	chr14	105246480	C	T	Heterozygous	12.5	43	SNP	Novel	72	---
AKT1	chr14	105246532	C	T	Heterozygous	11.9	58	SNP	Novel	109	---
AKT1	chr14	105246564	G	A	Heterozygous	4.5	12	SNP	Novel	111	---
MAP2K1	chr15	66727424	G	A	Heterozygous	10.4	55	SNP	Novel	134	---
MAP2K1	chr15	66727437	G	A	Heterozygous	5.9	20	SNP	Novel	136	---
MAP2K1	chr15	66727461	G	A	Heterozygous	7.9	35	SNP	Novel	139	---
MAP2K1	chr15	66727491	G	A	Heterozygous	4.3	12	SNP	Novel	140	---
MAP2K1	chr15	66727520	G	A	Heterozygous	5.7	20	SNP	Novel	140	---
MAP2K1	chr15	66729147	C	T	Heterozygous	5.7	41	SNP	Novel	418	---
MAP2K1	chr15	66774097	C	T	Heterozygous	3.3	11	SNP	Novel	606	---
MAP2K1	chr15	66774129	G	A	Heterozygous	3.9	19	SNP	Novel	609	---
MAP2K1	chr15	66774148	C	T	Heterozygous	3.8	17	SNP	Novel	611	---
MAP2K1	chr15	66774160	C	T	Heterozygous	3.3	11	SNP	Novel	611	---

IDH2	chr15	90631825	G	A	Heterozygous	4.7	20	SNP	Novel	275	---
IDH2	chr15	90631834	G	A	Heterozygous	10.5	102	SNP	Novel	276	---
IDH2	chr15	90631933	C	T	Heterozygous	7.8	56	SNP	Novel	270	---
ERBB2	chr17	37868247	C	T	Heterozygous	5.9	25	SNP	Novel	187	---
ERBB2	chr17	37872428	C	T	Heterozygous	4.2	11	SNP	Novel	190	---
ERBB2	chr17	37872449	CC	TT	Heterozygous	2.6	13	MNP	Novel	155	---
ERBB2	chr17	37872465	C	T	Heterozygous	5.2	17	SNP	Novel	155	---
ERBB2	chr17	37872482	C	T	Heterozygous	10.4	58	SNP	Novel	144	---
ERBB2	chr17	37880286	G	A	Heterozygous	3.6	15	SNP	Novel	606	---
ERBB2	chr17	37880294	G	A	Heterozygous	6.4	73	SNP	Novel	606	---
ERBB2	chr17	37880303	G	A	Heterozygous	4	20	SNP	Novel	602	---
ERBB2	chr17	37880340	C	T	Heterozygous	3.6	14	SNP	Novel	582	---
ERBB2	chr17	37880954	C	T	Heterozygous	3.1	11	SNP	Novel	1091	---
ERBB2	chr17	37881347	G	A	Heterozygous	3.9	15	SNP	Novel	385	---
ERBB2	chr17	37881364	G	A	Heterozygous	5.7	38	SNP	Novel	385	---
ERBB2	chr17	37881410	C	T	Heterozygous	4.1	17	SNP	Novel	388	---
ERBB2	chr17	37881421	C	T	Heterozygous	6.7	55	SNP	Novel	389	---
ERBB2	chr17	37881452	G	A	Heterozygous	4.4	19	SNP	Novel	365	---
ERBB2	chr17	37881520	C	T	Heterozygous	3.6	15	SNP	Novel	611	---
ERBB2	chr17	37881544	C	T	Heterozygous	3.4	13	SNP	Novel	638	---
ERBB2	chr17	37881571	C	T	Heterozygous	3.8	17	SNP	Novel	608	---
ERBB2	chr17	37883125	G	A	Heterozygous	4.1	16	SNP	Novel	339	---
ERBB2	chr17	37883218	G	A	Heterozygous	3.7	12	SNP	Novel	321	---
ERBB2	chr17	37883229	C	T	Heterozygous	4.2	16	SNP	Novel	335	---
GNA11	chr19	3115079	C	T	Heterozygous	12	102	SNP	Novel	209	---
MAP2K2	chr19	4117543	G	A	Heterozygous	4.6	30	SNP	Novel	612	---
MAP2K2	chr19	4117544	G	A	Heterozygous	3.3	10	SNP	Novel	612	---
MAP2K2	chr19	4117554	C	T	Heterozygous	6	63	SNP	Novel	612	---
MAP2K2	chr19	4117587	C	T	Heterozygous	3.4	12	SNP	Novel	592	---
MAP2K2	chr19	4117614	C	T	Heterozygous	3.7	16	SNP	Novel	590	---
JAK3	chr19	17945905	C	T	Heterozygous	5.3	40	SNP	Novel	530	---
JAK3	chr19	17945932	C	T	Heterozygous	4.9	33	SNP	Novel	534	---
JAK3	chr19	17945960	G	A	Heterozygous	3.4	12	SNP	Novel	526	---
JAK3	chr19	17945979	G	T	Heterozygous	4.9	33	SNP	Novel	529	---
JAK3	chr19	17945988	G	A	Heterozygous	4	18	SNP	Novel	526	---
JAK3	chr19	17946013	G	A	Heterozygous	3.8	16	SNP	Novel	521	---
JAK3	chr19	17948748	C	T	Heterozygous	3.8	13	SNP	Novel	314	---
JAK3	chr19	17948764	C	T	Heterozygous	6	37	SNP	Novel	316	---

JAK3	chr19	17948821	G	A	Heterozygous	6.4	42	SNP	Novel	312	---
JAK3	chr19	17948852	C	T	Heterozygous	6.3	40	SNP	Novel	303	---
JAK3	chr19	17948853	C	T	Heterozygous	5	23	SNP	Novel	303	---
AR	chrX	66799222	C	T	Heterozygous	3.8	14	SNP	Novel	446	---
AR	chrX	66799252	C	T	Heterozygous	5.6	41	SNP	Novel	445	---
AR	chrX	66866121	G	A	Heterozygous	5	22	SNP	Novel	260	---
AR	chrX	66866177	G	A	Heterozygous	8.2	62	SNP	Novel	269	---
AR	chrX	66866183	G	A	Heterozygous	4.8	21	SNP	Novel	269	---
AR	chrX	66874545	C	T	Heterozygous	4.8	17	SNP	Novel	209	---
AR	chrX	66906915	G	A	Heterozygous	3.7	17	SNP	Novel	668	---
AR	chrX	66915218	C	T	Heterozygous	5	22	SNP	Novel	261	---
AR	chrX	66915231	C	T	Heterozygous	7.9	58	SNP	Novel	265	---
AR	chrX	66915252	C	T	Heterozygous	3.7	11	SNP	Novel	268	---
AR	chrX	66915275	C	T	Heterozygous	3.7	11	SNP	Novel	268	---
AR	chrX	66915278	C	T	Heterozygous	3.7	11	SNP	Novel	268	---
AR	chrX	66917677	G	A	Heterozygous	3.4	10	SNP	Novel	349	---
AR	chrX	66917698	G	A	Heterozygous	5.7	36	SNP	Novel	351	---
AR	chrX	66917733	G	A	Heterozygous	4.3	18	SNP	Novel	351	---
AR	chrX	66938964	G	A	Heterozygous	4.2	13	SNP	Novel	190	---
AR	chrX	66941806	G	A	Heterozygous	10	77	SNP	Novel	219	---
AR	chrX	66941817	G	A	Heterozygous	11	90	SNP	Novel	218	---
AR	chrX	66941825	G	A	Heterozygous	7.4	43	SNP	Novel	216	---
AR	chrX	66941826	G	A	Heterozygous	11.1	91	SNP	Novel	216	---
AR	chrX	66941838	G	A	Heterozygous	7.5	44	SNP	Novel	212	---
AR	chrX	66941842	G	A	Heterozygous	7.7	43	SNP	Novel	196	---
AR	chrX	66941847	G	A	Heterozygous	12.8	109	SNP	Novel	195	---
AR	chrX	66945147	C	T	Heterozygous	5.8	39	SNP	Novel	380	---
AR	chrX	66945217	C	T	Heterozygous	5.5	35	SNP	Novel	380	---