

Data Sheet

Product Name: CancerSeq AMS Paraffin Tissue Curl

Catalog No.: T2235152-AC

Lot No.: C201053

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: _____ year(s) old
Female: 55 year(s) old

Pathological Diagnosis: Adenocarcinoma

Tumor Size: diameter 5.5 cm

Location: left upper 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)

C201053

Gene ID	Chrom	Position	Ref	Variant	Allele Call	Frequency	Quality	Type	Allele Source	Coverage	Allele Name
MTOR	chr1	11174377	T	C	Heterozygous	18.1	99	SNP	Novel	94	---
MTOR	chr1	11174391	G	A	Heterozygous	61.1	663	SNP	Novel	95	---
MTOR	chr1	11174398	A	G	Heterozygous	37.9	319	SNP	Novel	95	---
MTOR	chr1	11174474	G	A	Heterozygous	39.6	346	SNP	Novel	96	---
MTOR	chr1	11188016	C	T	Heterozygous	6.7	48	SNP	Novel	329	---
MTOR	chr1	11188031	C	T	Heterozygous	8.5	80	SNP	Novel	328	---
MTOR	chr1	11188054	G	A	Heterozygous	10.6	122	SNP	Novel	330	---
MTOR	chr1	11188064	C	T	Heterozygous	8.5	79	SNP	Novel	329	---
MTOR	chr1	11188078	C	T	Heterozygous	8	43	SNP	Hotspot	325	COSM893804
MTOR	chr1	11188098	C	T	Heterozygous	12.9	174	SNP	Novel	325	---
MTOR	chr1	11188277	G	A	Homozygous	100	728	SNP	Novel	46	---
MTOR	chr1	11190832	G	A	Heterozygous	43	465	SNP	Novel	121	---
MTOR	chr1	11217225	C	T	Heterozygous	4.4	20	SNP	Novel	389	---
MTOR	chr1	11217229	G	A	Heterozygous	13.8	175	SNP	Novel	391	---
MTOR	chr1	11217241	G	A	Heterozygous	13.2	219	SNP	Novel	394	---
MTOR	chr1	11217253	C	T	Heterozygous	8.3	90	SNP	Novel	396	---
MTOR	chr1	11217306	C	T	Heterozygous	6.3	50	SNP	Novel	394	---
JAK1	chr1	65311182	C	T	Heterozygous	10.4	174	SNP	Novel	521	---
NRAS	chr1	115252300	C	T	Heterozygous	25.9	44	SNP	Novel	27	---
NRAS	chr1	115256517	C	T	Heterozygous	3.9	20	SNP	Novel	698	---
NRAS	chr1	115256552	C	T	Heterozygous	6.4	82	SNP	Novel	704	---
NRAS	chr1	115258715	G	A	Heterozygous	3.5	15	SNP	Novel	770	---
NRAS	chr1	115258774	T	C	Heterozygous	4.1	19	SNP	Novel	463	---
DDR2	chr1	162724551	G	A	Homozygous	100	256	SNP	Novel	20	---
ALK	chr2	29416343	C	T	Heterozygous	38	309	SNP	Novel	92	---
ALK	chr2	29416366	G	C	Heterozygous	61.7	666	SNP	Novel	94	---
ALK	chr2	29416458	G	A	Heterozygous	6.6	20	SNP	Novel	91	---
ALK	chr2	29416572	T	C	Homozygous	100	1680	SNP	Novel	111	---
ALK	chr2	29416604	C	T	Heterozygous	36	331	SNP	Novel	114	---
ALK	chr2	29420419	G	A	Heterozygous	6.2	46	SNP	Novel	390	---
ALK	chr2	29420452	G	A	Heterozygous	7.3	66	SNP	Novel	384	---
ALK	chr2	29420473	C	T	Heterozygous	6.8	57	SNP	Novel	380	---
ALK	chr2	29420480	C	T	Heterozygous	5.1	28	SNP	Novel	374	---
ALK	chr2	29432666	G	A	Heterozygous	3.3	15	SNP	Novel	1285	---
ALK	chr2	29432709	G	A	Heterozygous	4.1	38	SNP	Novel	1282	---

ALK	chr2	29436864	G	A	Heterozygous	15.5	157	SNP	Novel	207	---
ALK	chr2	29436939	G	A	Heterozygous	12	102	SNP	Novel	209	---
ALK	chr2	29436957	G	A	Heterozygous	12.4	109	SNP	Novel	209	---
ALK	chr2	29436961	G	A	Heterozygous	7.2	37	SNP	Novel	209	---
ALK	chr2	29443617	C	G	Heterozygous	51	483	SNP	Novel	98	---
ALK	chr2	29445279	G	A	Heterozygous	19.5	244	SNP	Novel	220	---
ALK	chr2	29445302	G	A	Heterozygous	15	151	SNP	Novel	214	---
ALK	chr2	29445416	G	A	Heterozygous	6.9	63	SNP	Novel	421	---
ALK	chr2	29445458	G	T	Heterozygous	75.7	3992	SNP	Novel	415	---
ALK	chr2	29445463	G	A	Heterozygous	6.8	60	SNP	Novel	414	---
ALK	chr2	29445469	G	A	Heterozygous	10.9	159	SNP	Novel	412	---
ALK	chr2	29445483	G	A	Heterozygous	9.7	113	SNP	Novel	404	---
ALK	chr2	29497943	C	T	Heterozygous	14.9	73	SNP	Novel	94	---
ALK	chr2	29497965	C	T	Heterozygous	12.1	66	SNP	Novel	91	---
ALK	chr2	29498007	C	T	Heterozygous	13.8	65	SNP	Novel	94	---
ERBB4	chr2	212488744	C	T	Heterozygous	12	211	SNP	Novel	458	---
ERBB4	chr2	212488751	G	A	Heterozygous	9.4	131	SNP	Novel	457	---
ERBB4	chr2	212488780	G	A	Heterozygous	8.3	101	SNP	Novel	458	---
ERBB4	chr2	212488784	G	A	Heterozygous	9.2	125	SNP	Novel	457	---
RAF1	chr3	12632358	C	T	Heterozygous	8.5	97	SNP	Novel	410	---
RAF1	chr3	12632368	C	T	Heterozygous	8.7	102	SNP	Novel	414	---
RAF1	chr3	12645666	G	A	Heterozygous	3.9	25	SNP	Novel	1007	---
RAF1	chr3	12645669	C	T	Heterozygous	7	139	SNP	Novel	1011	---
RAF1	chr3	12645682	C	T	Heterozygous	3.9	25	SNP	Novel	1011	---
RAF1	chr3	12645693	G	A	Heterozygous	4.4	40	SNP	Novel	1012	---
RAF1	chr3	12645716	G	A	Heterozygous	4	27	SNP	Novel	999	---
RAF1	chr3	12645727	C	T	Heterozygous	3.8	23	SNP	Novel	998	---
CTNNB1	chr3	41266059	A	G	Heterozygous	6.5	16	SNP	Novel	62	---
CTNNB1	chr3	41266093	C	T	Heterozygous	66.1	444	SNP	Novel	62	---
PIK3CA	chr3	178916720	G	A	Heterozygous	38.4	343	SNP	Novel	99	---
PIK3CA	chr3	178916774	G	A	Heterozygous	35.8	319	SNP	Novel	95	---
PIK3CA	chr3	178916902	C	T	Heterozygous	7.5	14	SNP	Novel	40	---
PIK3CA	chr3	178916931	C	T	Heterozygous	10.8	20	SNP	Novel	37	---
PIK3CA	chr3	178922274	C	A	Heterozygous	38.7	97	SNP	Novel	31	---
PIK3CA	chr3	178927977	C	T	Heterozygous	19.9	189	SNP	Novel	166	---
PIK3CA	chr3	178928020	C	T	Heterozygous	11.6	77	SNP	Novel	164	---
PIK3CA	chr3	178928152	G	A	Heterozygous	9.1	88	SNP	Novel	320	---
PIK3CA	chr3	178938880	G	A	Heterozygous	31.2	379	SNP	Novel	160	---

PIK3CA	chr3	178938930	G	A	Heterozygous	22.5	238	SNP	Novel	169	---
PIK3CA	chr3	178947844	G	A	Heterozygous	4.3	49	SNP	Novel	1514	---
PIK3CA	chr3	178947872	G	A	Heterozygous	7.8	262	SNP	Novel	1501	---
PIK3CA	chr3	178952041	G	A	Heterozygous	9.5	65	SNP	Novel	200	---
PIK3CA	chr3	178952074	G	A	Heterozygous	14.4	102	SNP	Hotspot	202	COSM29313
PIK3CA	chr3	178952078	G	A	Heterozygous	11.5	66	SNP	Hotspot	200	COSM25086
FGFR3	chr4	1797255	G	A	Heterozygous	79.7	564	SNP	Novel	59	---
FGFR3	chr4	1797677	C	T	Heterozygous	3.5	16	SNP	Novel	947	---
FGFR3	chr4	1797737	G	A	Heterozygous	3.4	15	SNP	Novel	939	---
FGFR3	chr4	1803557	C	T	Heterozygous	7	87	SNP	Novel	601	---
FGFR3	chr4	1803559	C	T	Heterozygous	5.6	52	SNP	Novel	608	---
FGFR3	chr4	1803588	C	T	Heterozygous	5	39	SNP	Novel	617	---
FGFR3	chr4	1803597	C	T	Heterozygous	8.5	137	SNP	Novel	614	---
FGFR3	chr4	1803610	A	G	Heterozygous	5.2	43	SNP	Novel	615	---
FGFR3	chr4	1803616	C	T	Heterozygous	4.1	22	SNP	Novel	614	---
FGFR3	chr4	1803626	C	T	Heterozygous	7	89	SNP	Novel	616	---
FGFR3	chr4	1803628	G	A	Heterozygous	7	90	SNP	Novel	615	---
FGFR3	chr4	1803641	C	T	Heterozygous	6.5	76	SNP	Novel	614	---
FGFR3	chr4	1805826	C	T	Heterozygous	8.8	124	SNP	Novel	498	---
FGFR3	chr4	1805850	C	T	Heterozygous	3.8	16	SNP	Novel	498	---
FGFR3	chr4	1805866	C	T	Heterozygous	6.6	67	SNP	Novel	498	---
FGFR3	chr4	1805881	C	T	Heterozygous	3.7	14	SNP	Novel	492	---
FGFR3	chr4	1806089	G	A	Heterozygous	10.4	101	SNP	Novel	422	---
FGFR3	chr4	1806154	G	A	Heterozygous	5.2	33	SNP	Novel	420	---
FGFR3	chr4	1806164	C	T	Heterozygous	7.3	70	SNP	Novel	413	---
FGFR3	chr4	1806166	C	T	Heterozygous	11.6	180	SNP	Novel	413	---
FGFR3	chr4	1807855	G	A	Heterozygous	6.1	62	SNP	Novel	592	---
FGFR3	chr4	1807861	G	A	Heterozygous	4.2	23	SNP	Novel	593	---
FGFR3	chr4	1807894	G	A	Homozygous	100	9441	SNP	Novel	594	---
FGFR3	chr4	1807903	G	A	Heterozygous	5	39	SNP	Novel	596	---
FGFR3	chr4	1807920	G	A	Heterozygous	4.2	22	SNP	Novel	578	---
FGFR3	chr4	1808343	G	A	Heterozygous	4.2	41	SNP	Novel	1367	---
FGFR3	chr4	1808346	G	A	Heterozygous	4.3	46	SNP	Novel	1367	---
FGFR3	chr4	1808399	C	T	Heterozygous	3.1	11	SNP	Novel	1371	---
FGFR3	chr4	1809250	A	G	Heterozygous	36.1	312	SNP	Novel	108	---
FGFR3	chr4	1809348	C	T	Heterozygous	34.4	335	SNP	Novel	122	---
FGFR3	chr4	1809510	C	T	Heterozygous	13	199	SNP	Novel	369	---
PDGFRA	chr4	55097755	C	T	Heterozygous	18.4	57	SNP	Novel	49	---

PDGFRA	chr4	55104300	C	T	Heterozygous	30	124	SNP	Novel	50	---
PDGFRA	chr4	55104344	C	T	Heterozygous	12	32	SNP	Novel	50	---
PDGFRA	chr4	55104349	C	T	Heterozygous	12	32	SNP	Novel	50	---
PDGFRA	chr4	55104356	C	T	Heterozygous	20	68	SNP	Novel	50	---
PDGFRA	chr4	55104389	C	T	Heterozygous	32	137	SNP	Novel	50	---
PDGFRA	chr4	55123706	C	T	Heterozygous	20.4	130	SNP	Novel	103	---
PDGFRA	chr4	55123719	G	A	Heterozygous	27.9	207	SNP	Novel	104	---
PDGFRA	chr4	55126185	C	T	Heterozygous	5.1	19	SNP	Novel	198	---
PDGFRA	chr4	55133703	A	G	Heterozygous	15.1	136	SNP	Novel	186	---
PDGFRA	chr4	55133742	C	T	Heterozygous	5.8	24	SNP	Novel	191	---
PDGFRA	chr4	55133759	G	A	Heterozygous	16.4	160	SNP	Novel	189	---
PDGFRA	chr4	55144124	G	A	Heterozygous	8.4	125	SNP	Novel	545	---
PDGFRA	chr4	55144143	G	A	Heterozygous	10.3	188	SNP	Novel	551	---
PDGFRA	chr4	55144156	G	A	Heterozygous	4.4	25	SNP	Novel	548	---
PDGFRA	chr4	55144176	G	A	Heterozygous	10.2	183	SNP	Novel	547	---
PDGFRA	chr4	55152072	G	T	Heterozygous	48.6	330	SNP	Novel	72	---
PDGFRA	chr4	55161871	C	T	Heterozygous	14.8	93	SNP	Novel	128	---
PDGFRA	chr4	55161899	G	A	Heterozygous	13.7	92	SNP	Novel	124	---
KIT	chr4	55566266	G	A	Homozygous	100	289	SNP	Novel	22	---
KIT	chr4	55573038	G	A	Heterozygous	12.9	20	SNP	Novel	31	---
KIT	chr4	55589743	C	T	Heterozygous	3.2	13	SNP	Novel	901	---
KIT	chr4	55589779	C	T	Heterozygous	3.7	21	SNP	Novel	936	---
KIT	chr4	55589796	C	T	Heterozygous	3.2	12	SNP	Novel	930	---
KIT	chr4	55592178	C	T	Heterozygous	13.4	142	SNP	Novel	335	---
KIT	chr4	55593440	G	A	Heterozygous	12.2	167	SNP	Novel	344	---
KIT	chr4	55594245	C	T	Heterozygous	4	11	SNP	Novel	150	---
KIT	chr4	55599248	G	A	Heterozygous	50	277	SNP	Novel	60	---
ROS1	chr6	117641063	C	T	Heterozygous	60.3	356	SNP	Novel	58	---
ROS1	chr6	117641086	C	T	Heterozygous	13.8	44	SNP	Novel	58	---
ROS1	chr6	117641100	T	C	Heterozygous	5.1	12	SNP	Novel	59	---
ESR1	chr6	152419955	C	T	Heterozygous	39.1	477	SNP	Novel	138	---
ESR1	chr6	152420026	G	A	Heterozygous	9.8	48	SNP	Novel	133	---
ESR1	chr6	152420028	G	A	Heterozygous	29.3	290	SNP	Novel	133	---
EGFR	chr7	55211046	G	A	Heterozygous	8.9	148	SNP	Novel	596	---
EGFR	chr7	55211090	G	A	Heterozygous	7.4	100	SNP	Novel	592	---
EGFR	chr7	55211093	C	T	Heterozygous	3.7	16	SNP	Novel	593	---
EGFR	chr7	55211118	G	A	Heterozygous	7.5	101	SNP	Novel	584	---
EGFR	chr7	55219915	T	C	Heterozygous	4.5	13	SNP	Novel	132	---

EGFR	chr7	55219919	C	T	Heterozygous	11.9	68	SNP	Novel	134	---
EGFR	chr7	55221830	G	A	Heterozygous	23.5	179	SNP	Novel	119	---
EGFR	chr7	55221855	C	T	Heterozygous	56.2	709	SNP	Novel	121	---
EGFR	chr7	55228008	G	A	Heterozygous	13.7	50	SNP	Novel	73	---
EGFR	chr7	55228053	A	-	Homozygous	100	1012	DEL	Novel	72	---
EGFR	chr7	55232966	G	A	Heterozygous	4.3	45	SNP	Novel	1380	---
EGFR	chr7	55232967	G	A	Heterozygous	4.4	50	SNP	Novel	1380	---
EGFR	chr7	55232984	C	T	Heterozygous	3.2	13	SNP	Novel	1386	---
EGFR	chr7	55232986	G	A	Heterozygous	4.3	46	SNP	Novel	1392	---
EGFR	chr7	55233017	C	T	Heterozygous	5	73	SNP	Novel	1365	---
EGFR	chr7	55233045	G	A	Heterozygous	6.9	175	SNP	Novel	1329	---
EGFR	chr7	55233052	G	A	Heterozygous	8.4	273	SNP	Novel	1307	---
EGFR	chr7	55241664	G	A	Heterozygous	4.2	35	SNP	Novel	1067	---
EGFR	chr7	55241669	T	C	Heterozygous	5.9	95	SNP	Novel	1068	---
EGFR	chr7	55241716	G	A	Heterozygous	9.3	274	SNP	Novel	1047	---
EGFR	chr7	55241722	G	A	Heterozygous	4.3	37	SNP	Novel	1047	---
EGFR	chr7	55249042	C	T	Heterozygous	21.6	142	SNP	Novel	102	---
EGFR	chr7	55249071	C	T	Heterozygous	23.8	135	SNP	Hotspot	101	COSM6240
EGFR	chr7	55249097	C	T	Heterozygous	22	146	SNP	Novel	100	---
EGFR	chr7	55259432	C	T	Heterozygous	21	285	SNP	Novel	229	---
MET	chr7	116339352	G	A	Heterozygous	9.7	65	SNP	Novel	195	---
MET	chr7	116339383	C	T	Heterozygous	21.2	261	SNP	Novel	198	---
MET	chr7	116339398	G	A	Heterozygous	15.9	158	SNP	Novel	195	---
MET	chr7	116339414	C	T	Heterozygous	20.8	243	SNP	Novel	192	---
MET	chr7	116339425	T	C	Heterozygous	11.1	82	SNP	Novel	190	---
MET	chr7	116340214	G	A	Heterozygous	10.2	171	SNP	Novel	509	---
MET	chr7	116398796	G	A	Heterozygous	5.1	48	SNP	Novel	766	---
MET	chr7	116398801	C	T	Heterozygous	3.7	18	SNP	Novel	762	---
MET	chr7	116403173	C	T	Heterozygous	95.3	610	SNP	Novel	43	---
MET	chr7	116415179	C	T	Heterozygous	17.6	57	SNP	Novel	51	---
MET	chr7	116415184	C	T	Heterozygous	17.3	57	SNP	Novel	52	---
MET	chr7	116417470	C	T	Heterozygous	21	132	SNP	Novel	105	---
MET	chr7	116423422	G	A	Heterozygous	5.9	59	SNP	Novel	646	---
MET	chr7	116423450	G	A	Heterozygous	3.7	17	SNP	Novel	642	---
MET	chr7	116423460	G	A	Heterozygous	4.2	25	SNP	Novel	637	---
MET	chr7	116423466	G	A	Heterozygous	7.4	105	SNP	Novel	636	---
MET	chr7	116434471	C	T	Heterozygous	9.8	49	SNP	Novel	133	---
MET	chr7	116434511	A	G	Heterozygous	8.6	41	SNP	Novel	139	---

SMO	chr7	128845534	C	T	Heterozygous	27	206	SNP	Novel	111	---
SMO	chr7	128845582	C	T	Heterozygous	51.3	569	SNP	Novel	115	---
SMO	chr7	128845593	C	T	Heterozygous	4.3	11	SNP	Novel	116	---
SMO	chr7	128845603	C	T	Heterozygous	30.1	248	SNP	Novel	113	---
SMO	chr7	128845616	G	A	Heterozygous	8.1	31	SNP	Novel	111	---
SMO	chr7	128846355	C	T	Heterozygous	5.1	73	SNP	Novel	1279	---
SMO	chr7	128846356	C	T	Heterozygous	6.4	138	SNP	Novel	1279	---
SMO	chr7	128846388	C	T	Heterozygous	3.2	13	SNP	Novel	1287	---
SMO	chr7	128849116	C	T	Heterozygous	11.7	106	SNP	Novel	230	---
SMO	chr7	128849143	C	T	Heterozygous	7.4	47	SNP	Novel	242	---
SMO	chr7	128849151	T	A	Heterozygous	4.1	14	SNP	Novel	242	---
SMO	chr7	128849205	C	T	Heterozygous	7.3	46	SNP	Novel	248	---
SMO	chr7	128849237	C	T	Heterozygous	7	38	SNP	Novel	215	---
SMO	chr7	128850276	G	A	Heterozygous	8.3	151	SNP	Novel	726	---
SMO	chr7	128850283	C	T	Heterozygous	8.5	162	SNP	Novel	727	---
SMO	chr7	128850312	G	A	Heterozygous	3.4	13	SNP	Novel	731	---
SMO	chr7	128850323	G	A	Heterozygous	5.7	64	SNP	Novel	732	---
SMO	chr7	128850363	G	A	Heterozygous	4.3	28	SNP	Novel	728	---
BRAF	chr7	140434394	G	A	Heterozygous	7.3	39	SNP	Novel	192	---
BRAF	chr7	140434424	C	A	Heterozygous	5.5	22	SNP	Novel	201	---
BRAF	chr7	140453139	G	A	Heterozygous	34.3	187	SNP	Novel	70	---
BRAF	chr7	140453208	G	A	Heterozygous	32.8	161	SNP	Novel	67	---
BRAF	chr7	140481395	G	A	Heterozygous	13	156	SNP	Novel	284	---
BRAF	chr7	140481408	G	A	Heterozygous	13.1	157	SNP	Novel	282	---
BRAF	chr7	140494210	G	A	Heterozygous	11.5	66	SNP	Novel	139	---
BRAF	chr7	140494226	G	A	Heterozygous	7	29	SNP	Novel	142	---
BRAF	chr7	140494244	G	A	Heterozygous	7.1	29	SNP	Novel	141	---
BRAF	chr7	140500228	G	A	Heterozygous	3.2	15	SNP	Novel	1385	---
BRAF	chr7	140500246	G	A	Heterozygous	3.7	27	SNP	Novel	1402	---
BRAF	chr7	140500266	G	A	Heterozygous	3.7	26	SNP	Novel	1407	---
BRAF	chr7	140501279	C	T	Heterozygous	3.9	29	SNP	Novel	1176	---
BRAF	chr7	140507789	C	T	Heterozygous	6.3	76	SNP	Novel	683	---
BRAF	chr7	140507823	C	T	Heterozygous	4.9	41	SNP	Novel	690	---
BRAF	chr7	140507824	C	T	Heterozygous	3.6	16	SNP	Novel	690	---
GNAQ	chr9	80412491	C	T	Heterozygous	8.3	108	SNP	Novel	494	---
GNAQ	chr9	80412517	G	A	Heterozygous	5.3	38	SNP	Novel	493	---
GNAQ	chr9	80412525	G	A	Heterozygous	5.1	34	SNP	Novel	492	---
GNAQ	chr9	80412536	C	T	Heterozygous	10.3	170	SNP	Novel	493	---

RET	chr10	43609931	C	T	Heterozygous	8.7	44	SNP	Novel	150	---
RET	chr10	43609986	C	T	Heterozygous	16.2	129	SNP	Novel	154	---
RET	chr10	43609989	C	T	Heterozygous	16.3	132	SNP	Novel	153	---
RET	chr10	43609994	C	T	Heterozygous	29.4	331	SNP	Novel	153	---
RET	chr10	43613843	G	T	Heterozygous	41	1640	SNP	Novel	441	---
RET	chr10	43613861	G	A	Heterozygous	4.3	20	SNP	Novel	443	---
RET	chr10	43613864	C	T	Heterozygous	3.7	14	SNP	Novel	430	---
FGFR2	chr10	123247549	C	T	Heterozygous	3.6	14	SNP	Novel	614	---
FGFR2	chr10	123247576	C	T	Heterozygous	4	21	SNP	Novel	618	---
FGFR2	chr10	123257997	C	T	Heterozygous	12.8	190	SNP	Novel	367	---
FGFR2	chr10	123274813	T	C	Heterozygous	9.7	30	SNP	Novel	72	---
FGFR2	chr10	123284097	G	A	Heterozygous	7.6	22	SNP	Novel	79	---
FGFR2	chr10	123284124	G	A	Heterozygous	6.5	18	SNP	Novel	77	---
FGFR2	chr10	123306066	G	T	Heterozygous	8.8	49	SNP	Novel	170	---
FGFR2	chr10	123350102	G	A	Heterozygous	31.8	45	SNP	Novel	22	---
FGFR2	chr10	123354412	A	G	Heterozygous	4.1	18	SNP	Novel	443	---
FGFR2	chr10	123354423	G	A	Heterozygous	5.9	44	SNP	Novel	444	---
HRAS	chr11	533869	C	T	Heterozygous	31.2	295	SNP	Novel	125	---
HRAS	chr11	533905	A	G	Heterozygous	9	40	SNP	Novel	122	---
HRAS	chr11	534302	C	T	Heterozygous	4.2	25	SNP	Novel	637	---
KRAS	chr12	25364785	C	T	Heterozygous	40	143	SNP	Novel	40	---
KRAS	chr12	25364817	C	T	Heterozygous	8.1	14	SNP	Novel	37	---
KRAS	chr12	25398285	C	T	Homozygous	100	568	SNP	Hotspot	43	COSM517
KRAS	chr12	25400206	G	T	Heterozygous	50	233	SNP	Novel	46	---
KRAS	chr12	25400237	C	T	Heterozygous	34.1	127	SNP	Novel	44	---
ERBB3	chr12	56477694	A	T	Homozygous	98.7	1121	SNP	Novel	76	---
ERBB3	chr12	56478806	C	T	Heterozygous	12.9	150	SNP	Novel	279	---
ERBB3	chr12	56478833	C	T	Heterozygous	8.6	70	SNP	Novel	280	---
ERBB3	chr12	56482294	C	T	Heterozygous	16.2	371	SNP	Novel	468	---
ERBB3	chr12	56482362	G	A	Heterozygous	11.6	190	SNP	Novel	440	---
ERBB3	chr12	56482553	G	A	Heterozygous	5.6	19	SNP	Novel	142	---
ERBB3	chr12	56482611	G	A	Heterozygous	12.1	73	SNP	Novel	140	---
CDK4	chr12	58142114	G	A	Heterozygous	61.8	224	SNP	Novel	34	---
CDK4	chr12	58142895	C	T	Heterozygous	11.6	173	SNP	Novel	398	---
CDK4	chr12	58142906	G	A	Heterozygous	5.7	39	SNP	Novel	406	---
CDK4	chr12	58142928	C	T	Heterozygous	12.6	209	SNP	Novel	412	---
CDK4	chr12	58142958	C	T	Heterozygous	10.7	152	SNP	Novel	413	---
CDK4	chr12	58142964	C	T	Heterozygous	10.9	159	SNP	Novel	412	---

CDK4	chr12	58142971	C	T	Heterozygous	8.5	143	SNP	Novel	410	---
CDK4	chr12	58144453	C	A	Heterozygous	17.9	85	SNP	Novel	84	---
CDK4	chr12	58144462	G	A	Heterozygous	49.4	407	SNP	Novel	83	---
CDK4	chr12	58144891	G	A	Heterozygous	4.5	15	SNP	Novel	201	---
CDK4	chr12	58145768	C	T	Heterozygous	6.1	26	SNP	Novel	179	---
CDK4	chr12	58145946	G	A	Heterozygous	7.2	104	SNP	Novel	664	---
CDK4	chr12	58145976	G	A	Heterozygous	5.9	65	SNP	Novel	677	---
CDK4	chr12	58146017	C	T	Heterozygous	3.7	17	SNP	Novel	670	---
MAP2K1	chr15	66774113	C	T	Heterozygous	15.9	275	SNP	Novel	353	---
ERBB2	chr17	37868176	C	T	Heterozygous	38.6	275	SNP	Novel	83	---
ERBB2	chr17	37868255	G	A	Heterozygous	39.3	288	SNP	Novel	84	---
ERBB2	chr17	37872389	C	T	Heterozygous	7.9	35	SNP	Novel	140	---
ERBB2	chr17	37872390	C	T	Heterozygous	36.7	436	SNP	Novel	139	---
ERBB2	chr17	37872404	C	T	Heterozygous	18.7	155	SNP	Novel	139	---
ERBB2	chr17	37872459	C	T	Heterozygous	34.5	396	SNP	Novel	139	---
ERBB2	chr17	37872471	C	T	Heterozygous	8	35	SNP	Novel	138	---
ERBB2	chr17	37879618	G	A	Heterozygous	5.2	159	SNP	Novel	2745	---
ERBB2	chr17	37879673	G	A	Heterozygous	4.2	71	SNP	Novel	2792	---
ERBB2	chr17	37879689	G	A	Heterozygous	4.5	98	SNP	Novel	2784	---
ERBB2	chr17	37879858	C	T	Heterozygous	4.3	39	SNP	Novel	1176	---
ERBB2	chr17	37879890	G	A	Heterozygous	3.5	19	SNP	Novel	1172	---
ERBB2	chr17	37879913	G	A	Heterozygous	4.5	48	SNP	Novel	1166	---
ERBB2	chr17	37880225	G	A	Heterozygous	29.5	212	SNP	Novel	105	---
ERBB2	chr17	37880232	C	T	Heterozygous	32.7	267	SNP	Novel	107	---
ERBB2	chr17	37880296	C	T	Heterozygous	35.8	312	SNP	Novel	109	---
ERBB2	chr17	37880321	C	G	Heterozygous	17.7	125	SNP	Novel	130	---
ERBB2	chr17	37880973	C	T	Heterozygous	10.4	129	SNP	Novel	365	---
ERBB2	chr17	37880987	C	T	Heterozygous	15.8	278	SNP	Novel	368	---
ERBB2	chr17	37881007	C	T	Heterozygous	12.3	177	SNP	Novel	367	---
ERBB2	chr17	37881023	C	T	Heterozygous	13.3	206	SNP	Novel	368	---
ERBB2	chr17	37881027	C	T	Heterozygous	10.6	134	SNP	Novel	369	---
ERBB2	chr17	37881060	G	A	Heterozygous	5	27	SNP	Novel	361	---
ERBB2	chr17	37881434	G	A	Heterozygous	15.3	294	SNP	Novel	406	---
ERBB2	chr17	37881449	G	A	Heterozygous	12.8	204	SNP	Novel	390	---
ERBB2	chr17	37882904	G	A	Heterozygous	5.6	29	SNP	Novel	266	---
ERBB2	chr17	37882912	GG	AA	Heterozygous	5.6	29	MNP	Novel	266	---
ERBB2	chr17	37882935	C	T	Heterozygous	15.4	196	SNP	Novel	266	---
ERBB2	chr17	37883131	G	A	Heterozygous	14.7	98	SNP	Novel	136	---

ERBB2	chr17	37883205	C	A	Heterozygous	6.5	24	SNP	Novel	138	---
ERBB2	chr17	37883224	G	A	Heterozygous	7.4	33	SNP	Novel	148	---
GNA11	chr19	3114986	C	T	Heterozygous	18.2	69	SNP	Novel	66	---
GNA11	chr19	3115051	C	T	Heterozygous	18.2	69	SNP	Novel	66	---
GNA11	chr19	3118894	G	A	Heterozygous	5.3	51	SNP	Novel	721	---
GNA11	chr19	3118914	C	T	Heterozygous	4	23	SNP	Novel	726	---
GNA11	chr19	3118936	G	A	Heterozygous	5.7	67	SNP	Novel	672	---
GNA11	chr19	3118958	G	A	Heterozygous	4.9	42	SNP	Novel	715	---
GNA11	chr19	3118968	C	T	Heterozygous	4.1	24	SNP	Novel	708	---
JAK3	chr19	17948796	C	T	Heterozygous	95.9	725	SNP	Novel	49	---
JAK3	chr19	17949133	T	C	Heterozygous	3.8	20	SNP	Novel	652	---
JAK3	chr19	17949157	G	A	Heterozygous	4.6	32	SNP	Novel	658	---
JAK3	chr19	17949158	G	A	Heterozygous	8.8	160	SNP	Novel	657	---
AR	chrX	66776192	A	G	Heterozygous	8	36	SNP	Novel	137	---
AR	chrX	66799231	C	T	Heterozygous	15.7	133	SNP	Novel	172	---
AR	chrX	66799284	G	A	Heterozygous	25.7	292	SNP	Novel	171	---
AR	chrX	66866159	G	A	Heterozygous	30.8	245	SNP	Novel	107	---
AR	chrX	66906905	G	A	Heterozygous	7.8	61	SNP	Novel	294	---
AR	chrX	66906919	G	A	Heterozygous	8.8	78	SNP	Novel	294	---
AR	chrX	66917700	G	A	Heterozygous	37.8	264	SNP	Novel	82	---
AR	chrX	66917768	G	A	Heterozygous	4.9	12	SNP	Novel	82	---
AR	chrX	66938989	C	T	Heterozygous	90.6	386	SNP	Novel	32	---
AR	chrX	66938992	C	T	Heterozygous	87.5	363	SNP	Novel	32	---
AR	chrX	66943574	C	T	Heterozygous	5.6	65	SNP	Novel	804	---