

Data Sheet

Product Name: CancerSeq AMS Paraffin Tissue Curl

Catalog No.: T2235152-AC

Lot No.: C202135

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

Pathological Diagnosis: Adenocarcinoma, Peripheral

Tumor Size: N/A

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)

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Gene ID	Chrom	Position	Ref	Variant	Allele Call	Frequency	Quality	Type	Allele Source	Coverage	Allele Name
MTOR	chr1	11174396	G	A	Heterozygous	18.2	37	SNP	Novel	33	---
MTOR	chr1	11174400	G	A	Heterozygous	9.1	15	SNP	Novel	33	---
MTOR	chr1	11184654	C	T	Heterozygous	7.7	10	SNP	Novel	26	---
MTOR	chr1	11217220	G	A	Heterozygous	2.5	14	SNP	Novel	120	---
MTOR	chr1	11217255	C	T	Heterozygous	6.6	52	SNP	Novel	121	---
MTOR	chr1	11217262	G	A	Heterozygous	2.4	14	SNP	Novel	125	---
MTOR	chr1	11217288	C	T	Heterozygous	2.3	14	SNP	Novel	131	---
MTOR	chr1	11217292	G	A	Heterozygous	6.2	51	SNP	Novel	129	---
JAK1	chr1	65310489	T	C	Heterozygous	31.7	111	SNP	Novel	41	---
JAK1	chr1	65311185	G	A	Heterozygous	3.2	91	SNP	Novel	887	---
JAK1	chr1	65311187	C	T	Heterozygous	1.7	25	SNP	Novel	887	---
JAK1	chr1	65311212	C	T	Heterozygous	1.6	24	SNP	Novel	1004	---
JAK1	chr1	65311242	C	T	Heterozygous	2.7	74	SNP	Novel	1007	---
NRAS	chr1	115256510	C	T	Heterozygous	1.8	26	SNP	Novel	705	---
NRAS	chr1	115256527	C	T	Heterozygous	2	33	SNP	Novel	745	---
NRAS	chr1	115256552	C	T	Heterozygous	1.2	11	SNP	Novel	743	---
NRAS	chr1	115256555	C	T	Heterozygous	1.5	17	SNP	Novel	741	---
NRAS	chr1	115258703	G	A	Heterozygous	1.2	10	SNP	Novel	670	---
NRAS	chr1	115258709	G	A	Heterozygous	1.2	10	SNP	Novel	671	---
NRAS	chr1	115258710	G	A	Heterozygous	1.2	10	SNP	Novel	671	---
NRAS	chr1	115258744	C	T	Heterozygous	1.4	13	SNP	Hotspot	588	COSM573
NRAS	chr1	115258745	C	T	Heterozygous	1	8	SNP	Hotspot	588	COSM571
NRAS	chr1	115258752	T	G	Heterozygous	2.4	39	SNP	Novel	574	---
NRAS	chr1	115258753	C	T	Heterozygous	2.3	35	SNP	Novel	564	---
NRAS	chr1	115258770	G	A	Heterozygous	2	24	SNP	Novel	512	---
NRAS	chr1	115258773	C	T	Heterozygous	2	24	SNP	Novel	506	---
ALK	chr2	29416366	G	C	Homozygous	100	262	SNP	Novel	20	---
ALK	chr2	29420399	G	A	Heterozygous	2	14	SNP	Novel	153	---
ALK	chr2	29420405	T	A	Heterozygous	3.8	31	SNP	Novel	160	---
ALK	chr2	29420441	C	T	Heterozygous	4.3	39	SNP	Novel	161	---
ALK	chr2	29420472	C	T	Heterozygous	3.1	24	SNP	Novel	160	---
ALK	chr2	29432664	C	T	Heterozygous	1.2	10	SNP	Hotspot	669	COSM28056
ALK	chr2	29432687	C	T	Heterozygous	1.6	19	SNP	Novel	695	---
ALK	chr2	29432697	C	T	Heterozygous	1.3	12	SNP	Novel	694	---
ALK	chr2	29432715	G	A	Heterozygous	1.4	16	SNP	Novel	690	---

ALK	chr2	29445426	G	A	Heterozygous	6.2	15	SNP	Novel	48	---
ALK	chr2	29445458	G	T	Homozygous	100	662	SNP	Novel	41	---
ERBB4	chr2	212488726	G	A	Heterozygous	2	15	SNP	Novel	200	---
ERBB4	chr2	212488747	C	T	Heterozygous	1.5	11	SNP	Novel	269	---
ERBB4	chr2	212488762	T	C	Heterozygous	3.2	33	SNP	Novel	249	---
ERBB4	chr2	212488773	C	T	Heterozygous	5.8	77	SNP	Novel	242	---
ERBB4	chr2	212488784	G	A	Heterozygous	1.7	13	SNP	Novel	239	---
ERBB4	chr2	212488791	G	A	Heterozygous	2.9	28	SNP	Novel	239	---
RAF1	chr3	12632377	G	A	Heterozygous	2	14	SNP	Novel	147	---
RAF1	chr3	12632398	C	T	Heterozygous	3.5	26	SNP	Novel	144	---
RAF1	chr3	12632420	T	C	Heterozygous	2.2	14	SNP	Novel	135	---
RAF1	chr3	12632424	C	T	Heterozygous	5.2	42	SNP	Novel	135	---
RAF1	chr3	12645657	G	A	Heterozygous	1.2	11	SNP	Novel	734	---
RAF1	chr3	12645659	C	T	Heterozygous	1.6	21	SNP	Novel	734	---
RAF1	chr3	12645663	G	A	Heterozygous	2.9	64	SNP	Novel	735	---
RAF1	chr3	12645669	C	T	Heterozygous	1.4	14	SNP	Novel	738	---
RAF1	chr3	12645680	G	A	Heterozygous	1.5	17	SNP	Novel	742	---
RAF1	chr3	12645699	G	A	Heterozygous	1.6	23	SNP	Hotspot	736	COSM181063
RAF1	chr3	12645720	G	A	Heterozygous	1.4	13	SNP	Novel	727	---
RAF1	chr3	12645729	G	A	Heterozygous	1.8	26	SNP	Novel	711	---
PIK3CA	chr3	178921478	A	G	Heterozygous	5.8	15	SNP	Novel	52	---
PIK3CA	chr3	178921522	G	A	Heterozygous	3.7	10	SNP	Novel	54	---
PIK3CA	chr3	178947821	G	A	Heterozygous	1.1	12	SNP	Novel	1633	---
PIK3CA	chr3	178947865	G	A	Heterozygous	1.4	24	SNP	Novel	1619	---
FGFR3	chr4	1797669	C	T	Heterozygous	1.7	77	SNP	Novel	694	---
FGFR3	chr4	1797676	C	T	Heterozygous	2.7	138	SNP	Novel	712	---
FGFR3	chr4	1797693	C	T	Heterozygous	3.6	178	SNP	Novel	722	---
FGFR3	chr4	1797702	C	T	Heterozygous	1.1	18	SNP	Novel	728	---
FGFR3	chr4	1797706	C	T	Heterozygous	2.1	39	SNP	Novel	728	---
FGFR3	chr4	1797719	C	T	Heterozygous	1.6	21	SNP	Novel	732	---
FGFR3	chr4	1797726	C	T	Heterozygous	1.4	15	SNP	Novel	728	---
FGFR3	chr4	1797729	G	A	Heterozygous	1.2	11	SNP	Novel	733	---
FGFR3	chr4	1797734	G	A	Heterozygous	1.1	10	SNP	Novel	729	---
FGFR3	chr4	1803553	C	T	Heterozygous	1.4	17	SNP	Novel	363	---
FGFR3	chr4	1803561	G	A	Heterozygous	1.3	11	SNP	Novel	373	---
FGFR3	chr4	1803565	G	A	Heterozygous	1.3	11	SNP	Hotspot	373	COSM1757310
FGFR3	chr4	1803571	C	T	Heterozygous	2.2	23	SNP	Novel	372	---
FGFR3	chr4	1803581	C	T	Heterozygous	1.1	20	SNP	Novel	374	---

FGFR3	chr4	1803585	C	T	Heterozygous	1.6	14	SNP	Novel	375	---
FGFR3	chr4	1803595	G	A	Heterozygous	1.6	56	SNP	Novel	368	---
FGFR3	chr4	1803606	A	G	Heterozygous	5.3	115	SNP	Novel	418	---
FGFR3	chr4	1803609	C	T	Heterozygous	1.4	12	SNP	Novel	438	---
FGFR3	chr4	1803614	G	A	Heterozygous	2.5	34	SNP	Novel	438	---
FGFR3	chr4	1803617	G	A	Heterozygous	1.8	19	SNP	Novel	438	---
FGFR3	chr4	1803629	C	T	Heterozygous	1.6	15	SNP	Novel	445	---
FGFR3	chr4	1803647	C	T	Heterozygous	2.3	29	SNP	Novel	431	---
FGFR3	chr4	1805854	C	T	Heterozygous	3.3	32	SNP	Novel	122	---
FGFR3	chr4	1805864	C	T	Heterozygous	2.6	14	SNP	Novel	116	---
FGFR3	chr4	1805881	C	T	Heterozygous	2.7	15	SNP	Novel	112	---
FGFR3	chr4	1805889	C	T	Heterozygous	9.9	81	SNP	Novel	111	---
FGFR3	chr4	1806125	G	T	Heterozygous	5.2	81	SNP	Novel	134	---
FGFR3	chr4	1806131	T	C	Heterozygous	5.2	42	SNP	Novel	135	---
FGFR3	chr4	1806136	G	A	Heterozygous	3.1	20	SNP	Novel	130	---
FGFR3	chr4	1806143	C	T	Heterozygous	3.3	20	SNP	Novel	122	---
FGFR3	chr4	1807841	G	A	Heterozygous	3.1	32	SNP	Novel	262	---
FGFR3	chr4	1807852	G	A	Heterozygous	1.9	36	SNP	Novel	261	---
FGFR3	chr4	1807859	C	A	Heterozygous	3.1	82	SNP	Novel	262	---
FGFR3	chr4	1807888	G	A	Heterozygous	3.5	38	SNP	Novel	255	---
FGFR3	chr4	1807894	G	A	Homozygous	100	5073	SNP	Novel	248	---
FGFR3	chr4	1807908	C	T	Heterozygous	2	16	SNP	Novel	255	---
FGFR3	chr4	1807910	G	A	Heterozygous	1.6	12	SNP	Novel	254	---
FGFR3	chr4	1807918	G	A	Heterozygous	2	17	SNP	Novel	253	---
FGFR3	chr4	1808315	G	A	Heterozygous	3.1	66	SNP	Novel	647	---
FGFR3	chr4	1808332	G	A	Heterozygous	1.8	24	SNP	Novel	674	---
FGFR3	chr4	1808342	G	A	Heterozygous	3.1	68	SNP	Novel	686	---
FGFR3	chr4	1808356	A	C	Heterozygous	1.8	26	SNP	Novel	704	---
FGFR3	chr4	1808367	G	A	Heterozygous	1.4	14	SNP	Novel	724	---
FGFR3	chr4	1808369	G	A	Heterozygous	2.2	39	SNP	Novel	725	---
FGFR3	chr4	1808372	C	T	Heterozygous	1.5	17	SNP	Novel	732	---
FGFR3	chr4	1808382	G	A	Heterozygous	1.9	29	SNP	Novel	728	---
FGFR3	chr4	1808384	C	T	Heterozygous	1.7	21	SNP	Novel	727	---
FGFR3	chr4	1808390	C	T	Heterozygous	1.2	25	SNP	Novel	722	---
FGFR3	chr4	1808398	G	A	Heterozygous	1.8	25	SNP	Novel	721	---
PDGFRA	chr4	55097751	C	T	Heterozygous	14.3	15	SNP	Novel	21	---
PDGFRA	chr4	55126198	G	A	Heterozygous	3.9	15	SNP	Novel	77	---
PDGFRA	chr4	55144115	G	A	Heterozygous	3.1	24	SNP	Novel	162	---

PDGFRA	chr4	55144126	G	A	Heterozygous	2.5	29	SNP	Novel	161	---
PDGFRA	chr4	55144142	T	C	Heterozygous	2	15	SNP	Novel	202	---
PDGFRA	chr4	55144155	G	A	Heterozygous	1.5	11	SNP	Novel	201	---
PDGFRA	chr4	55144166	C	T	Heterozygous	2	15	SNP	Novel	198	---
KIT	chr4	55589758	G	A	Heterozygous	3	20	SNP	Novel	134	---
KIT	chr4	55589764	C	T	Heterozygous	3	20	SNP	Novel	135	---
KIT	chr4	55589788	GG	AA	Heterozygous	2.2	14	MNP	Novel	138	---
KIT	chr4	55589796	C	T	Heterozygous	2.2	14	SNP	Novel	139	---
KIT	chr4	55592173	G	A	Heterozygous	4.7	27	SNP	Novel	106	---
KIT	chr4	55592246	G	A	Heterozygous	4.8	27	SNP	Novel	105	---
KIT	chr4	55593436	C	T	Heterozygous	3.2	28	SNP	Novel	187	---
KIT	chr4	55593473	A	C	Heterozygous	2.6	19	SNP	Novel	193	---
KIT	chr4	55593475	C	T	Heterozygous	3.1	27	SNP	Novel	194	---
KIT	chr4	55593510	C	T	Heterozygous	1.6	11	SNP	Novel	186	---
ESR1	chr6	152419966	G	A	Heterozygous	6.5	10	SNP	Novel	31	---
EGFR	chr7	55211072	G	A	Heterozygous	1.5	15	SNP	Novel	607	---
EGFR	chr7	55211080	G	A	Heterozygous	1.4	13	SNP	Hotspot	568	COSM21683
EGFR	chr7	55211118	G	A	Heterozygous	1.9	23	SNP	Novel	522	---
EGFR	chr7	55221822	C	T	Heterozygous	4.1	10	SNP	Hotspot	49	COSM21687
EGFR	chr7	55221826	C	T	Heterozygous	6.1	15	SNP	Novel	49	---
EGFR	chr7	55221830	G	A	Heterozygous	9.3	21	SNP	Novel	43	---
EGFR	chr7	55221863	G	T	Heterozygous	6.1	15	SNP	Novel	49	---
EGFR	chr7	55221866	C	T	Heterozygous	6.1	15	SNP	Novel	49	---
EGFR	chr7	55221867	C	T	Heterozygous	6.1	14	SNP	Novel	49	---
EGFR	chr7	55232970	C	T	Heterozygous	1.5	17	SNP	Novel	660	---
EGFR	chr7	55232973	G	A	Heterozygous	1.8	25	SNP	Novel	658	---
EGFR	chr7	55233005	C	T	Heterozygous	1.3	14	SNP	Novel	934	---
EGFR	chr7	55233016	C	T	Heterozygous	2.6	179	SNP	Novel	923	---
EGFR	chr7	55233037	C	T	Heterozygous	1.4	51	SNP	Novel	923	---
EGFR	chr7	55233050	G	A	Heterozygous	1.6	21	SNP	Novel	901	---
EGFR	chr7	55241656	G	A	Heterozygous	2.5	29	SNP	Novel	367	---
EGFR	chr7	55241697	C	T	Heterozygous	1.6	13	SNP	Novel	310	---
EGFR	chr7	55241708	G	A	Heterozygous	5.1	84	SNP	Hotspot	334	COSM18425
EGFR	chr7	55241710	T	G	Heterozygous	4.2	63	SNP	Novel	332	---
EGFR	chr7	55241711	C	T	Heterozygous	1.5	12	SNP	Novel	332	---
EGFR	chr7	55241714	G	A	Heterozygous	2.7	49	SNP	Novel	330	---
EGFR	chr7	55241716	G	A	Heterozygous	0.9	11	SNP	Novel	319	---
EGFR	chr7	55241718	G	A	Heterozygous	2.7	32	SNP	Novel	330	---

EGFR	chr7	55241722	G	A	Heterozygous	2.1	34	SNP	Novel	329	---
EGFR	chr7	55241727	G	A	Heterozygous	1.5	13	SNP	Novel	328	---
EGFR	chr7	55249063	G	A	Heterozygous	39.3	91	SNP	Novel	28	---
EGFR	chr7	55259490	C	T	Heterozygous	4.3	10	SNP	Novel	47	---
EGFR	chr7	55259501	C	T	Heterozygous	4.3	10	SNP	Novel	47	---
MET	chr7	116339385	G	A	Heterozygous	9.1	21	SNP	Novel	44	---
MET	chr7	116339426	C	T	Heterozygous	4.5	10	SNP	Novel	44	---
MET	chr7	116339431	G	A	Heterozygous	9.1	21	SNP	Novel	44	---
MET	chr7	116340224	G	A	Heterozygous	1.9	19	SNP	Novel	361	---
MET	chr7	116340270	G	A	Heterozygous	1.9	19	SNP	Novel	373	---
MET	chr7	116340271	T	G	Heterozygous	2.1	23	SNP	Novel	373	---
MET	chr7	116340296	C	T	Heterozygous	2.2	24	SNP	Novel	361	---
MET	chr7	116340310	G	A	Heterozygous	1.7	15	SNP	Novel	353	---
MET	chr7	116423452	G	A	Heterozygous	2.7	47	SNP	Novel	635	---
MET	chr7	116423464	G	A	Heterozygous	1.3	11	SNP	Novel	635	---
MET	chr7	116423466	G	A	Heterozygous	1.6	18	SNP	Novel	630	---
MET	chr7	116434464	T	C	Heterozygous	8.6	15	SNP	Novel	35	---
MET	chr7	116434504	T	C	Heterozygous	18.2	37	SNP	Novel	33	---
SMO	chr7	128845553	C	T	Heterozygous	11.4	21	SNP	Novel	35	---
SMO	chr7	128845569	C	T	Heterozygous	11.4	21	SNP	Novel	35	---
SMO	chr7	128845570	C	T	Heterozygous	5.7	10	SNP	Novel	35	---
SMO	chr7	128846356	C	T	Heterozygous	1.6	19	SNP	Novel	618	---
SMO	chr7	128846361	C	T	Heterozygous	2.9	57	SNP	Novel	619	---
SMO	chr7	128846362	C	T	Heterozygous	1.9	27	SNP	Novel	619	---
SMO	chr7	128846365	G	A	Heterozygous	2.6	46	SNP	Novel	619	---
SMO	chr7	128846394	G	A	Heterozygous	1.5	15	SNP	Novel	615	---
SMO	chr7	128846395	G	C	Heterozygous	8.6	345	SNP	Novel	615	---
SMO	chr7	128846404	G	A	Heterozygous	1.3	11	SNP	Novel	541	---
SMO	chr7	128849182	C	T	Heterozygous	33.3	48	SNP	Novel	21	---
SMO	chr7	128849237	C	T	Heterozygous	16.7	22	SNP	Novel	24	---
SMO	chr7	128850291	G	A	Heterozygous	3	24	SNP	Novel	164	---
SMO	chr7	128850308	C	T	Heterozygous	2.4	20	SNP	Novel	212	---
SMO	chr7	128850347	G	A	Heterozygous	5.5	59	SNP	Novel	201	---
SMO	chr7	128850348	G	A	Heterozygous	3.5	32	SNP	Novel	200	---
BRAF	chr7	140434447	G	A	Heterozygous	7.7	35	SNP	Novel	78	---
BRAF	chr7	140476724	G	A	Heterozygous	8.6	15	SNP	Novel	35	---
BRAF	chr7	140481412	C	T	Heterozygous	2.5	31	SNP	Hotspot	398	COSM253328
BRAF	chr7	140481414	G	A	Heterozygous	2.1	23	SNP	Novel	380	---

BRAF	chr7	140481418	C	T	Heterozygous	2.4	28	SNP	Novel	380	---
BRAF	chr7	140481423	C	T	Heterozygous	6.6	144	SNP	Novel	380	---
BRAF	chr7	140481427	G	A	Heterozygous	2.1	25	SNP	Novel	374	---
BRAF	chr7	140481430	C	T	Heterozygous	7.5	212	SNP	Novel	374	---
BRAF	chr7	140481438	A	G	Heterozygous	1.4	11	SNP	Novel	370	---
BRAF	chr7	140481440	C	T	Heterozygous	1.9	19	SNP	Novel	369	---
BRAF	chr7	140494202	G	A	Heterozygous	2.9	10	SNP	Novel	70	---
BRAF	chr7	140494221	G	A	Heterozygous	2.8	10	SNP	Novel	71	---
BRAF	chr7	140494226	G	A	Heterozygous	8	35	SNP	Novel	75	---
BRAF	chr7	140500228	G	A	Heterozygous	1.5	18	SNP	Novel	723	---
BRAF	chr7	140500250	G	A	Heterozygous	2	34	SNP	Novel	791	---
BRAF	chr7	140500263	C	T	Heterozygous	1.4	15	SNP	Novel	785	---
BRAF	chr7	140500269	G	A	Heterozygous	2	35	SNP	Novel	787	---
BRAF	chr7	140500286	G	A	Heterozygous	2.2	38	SNP	Novel	735	---
BRAF	chr7	140500290	C	A	Heterozygous	4.5	145	SNP	Novel	733	---
BRAF	chr7	140501292	G	A	Heterozygous	2	22	SNP	Novel	399	---
BRAF	chr7	140501295	G	A	Heterozygous	1.5	23	SNP	Novel	392	---
BRAF	chr7	140501312	G	A	Heterozygous	2	22	SNP	Novel	398	---
BRAF	chr7	140501325	G	A	Heterozygous	0.8	13	SNP	Novel	394	---
BRAF	chr7	140507787	C	T	Heterozygous	3.2	30	SNP	Novel	221	---
BRAF	chr7	140507807	A	C	Heterozygous	1.5	12	SNP	Novel	259	---
BRAF	chr7	140507823	C	T	Heterozygous	2.6	26	SNP	Novel	266	---
BRAF	chr7	140507834	C	T	Heterozygous	2.6	26	SNP	Novel	265	---
GNAQ	chr9	80412465	G	A	Heterozygous	3.4	83	SNP	Novel	234	---
GNAQ	chr9	80412481	G	A	Heterozygous	2.4	22	SNP	Novel	247	---
GNAQ	chr9	80412496	A	G	Heterozygous	2	16	SNP	Novel	255	---
GNAQ	chr9	80412515	G	A	Heterozygous	1.5	12	SNP	Novel	264	---
GNAQ	chr9	80412516	C	T	Heterozygous	2.3	21	SNP	Novel	264	---
GNAQ	chr9	80412530	C	T	Heterozygous	1.9	16	SNP	Novel	257	---
GNAQ	chr9	80412545	G	A	Heterozygous	2.4	22	SNP	Novel	253	---
RET	chr10	43609162	C	T	Heterozygous	8.6	15	SNP	Novel	35	---
RET	chr10	43609918	C	T	Heterozygous	14.3	15	SNP	Novel	21	---
RET	chr10	43609923	C	T	Heterozygous	8.3	10	SNP	Novel	24	---
RET	chr10	43613826	G	A	Heterozygous	1.4	22	SNP	Novel	217	---
RET	chr10	43613843	G	T	Heterozygous	48.9	1572	SNP	Novel	227	---
RET	chr10	43613870	C	T	Heterozygous	2.2	18	SNP	Novel	226	---
RET	chr10	43613885	C	T	Heterozygous	2.8	25	SNP	Novel	212	---
FGFR2	chr10	123247548	G	A	Heterozygous	4	36	SNP	Novel	175	---

FGFR2	chr10	123247549	C	T	Heterozygous	2.9	23	SNP	Novel	175	---
FGFR2	chr10	123247550	G	A	Heterozygous	1.8	12	SNP	Novel	171	---
FGFR2	chr10	123247555	C	T	Heterozygous	1.7	15	SNP	Novel	173	---
FGFR2	chr10	123247564	C	T	Heterozygous	5.7	58	SNP	Novel	174	---
FGFR2	chr10	123247576	C	T	Heterozygous	5.7	58	SNP	Novel	174	---
FGFR2	chr10	123257969	G	A	Heterozygous	4.1	15	SNP	Novel	73	---
FGFR2	chr10	123276936	G	A	Heterozygous	8.8	15	SNP	Novel	34	---
FGFR2	chr10	123354464	C	T	Heterozygous	2.5	36	SNP	Novel	479	---
HRAS	chr11	533878	C	T	Heterozygous	9.1	15	SNP	Novel	33	---
HRAS	chr11	533914	C	T	Heterozygous	10	15	SNP	Novel	30	---
HRAS	chr11	534254	C	T	Heterozygous	2.8	23	SNP	Novel	179	---
HRAS	chr11	534264	G	A	Heterozygous	2.8	23	SNP	Novel	179	---
HRAS	chr11	534273	C	T	Heterozygous	1.7	12	SNP	Novel	179	---
HRAS	chr11	534285	C	T	Heterozygous	2.8	22	SNP	Hotspot	179	COSM490
HRAS	chr11	534289	C	T	Heterozygous	4.5	42	SNP	Hotspot	178	COSM480
HRAS	chr11	534299	C	T	Heterozygous	3	24	SNP	Novel	164	---
HRAS	chr11	534307	G	A	Heterozygous	2.4	17	SNP	Novel	170	---
HRAS	chr11	534323	C	T	Heterozygous	4.1	33	SNP	Novel	148	---
HRAS	chr11	534328	C	T	Heterozygous	5	41	SNP	Novel	141	---
KRAS	chr12	25380274	C	T	Heterozygous	2.9	14	SNP	Novel	105	---
KRAS	chr12	25380319	C	T	Heterozygous	3.7	20	SNP	Novel	108	---
KRAS	chr12	25380337	T	G	Heterozygous	3.7	20	SNP	Novel	109	---
KRAS	chr12	25389182	A	G	Heterozygous	25	98	SNP	Novel	48	---
KRAS	chr12	25389187	G	A	Heterozygous	4.2	10	SNP	Novel	48	---
KRAS	chr12	25389191	G	A	Heterozygous	6.2	15	SNP	Novel	48	---
KRAS	chr12	25389220	A	G	Heterozygous	27.7	110	SNP	Novel	47	---
KRAS	chr12	25398240	G	A	Heterozygous	7.7	21	SNP	Novel	52	---
KRAS	chr12	25398241	A	G	Heterozygous	28.3	134	SNP	Novel	53	---
KRAS	chr12	25398285	C	A	Heterozygous	43.4	249	SNP	Hotspot	53	COSM516
KRAS	chr12	25400174	G	A	Heterozygous	5.2	15	SNP	Novel	58	---
KRAS	chr12	25400206	G	T	Homozygous	100	1012	SNP	Novel	58	---
ERBB3	chr12	56477606	C	T	Heterozygous	3.1	10	SNP	Novel	65	---
ERBB3	chr12	56477633	G	A	Heterozygous	8.8	53	SNP	Novel	68	---
ERBB3	chr12	56477666	G	A	Heterozygous	8.2	35	SNP	Novel	73	---
ERBB3	chr12	56477669	G	A	Heterozygous	5.5	20	SNP	Novel	73	---
ERBB3	chr12	56477681	C	A	Heterozygous	5.5	20	SNP	Novel	73	---
ERBB3	chr12	56477694	A	T	Heterozygous	82	768	SNP	Novel	61	---
ERBB3	chr12	56478860	C	T	Heterozygous	3.1	30	SNP	Novel	223	---

ERBB3	chr12	56478868	C	T	Heterozygous	2.7	24	SNP	Novel	223	---
ERBB3	chr12	56478882	G	A	Heterozygous	2.8	25	SNP	Novel	215	---
ERBB3	chr12	56481577	A	G	Heterozygous	6.5	21	SNP	Novel	62	---
ERBB3	chr12	56481670	C	T	Heterozygous	9.8	35	SNP	Novel	61	---
ERBB3	chr12	56482312	C	T	Heterozygous	2.5	34	SNP	Novel	442	---
ERBB3	chr12	56482315	C	T	Heterozygous	10.4	332	SNP	Novel	443	---
ERBB3	chr12	56482321	C	A	Heterozygous	2.3	72	SNP	Novel	438	---
ERBB3	chr12	56482331	C	T	Heterozygous	1.6	15	SNP	Novel	442	---
ERBB3	chr12	56482342	A	G	Heterozygous	1.6	15	SNP	Novel	441	---
ERBB3	chr12	56482348	C	T	Heterozygous	2.5	37	SNP	Novel	436	---
ERBB3	chr12	56482368	C	T	Heterozygous	4.9	75	SNP	Novel	309	---
ERBB3	chr12	56482376	C	T	Heterozygous	2.6	28	SNP	Novel	308	---
ERBB3	chr12	56482588	G	A	Heterozygous	19.2	29	SNP	Novel	26	---
CDK4	chr12	58142889	C	T	Heterozygous	2.5	23	SNP	Novel	237	---
CDK4	chr12	58142895	C	T	Heterozygous	2.9	28	SNP	Novel	238	---
CDK4	chr12	58142938	C	T	Heterozygous	2.3	48	SNP	Novel	259	---
CDK4	chr12	58142947	C	T	Heterozygous	2.2	20	SNP	Novel	269	---
CDK4	chr12	58142957	T	A	Heterozygous	1.5	11	SNP	Novel	266	---
CDK4	chr12	58142958	C	T	Heterozygous	1.5	11	SNP	Novel	271	---
CDK4	chr12	58142965	C	T	Heterozygous	2.2	21	SNP	Novel	267	---
CDK4	chr12	58142982	C	T	Heterozygous	2.8	27	SNP	Novel	248	---
CDK4	chr12	58142983	C	T	Heterozygous	2.4	22	SNP	Novel	247	---
CDK4	chr12	58143258	T	C	Heterozygous	3.8	20	SNP	Novel	104	---
CDK4	chr12	58143260	G	A	Heterozygous	2.9	26	SNP	Novel	102	---
CDK4	chr12	58144445	C	T	Heterozygous	6.1	10	SNP	Novel	33	---
CDK4	chr12	58144953	C	T	Heterozygous	2.8	14	SNP	Novel	106	---
CDK4	chr12	58144960	C	T	Heterozygous	2.8	14	SNP	Novel	106	---
CDK4	chr12	58145763	A	C	Heterozygous	8.3	21	SNP	Novel	48	---
CDK4	chr12	58145768	C	T	Heterozygous	4.2	10	SNP	Novel	48	---
CDK4	chr12	58145962	C	T	Heterozygous	1.8	15	SNP	Novel	281	---
CDK4	chr12	58145964	C	T	Heterozygous	3.1	36	SNP	Novel	290	---
CDK4	chr12	58146004	C	T	Heterozygous	3.4	165	SNP	Novel	266	---
CDK4	chr12	58146020	C	T	Heterozygous	2.5	25	SNP	Novel	279	---
MAP2K1	chr15	66727450	C	A	Heterozygous	21.8	174	SNP	Novel	87	---
MAP2K1	chr15	66727521	C	T	Heterozygous	7.3	35	SNP	Novel	82	---
MAP2K1	chr15	66729174	G	T	Heterozygous	8	10	SNP	Novel	25	---
MAP2K1	chr15	66729193	A	T	Heterozygous	26.1	98	SNP	Novel	46	---
MAP2K1	chr15	66774125	C	T	Heterozygous	7.1	35	SNP	Novel	85	---

MAP2K1	chr15	66774154	G	T	Heterozygous	17.7	154	SNP	Novel	96	---
MAP2K1	chr15	66774164	C	T	Heterozygous	8	43	SNP	Novel	87	---
MAP2K1	chr15	66774172	C	T	Heterozygous	5.7	27	SNP	Novel	87	---
MAP2K1	chr15	66774182	G	A	Heterozygous	4.7	20	SNP	Novel	86	---
ERBB2	chr17	37872389	C	T	Heterozygous	11.1	29	SNP	Novel	45	---
ERBB2	chr17	37872457	C	T	Heterozygous	17.4	22	SNP	Novel	23	---
ERBB2	chr17	37879618	G	A	Heterozygous	1.5	20	SNP	Novel	1022	---
ERBB2	chr17	37879621	G	T	Heterozygous	1.6	24	SNP	Novel	1011	---
ERBB2	chr17	37879639	G	A	Heterozygous	1.2	13	SNP	Novel	1058	---
ERBB2	chr17	37879654	C	T	Heterozygous	2.2	49	SNP	Novel	1068	---
ERBB2	chr17	37879658	G	A	Heterozygous	1	8	SNP	Hotspot	1067	COSM436498
ERBB2	chr17	37879671	C	T	Heterozygous	1.3	16	SNP	Novel	1062	---
ERBB2	chr17	37879673	G	A	Heterozygous	1.3	15	SNP	Novel	1064	---
ERBB2	chr17	37879677	G	A	Heterozygous	1.5	22	SNP	Novel	1065	---
ERBB2	chr17	37879682	C	T	Heterozygous	1.4	18	SNP	Novel	1063	---
ERBB2	chr17	37879684	A	G	Heterozygous	1.1	11	SNP	Novel	1055	---
ERBB2	chr17	37879689	G	A	Heterozygous	3.2	110	SNP	Novel	1052	---
ERBB2	chr17	37879825	C	T	Heterozygous	2.6	28	SNP	Novel	309	---
ERBB2	chr17	37879833	G	A	Heterozygous	2.6	28	SNP	Novel	311	---
ERBB2	chr17	37879847	C	T	Heterozygous	2.1	22	SNP	Novel	328	---
ERBB2	chr17	37879860	G	A	Heterozygous	2.1	21	SNP	Novel	339	---
ERBB2	chr17	37879862	G	A	Heterozygous	2.3	26	SNP	Novel	341	---
ERBB2	chr17	37879878	G	A	Heterozygous	1.9	19	SNP	Novel	367	---
ERBB2	chr17	37879883	T	A	Heterozygous	5.6	110	SNP	Novel	376	---
ERBB2	chr17	37879884	G	A	Heterozygous	3.4	51	SNP	Novel	377	---
ERBB2	chr17	37879891	G	A	Heterozygous	1.4	12	SNP	Novel	345	---
ERBB2	chr17	37880321	C	G	Heterozygous	80	234	SNP	Novel	25	---
ERBB2	chr17	37880959	C	T	Heterozygous	2.6	23	SNP	Novel	233	---
ERBB2	chr17	37880960	A	C	Heterozygous	3.9	42	SNP	Novel	229	---
ERBB2	chr17	37880995	C	T	Heterozygous	3.1	29	SNP	Novel	227	---
ERBB2	chr17	37881004	G	A	Heterozygous	3.2	30	SNP	Novel	219	---
ERBB2	chr17	37881007	C	T	Heterozygous	2.3	19	SNP	Novel	222	---
ERBB2	chr17	37881027	C	T	Heterozygous	2.3	19	SNP	Novel	214	---
ERBB2	chr17	37881035	C	T	Heterozygous	2.8	25	SNP	Novel	212	---
ERBB2	chr17	37881350	G	A	Heterozygous	15.6	29	SNP	Novel	32	---
ERBB2	chr17	37881365	G	A	Heterozygous	18.8	37	SNP	Novel	32	---
ERBB2	chr17	37881406	G	A	Heterozygous	6.9	10	SNP	Novel	29	---
ERBB2	chr17	37881411	G	A	Heterozygous	6.9	10	SNP	Novel	29	---

ERBB2	chr17	37882863	C	T	Heterozygous	9.7	61	SNP	Novel	93	---
ERBB2	chr17	37882886	G	A	Heterozygous	3.1	14	SNP	Novel	97	---
ERBB2	chr17	37882924	C	T	Heterozygous	5.1	27	SNP	Novel	99	---
ERBB2	chr17	37882932	C	T	Heterozygous	4.2	20	SNP	Novel	96	---
ERBB2	chr17	37883235	G	A	Heterozygous	9.1	10	SNP	Novel	22	---
GNA11	chr19	3118885	C	T	Heterozygous	1.9	18	SNP	Novel	309	---
GNA11	chr19	3118895	C	T	Heterozygous	2.2	23	SNP	Novel	312	---
GNA11	chr19	3118902	C	T	Heterozygous	2.6	28	SNP	Novel	312	---
GNA11	chr19	3118908	C	T	Heterozygous	1.6	13	SNP	Novel	313	---
GNA11	chr19	3118914	C	T	Heterozygous	1.9	17	SNP	Novel	322	---
GNA11	chr19	3118939	G	A	Heterozygous	2.2	28	SNP	Novel	278	---
GNA11	chr19	3118948	C	T	Heterozygous	1.7	14	SNP	Novel	302	---
GNA11	chr19	3118962	T	G	Heterozygous	2	19	SNP	Novel	294	---
GNA11	chr19	3118970	C	T	Heterozygous	1.7	14	SNP	Novel	296	---
GNA11	chr19	3118972	G	A	Heterozygous	2	19	SNP	Novel	296	---
JAK3	chr19	17949119	G	A	Heterozygous	1.3	18	SNP	Novel	1452	---
JAK3	chr19	17949123	G	A	Heterozygous	1.2	15	SNP	Novel	1452	---
JAK3	chr19	17949138	C	T	Heterozygous	1.4	45	SNP	Novel	1470	---
JAK3	chr19	17949164	T	A	Heterozygous	2.2	71	SNP	Hotspot	1594	COSM48455
JAK3	chr19	17949165	G	A	Heterozygous	2.2	71	SNP	Novel	1590	---
JAK3	chr19	17949177	G	A	Heterozygous	1.1	10	SNP	Novel	1577	---
JAK3	chr19	17949180	C	T	Heterozygous	1.1	10	SNP	Novel	1576	---
JAK3	chr19	17949182	C	T	Heterozygous	1.3	17	SNP	Novel	1575	---
AR	chrX	66776212	G	A	Heterozygous	3.8	20	SNP	Novel	105	---
AR	chrX	66799290	C	T	Heterozygous	5.7	10	SNP	Novel	35	---
AR	chrX	66906893	G	A	Heterozygous	1.3	11	SNP	Novel	449	---
AR	chrX	66906916	A	T	Heterozygous	2.9	45	SNP	Novel	447	---
AR	chrX	66915255	C	T	Heterozygous	11.5	15	SNP	Novel	26	---
AR	chrX	66943520	C	T	Heterozygous	1.8	26	SNP	Novel	800	---
AR	chrX	66943532	C	T	Heterozygous	2.2	43	SNP	Novel	803	---
AR	chrX	66943553	C	T	Heterozygous	1.2	53	SNP	Novel	803	---