

# Data Sheet

Product Name: CancerSeq AMS Paraffin Tissue Curl

Catalog No.: T2235152-AC

Lot No.: C202126

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: 57 year(s) old

Pathological Diagnosis: Adenocarcinoma (part of Bronchioloalveolar carcinoma)

Tumor Size: diameter 4 cm

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

C202126

Gene ID	Chrom	Position	Ref	Variant	Allele Call	Frequency	Quality	Type	Allele Source	Coverage	Allele Name
MTOR	chr1	11174374	C	T	Heterozygous	7.3	138	SNP	Novel	317	---
MTOR	chr1	11174384	G	A	Heterozygous	24	787	SNP	Novel	317	---
MTOR	chr1	11174398	A	G	Heterozygous	12	289	SNP	Novel	317	---
MTOR	chr1	11174426	C	T	Heterozygous	7.2	136	SNP	Novel	321	---
MTOR	chr1	11184608	G	A	Heterozygous	8.1	177	SNP	Novel	344	---
MTOR	chr1	11188039	C	T	Heterozygous	5	976	SNP	Novel	1963	---
MTOR	chr1	11188052	C	A	Heterozygous	3.2	186	SNP	Novel	1968	---
MTOR	chr1	11188057	C	T	Heterozygous	4.4	357	SNP	Novel	1967	---
MTOR	chr1	11188069	C	T	Heterozygous	2.3	98	SNP	Novel	1969	---
MTOR	chr1	11188075	G	A	Heterozygous	4	292	SNP	Novel	1968	---
MTOR	chr1	11188079	C	T	Heterozygous	4.5	373	SNP	Novel	1970	---
MTOR	chr1	11188081	G	A	Heterozygous	4.6	388	SNP	Novel	1969	---
MTOR	chr1	11188094	C	T	Heterozygous	4.2	320	SNP	Novel	1964	---
MTOR	chr1	11188244	G	A	Heterozygous	48	869	SNP	Novel	125	---
MTOR	chr1	11189815	G	A	Heterozygous	33.9	515	SNP	Novel	121	---
MTOR	chr1	11189882	G	A	Heterozygous	34.1	531	SNP	Novel	123	---
MTOR	chr1	11190802	T	C	Heterozygous	4.5	64	SNP	Novel	291	---
MTOR	chr1	11190825	C	T	Heterozygous	2.4	24	SNP	Novel	295	---
MTOR	chr1	11190861	A	G	Heterozygous	2.3	24	SNP	Novel	298	---
MTOR	chr1	11190888	C	T	Heterozygous	32.4	1115	SNP	Novel	296	---
MTOR	chr1	11217205	T	C	Heterozygous	2.3	51	SNP	Novel	970	---
MTOR	chr1	11217216	C	T	Heterozygous	12.5	995	SNP	Novel	970	---
MTOR	chr1	11217235	C	T	Heterozygous	12	938	SNP	Novel	976	---
MTOR	chr1	11217263	T	C	Heterozygous	1.4	18	SNP	Novel	981	---
JAK1	chr1	65310471	G	A	Heterozygous	9.3	728	SNP	Novel	1154	---
JAK1	chr1	65310489	T	C	Heterozygous	41.2	6571	SNP	Novel	1172	---
JAK1	chr1	65310515	C	T	Heterozygous	5.6	328	SNP	Novel	1177	---
JAK1	chr1	65310554	G	A	Heterozygous	7.4	526	SNP	Novel	1182	---
JAK1	chr1	65310558	C	T	Heterozygous	1.9	42	SNP	Novel	1183	---
JAK1	chr1	65310562	T	C	Heterozygous	2.2	56	SNP	Novel	1181	---
JAK1	chr1	65310573	C	T	Heterozygous	4.9	264	SNP	Novel	1174	---
JAK1	chr1	65311199	G	A	Heterozygous	2.4	204	SNP	Novel	4000	---
JAK1	chr1	65311205	C	T	Heterozygous	2.9	311	SNP	Novel	4000	---
JAK1	chr1	65311210	C	T	Heterozygous	4	605	SNP	Novel	4000	---
JAK1	chr1	65311214	G	A	Heterozygous	2.6	229	SNP	Novel	3999	---

JAK1	chr1	65311241	C	T	Heterozygous	1.2	27	SNP	Novel	3995	---
JAK1	chr1	65311245	G	A	Heterozygous	2.4	204	SNP	Novel	4000	---
JAK1	chr1	65311248	G	A	Heterozygous	2.5	209	SNP	Novel	4000	---
NRAS	chr1	115252227	C	T	Heterozygous	31	491	SNP	Novel	145	---
NRAS	chr1	115252289	C	T	Heterozygous	10.3	118	SNP	Novel	146	---
NRAS	chr1	115256506	C	T	Heterozygous	1.6	67	SNP	Novel	4000	---
NRAS	chr1	115256508	C	T	Heterozygous	6	1246	SNP	Novel	3998	---
NRAS	chr1	115256510	C	T	Heterozygous	3.4	433	SNP	Novel	4000	---
NRAS	chr1	115256515	C	T	Heterozygous	1.6	61	SNP	Novel	3999	---
NRAS	chr1	115256522	C	T	Heterozygous	1.9	114	SNP	Novel	4000	---
NRAS	chr1	115256535	G	A	Heterozygous	1.6	66	SNP	Novel	4000	---
NRAS	chr1	115256536	C	T	Heterozygous	3	334	SNP	Hotspot	4000	COSM578
NRAS	chr1	115256566	C	T	Heterozygous	2.3	169	SNP	Novel	3999	---
NRAS	chr1	115256568	C	T	Heterozygous	4.3	686	SNP	Novel	3999	---
NRAS	chr1	115256569	C	T	Heterozygous	4.2	649	SNP	Novel	3998	---
NRAS	chr1	115256572	C	T	Heterozygous	1.4	41	SNP	Novel	3999	---
NRAS	chr1	115258693	T	C	Heterozygous	1.4	37	SNP	Novel	2765	---
NRAS	chr1	115258697	C	T	Heterozygous	3.5	325	SNP	Novel	2766	---
NRAS	chr1	115258707	C	T	Heterozygous	2.6	169	SNP	Novel	2770	---
NRAS	chr1	115258739	C	T	Heterozygous	2.4	143	SNP	Novel	2778	---
NRAS	chr1	115258742	C	T	Heterozygous	1.6	49	SNP	Novel	2778	---
NRAS	chr1	115258747	C	T	Heterozygous	2.7	190	SNP	Hotspot	2773	COSM564
NRAS	chr1	115258753	C	T	Heterozygous	2.7	190	SNP	Novel	2777	---
NRAS	chr1	115258757	C	T	Heterozygous	2.7	186	SNP	Novel	2760	---
NRAS	chr1	115258763	C	T	Heterozygous	2.7	186	SNP	Novel	2763	---
DDR2	chr1	162724538	G	A	Heterozygous	31.6	545	SNP	Novel	158	---
DDR2	chr1	162724542	G	A	Heterozygous	31.6	545	SNP	Novel	158	---
DDR2	chr1	162724551	G	A	Heterozygous	5.1	47	SNP	Novel	156	---
DDR2	chr1	162724559	G	A	Heterozygous	31.4	532	SNP	Novel	156	---
DDR2	chr1	162724599	G	A	Heterozygous	5	47	SNP	Novel	159	---
ALK	chr2	29416366	G	C	Heterozygous	33.6	895	SNP	Novel	220	---
ALK	chr2	29416445	C	T	Heterozygous	27.6	710	SNP	Novel	228	---
ALK	chr2	29416572	T	C	Heterozygous	81.5	11597	SNP	Novel	584	---
ALK	chr2	29416572	TC	CT	Heterozygous	18.5	11597	MNP	Novel	584	---
ALK	chr2	29416625	G	A	Heterozygous	7.9	298	SNP	Novel	605	---
ALK	chr2	29416647	G	A	Heterozygous	8.2	317	SNP	Novel	607	---
ALK	chr2	29416650	C	T	Heterozygous	19	1111	SNP	Novel	604	---
ALK	chr2	29420417	G	A	Heterozygous	2.2	126	SNP	Novel	2899	---

ALK	chr2	29420418	G	A	Heterozygous	1.5	44	SNP	Novel	2899	---
ALK	chr2	29420440	C	T	Heterozygous	2.3	135	SNP	Novel	2894	---
ALK	chr2	29420442	G	A	Heterozygous	2.5	160	SNP	Novel	2892	---
ALK	chr2	29420444	C	T	Heterozygous	1.6	48	SNP	Novel	2891	---
ALK	chr2	29420473	C	T	Heterozygous	1.9	80	SNP	Novel	2875	---
ALK	chr2	29432669	C	T	Heterozygous	2.1	135	SNP	Novel	3999	---
ALK	chr2	29432674	C	T	Heterozygous	2.4	204	SNP	Novel	4000	---
ALK	chr2	29432691	G	A	Heterozygous	1.5	55	SNP	Novel	4000	---
ALK	chr2	29432700	C	A	Heterozygous	1.4	39	SNP	Novel	3993	---
ALK	chr2	29432706	C	T	Heterozygous	1.4	47	SNP	Novel	3999	---
ALK	chr2	29432715	G	A	Heterozygous	2	130	SNP	Novel	4000	---
ALK	chr2	29432722	G	A	Heterozygous	1.1	14	SNP	Novel	4000	---
ALK	chr2	29432724	C	T	Heterozygous	1.1	16	SNP	Novel	4000	---
ALK	chr2	29432726	G	A	Heterozygous	1.8	244	SNP	Novel	3985	---
ALK	chr2	29436967	G	A	Heterozygous	27.2	826	SNP	Novel	261	---
ALK	chr2	29443579	G	A	Heterozygous	1.9	17	SNP	Novel	317	---
ALK	chr2	29443638	G	A	Heterozygous	14.8	413	SNP	Novel	330	---
ALK	chr2	29445218	C	T	Heterozygous	6.4	503	SNP	Novel	1419	---
ALK	chr2	29445221	G	A	Heterozygous	6.2	475	SNP	Novel	1419	---
ALK	chr2	29445232	G	A	Heterozygous	1.5	28	SNP	Novel	1421	---
ALK	chr2	29445233	G	A	Heterozygous	1.1	12	SNP	Novel	1420	---
ALK	chr2	29445267	G	A	Heterozygous	7.6	667	SNP	Novel	1423	---
ALK	chr2	29445280	C	T	Heterozygous	8.5	2065	SNP	Novel	1409	---
ALK	chr2	29445307	G	A	Heterozygous	9	858	SNP	Novel	1406	---
ALK	chr2	29445308	GAG	AAA	Heterozygous	1.3	15	MNP	Novel	1276	---
ALK	chr2	29445311	G	A	Heterozygous	6.8	550	SNP	Novel	1413	---
ALK	chr2	29445383	C	T	Heterozygous	3	142	SNP	Novel	1611	---
ALK	chr2	29445392	C	T	Heterozygous	2.1	66	SNP	Novel	1612	---
ALK	chr2	29445413	G	A	Heterozygous	6.6	589	SNP	Novel	1631	---
ALK	chr2	29445446	C	T	Heterozygous	3.8	224	SNP	Novel	1631	---
ALK	chr2	29445455	G	A	Heterozygous	3	222	SNP	Novel	1611	---
ALK	chr2	29445458	G	T	Heterozygous	78	22543	SNP	Novel	1618	---
ALK	chr2	29445465	C	T	Heterozygous	2.7	110	SNP	Novel	1605	---
ALK	chr2	29498006	C	T	Heterozygous	15.2	381	SNP	Novel	296	---
IDH1	chr2	209113146	C	T	Heterozygous	1.7	18	SNP	Novel	538	---
IDH1	chr2	209113198	C	T	Heterozygous	1.7	19	SNP	Novel	534	---
ERBB4	chr2	212488723	T	C	Heterozygous	2.1	64	SNP	Novel	1569	---
ERBB4	chr2	212488770	C	T	Heterozygous	5.8	465	SNP	Novel	1577	---

ERBB4	chr2	212488776	A	G	Heterozygous	1.1	13	SNP	Novel	1577	---
ERBB4	chr2	212488784	G	A	Heterozygous	1.5	27	SNP	Novel	1569	---
RAF1	chr3	12632344	C	T	Heterozygous	7.1	738	SNP	Novel	1792	---
RAF1	chr3	12632368	C	T	Heterozygous	5.8	531	SNP	Novel	1821	---
RAF1	chr3	12632401	C	T	Heterozygous	6.9	713	SNP	Novel	1822	---
RAF1	chr3	12632439	C	T	Heterozygous	7	738	SNP	Novel	1803	---
RAF1	chr3	12632446	A	G	Heterozygous	2.4	102	SNP	Novel	1796	---
RAF1	chr3	12645662	G	A	Heterozygous	3.6	334	SNP	Novel	2699	---
RAF1	chr3	12645680	G	A	Heterozygous	3.1	250	SNP	Novel	2704	---
RAF1	chr3	12645688	G	A	Heterozygous	5.2	651	SNP	Novel	2705	---
RAF1	chr3	12645693	G	A	Heterozygous	1	11	SNP	Novel	2703	---
RAF1	chr3	12645710	C	T	Heterozygous	1.3	26	SNP	Novel	2690	---
RAF1	chr3	12645716	G	A	Heterozygous	4.2	432	SNP	Novel	2692	---
RAF1	chr3	12645732	G	A	Heterozygous	6.7	1001	SNP	Novel	2680	---
RAF1	chr3	12645734	G	A	Heterozygous	1	12	SNP	Novel	2671	---
CTNNB1	chr3	41266065	C	T	Heterozygous	4.8	27	SNP	Novel	105	---
CTNNB1	chr3	41266109	C	T	Heterozygous	57.1	892	SNP	Hotspot	105	COSM5703
PIK3CA	chr3	178916873	G	A	Heterozygous	2.8	23	SNP	Novel	177	---
PIK3CA	chr3	178916876	G	A	Heterozygous	8.5	97	SNP	Hotspot	177	COSM746
PIK3CA	chr3	178916903	C	T	Heterozygous	6.7	71	SNP	Novel	180	---
PIK3CA	chr3	178921513	G	A	Heterozygous	6.7	176	SNP	Novel	464	---
PIK3CA	chr3	178921518	C	T	Heterozygous	13.1	491	SNP	Novel	464	---
PIK3CA	chr3	178921553	T	C	Heterozygous	1.3	10	SNP	Novel	471	---
PIK3CA	chr3	178922260	A	G	Heterozygous	3.5	39	SNP	Novel	258	---
PIK3CA	chr3	178922274	C	A	Heterozygous	45.6	1674	SNP	Novel	259	---
PIK3CA	chr3	178922322	G	A	Heterozygous	30	812	SNP	Novel	220	---
PIK3CA	chr3	178922324	G	A	Heterozygous	19.7	557	SNP	Hotspot	274	COSM86044
PIK3CA	chr3	178922336	G	A	Heterozygous	19.4	543	SNP	Novel	273	---
PIK3CA	chr3	178922352	A	G	Heterozygous	1.5	11	SNP	Novel	269	---
PIK3CA	chr3	178927993	G	A	Heterozygous	11.1	310	SNP	Novel	369	---
PIK3CA	chr3	178928093	C	T	Heterozygous	1.8	30	SNP	Novel	952	---
PIK3CA	chr3	178928100	G	A	Heterozygous	3.3	102	SNP	Novel	952	---
PIK3CA	chr3	178928107	C	T	Heterozygous	3.9	141	SNP	Novel	951	---
PIK3CA	chr3	178928118	C	T	Heterozygous	5.7	275	SNP	Novel	948	---
PIK3CA	chr3	178928127	G	A	Heterozygous	3.5	115	SNP	Novel	946	---
PIK3CA	chr3	178928141	G	A	Heterozygous	3.5	115	SNP	Novel	949	---
PIK3CA	chr3	178936065	C	T	Heterozygous	26	109	SNP	Novel	50	---
PIK3CA	chr3	178936082	G	A	Heterozygous	26	109	SNP	Hotspot	50	COSM760

PIK3CA	chr3	178938846	G	A	Heterozygous	25.2	814	SNP	Novel	306	---
PIK3CA	chr3	178938849	G	A	Heterozygous	24.2	767	SNP	Novel	306	---
PIK3CA	chr3	178938864	G	A	Heterozygous	18.3	513	SNP	Novel	306	---
PIK3CA	chr3	178947839	G	A	Heterozygous	2.1	148	SNP	Novel	4000	---
PIK3CA	chr3	178947841	G	A	Heterozygous	1.3	32	SNP	Novel	3999	---
PIK3CA	chr3	178947844	G	A	Heterozygous	1.3	34	SNP	Novel	4000	---
PIK3CA	chr3	178947848	C	T	Heterozygous	1.7	81	SNP	Novel	3995	---
PIK3CA	chr3	178947868	G	A	Heterozygous	2.5	219	SNP	Novel	4000	---
PIK3CA	chr3	178952056	G	A	Heterozygous	4.6	119	SNP	Novel	569	---
PIK3CA	chr3	178952074	G	A	Heterozygous	8.6	303	SNP	Hotspot	526	COSM29313
PIK3CA	chr3	178952079	A	G	Heterozygous	3.4	66	SNP	Hotspot	528	COSM1421003
PIK3CA	chr3	178952092	T	C	Heterozygous	11.5	457	SNP	Novel	511	---
FGFR3	chr4	1797234	G	A	Heterozygous	11.7	820	SNP	Novel	908	---
FGFR3	chr4	1797678	C	T	Heterozygous	4.8	808	SNP	Novel	3941	---
FGFR3	chr4	1797694	C	T	Heterozygous	2.7	1424	SNP	Novel	3938	---
FGFR3	chr4	1797700	C	T	Heterozygous	2.5	577	SNP	Novel	3955	---
FGFR3	chr4	1797706	C	T	Heterozygous	3.8	1062	SNP	Novel	3965	---
FGFR3	chr4	1797715	C	T	Heterozygous	1.3	33	SNP	Novel	3968	---
FGFR3	chr4	1797729	G	A	Heterozygous	1.4	48	SNP	Novel	3963	---
FGFR3	chr4	1797732	C	T	Heterozygous	2.2	154	SNP	Novel	3962	---
FGFR3	chr4	1797748	C	T	Heterozygous	2.2	379	SNP	Novel	3926	---
FGFR3	chr4	1801189	C	T	Heterozygous	2	32	SNP	Novel	684	---
FGFR3	chr4	1801195	C	A	Heterozygous	2	31	SNP	Novel	697	---
FGFR3	chr4	1801200	G	A	Heterozygous	7.4	313	SNP	Novel	688	---
FGFR3	chr4	1801208	C	T	Heterozygous	10.3	547	SNP	Novel	712	---
FGFR3	chr4	1801227	G	A	Heterozygous	8	345	SNP	Novel	676	---
FGFR3	chr4	1803584	C	T	Heterozygous	3.9	400	SNP	Novel	2872	---
FGFR3	chr4	1803592	C	T	Heterozygous	4.1	434	SNP	Novel	2851	---
FGFR3	chr4	1803600	C	T	Heterozygous	1.6	51	SNP	Novel	2879	---
FGFR3	chr4	1803605	C	T	Heterozygous	3.6	344	SNP	Novel	2882	---
FGFR3	chr4	1803609	C	T	Heterozygous	3.8	391	SNP	Novel	2884	---
FGFR3	chr4	1803634	T	C	Heterozygous	3.8	391	SNP	Novel	2884	---
FGFR3	chr4	1805803	C	G	Heterozygous	1.9	62	SNP	Novel	2047	---
FGFR3	chr4	1805818	C	T	Heterozygous	6.9	797	SNP	Novel	2054	---
FGFR3	chr4	1805840	G	C	Heterozygous	3.5	244	SNP	Novel	2065	---
FGFR3	chr4	1805870	C	T	Heterozygous	3.4	222	SNP	Novel	2066	---
FGFR3	chr4	1805872	C	T	Heterozygous	3.6	256	SNP	Novel	2069	---
FGFR3	chr4	1805881	C	T	Heterozygous	4.3	345	SNP	Novel	2065	---

FGFR3	chr4	1806091	C	T	Heterozygous	1.2	21	SNP	Novel	2402	---
FGFR3	chr4	1806109	C	T	Heterozygous	4.6	469	SNP	Novel	2425	---
FGFR3	chr4	1806136	G	T	Heterozygous	1.2	18	SNP	Novel	2416	---
FGFR3	chr4	1806148	G	A	Heterozygous	1.7	56	SNP	Novel	2416	---
FGFR3	chr4	1806153	C	T	Heterozygous	3.7	307	SNP	Hotspot	2426	COSM1737909
FGFR3	chr4	1806166	C	T	Heterozygous	2.8	172	SNP	Novel	2422	---
FGFR3	chr4	1807834	G	A	Heterozygous	3.6	359	SNP	Novel	2960	---
FGFR3	chr4	1807841	G	A	Heterozygous	2.3	141	SNP	Novel	3018	---
FGFR3	chr4	1807851	G	A	Heterozygous	2	102	SNP	Novel	3018	---
FGFR3	chr4	1807855	G	A	Heterozygous	2.2	126	SNP	Novel	3038	---
FGFR3	chr4	1807882	C	T	Heterozygous	2.1	107	SNP	Novel	3063	---
FGFR3	chr4	1807888	G	A	Heterozygous	4.9	662	SNP	Novel	3055	---
FGFR3	chr4	1807894	G	A	Homozygous	100	63655	SNP	Novel	3053	---
FGFR3	chr4	1807897	C	T	Heterozygous	2.6	179	SNP	Novel	3047	---
FGFR3	chr4	1807901	G	A	Heterozygous	2.9	233	SNP	Novel	3049	---
FGFR3	chr4	1807918	G	A	Heterozygous	3.6	372	SNP	Novel	2991	---
FGFR3	chr4	1808320	C	T	Heterozygous	2.2	166	SNP	Novel	3989	---
FGFR3	chr4	1808329	C	T	Heterozygous	2.2	152	SNP	Novel	3999	---
FGFR3	chr4	1808330	C	T	Heterozygous	1.1	18	SNP	Novel	3998	---
FGFR3	chr4	1808337	C	T	Heterozygous	3.7	507	SNP	Novel	3999	---
FGFR3	chr4	1808338	C	A	Heterozygous	1.1	15	SNP	Novel	3996	---
FGFR3	chr4	1808367	G	A	Heterozygous	3.9	555	SNP	Novel	3998	---
FGFR3	chr4	1808373	C	T	Heterozygous	2.3	175	SNP	Novel	3998	---
FGFR3	chr4	1808378	C	T	Heterozygous	1.2	25	SNP	Novel	4000	---
FGFR3	chr4	1808387	G	A	Heterozygous	1.7	320	SNP	Novel	3970	---
FGFR3	chr4	1808393	C	T	Heterozygous	3.6	473	SNP	Novel	3997	---
FGFR3	chr4	1808398	G	A	Heterozygous	1.7	83	SNP	Novel	3999	---
FGFR3	chr4	1809238	T	C	Heterozygous	6.2	124	SNP	Novel	370	---
FGFR3	chr4	1809293	G	A	Heterozygous	29.8	1483	SNP	Novel	410	---
FGFR3	chr4	1809306	G	A	Heterozygous	28.9	1416	SNP	Novel	408	---
FGFR3	chr4	1809342	-	T	Heterozygous	26.3	467	INS	Novel	403	---
FGFR3	chr4	1809343	G	T	Heterozygous	25.6	1169	SNP	Novel	403	---
FGFR3	chr4	1809348	C	T	Heterozygous	1.5	13	SNP	Novel	403	---
FGFR3	chr4	1809458	T	C	Heterozygous	1.3	10	SNP	Novel	387	---
FGFR3	chr4	1809492	C	T	Heterozygous	24.6	1142	SNP	Novel	410	---
FGFR3	chr4	1809559	T	C	Heterozygous	1.7	17	SNP	Novel	414	---
PDGFRA	chr4	55097742	C	T	Heterozygous	14.9	800	SNP	Novel	612	---
PDGFRA	chr4	55097744	C	T	Heterozygous	5.4	173	SNP	Novel	649	---



PDGFRA	chr4	55097747	C	T	Heterozygous	3.3	73	SNP	Novel	645	---
PDGFRA	chr4	55097761	G	A	Heterozygous	4.9	155	SNP	Novel	678	---
PDGFRA	chr4	55097775	C	T	Heterozygous	6.4	246	SNP	Novel	689	---
PDGFRA	chr4	55097831	C	T	Heterozygous	3.2	74	SNP	Novel	692	---
PDGFRA	chr4	55097838	C	T	Heterozygous	12.9	743	SNP	Novel	688	---
PDGFRA	chr4	55104293	C	T	Heterozygous	3.4	34	SNP	Novel	237	---
PDGFRA	chr4	55104325	C	T	Heterozygous	5	61	SNP	Novel	242	---
PDGFRA	chr4	55104355	C	T	Heterozygous	2.9	28	SNP	Novel	239	---
PDGFRA	chr4	55123762	G	A	Heterozygous	4	53	SNP	Novel	274	---
PDGFRA	chr4	55123766	C	T	Heterozygous	18.2	499	SNP	Novel	274	---
PDGFRA	chr4	55126172	C	T	Heterozygous	2	43	SNP	Novel	1097	---
PDGFRA	chr4	55126193	G	A	Heterozygous	5.1	262	SNP	Novel	1097	---
PDGFRA	chr4	55126199	C	T	Heterozygous	3.3	117	SNP	Novel	1097	---
PDGFRA	chr4	55126218	G	A	Heterozygous	1.4	17	SNP	Novel	1093	---
PDGFRA	chr4	55126236	G	A	Heterozygous	3	99	SNP	Novel	1093	---
PDGFRA	chr4	55126238	C	T	Heterozygous	3.2	112	SNP	Novel	1092	---
PDGFRA	chr4	55126246	G	A	Heterozygous	1.2	13	SNP	Novel	1087	---
PDGFRA	chr4	55133675	C	T	Heterozygous	34.9	1281	SNP	Novel	275	---
PDGFRA	chr4	55133746	C	T	Heterozygous	35.9	1339	SNP	Novel	281	---
PDGFRA	chr4	55140991	G	A	Heterozygous	19.7	698	SNP	Novel	361	---
PDGFRA	chr4	55141055	A	G	Homozygous	100	7270	SNP	Novel	358	---
PDGFRA	chr4	55144115	G	A	Heterozygous	3.9	268	SNP	Novel	1832	---
PDGFRA	chr4	55144151	G	A	Heterozygous	1.5	32	SNP	Novel	1833	---
PDGFRA	chr4	55144155	G	A	Heterozygous	2.6	119	SNP	Novel	1822	---
PDGFRA	chr4	55144169	G	A	Heterozygous	4.2	305	SNP	Novel	1823	---
PDGFRA	chr4	55152077	T	C	Heterozygous	1.5	16	SNP	Novel	598	---
PDGFRA	chr4	55152087	C	T	Heterozygous	18.1	1119	SNP	Novel	592	---
PDGFRA	chr4	55161875	C	T	Heterozygous	4.7	194	SNP	Novel	940	---
PDGFRA	chr4	55161899	G	A	Heterozygous	3.1	90	SNP	Novel	944	---
PDGFRA	chr4	55161902	G	A	Heterozygous	4.4	178	SNP	Novel	944	---
PDGFRA	chr4	55161936	G	A	Heterozygous	4	139	SNP	Novel	923	---
KIT	chr4	55566215	C	T	Heterozygous	16.1	116	SNP	Novel	87	---
KIT	chr4	55566266	G	A	Homozygous	100	1695	SNP	Novel	89	---
KIT	chr4	55573118	A	C	Heterozygous	2.9	10	SNP	Novel	68	---
KIT	chr4	55589758	G	A	Heterozygous	2.1	110	SNP	Novel	3094	---
KIT	chr4	55589764	C	T	Heterozygous	1.1	18	SNP	Novel	3136	---
KIT	chr4	55589782	G	A	Heterozygous	3.8	421	SNP	Novel	3139	---
KIT	chr4	55589789	G	A	Heterozygous	4	456	SNP	Novel	3135	---

KIT	chr4	55589790	C	T	Heterozygous	2.8	226	SNP	Novel	3134	---
KIT	chr4	55589793	G	A	Heterozygous	3.4	328	SNP	Novel	3133	---
KIT	chr4	55592184	A	G	Heterozygous	3.3	187	SNP	Novel	1782	---
KIT	chr4	55592191	C	T	Heterozygous	3.9	247	SNP	Novel	1787	---
KIT	chr4	55593427	T	C	Heterozygous	1.7	51	SNP	Novel	2218	---
KIT	chr4	55593436	C	T	Heterozygous	4.1	347	SNP	Novel	2221	---
KIT	chr4	55593441	C	T	Heterozygous	4.2	368	SNP	Novel	2223	---
KIT	chr4	55593444	G	A	Heterozygous	3.6	271	SNP	Novel	2223	---
KIT	chr4	55593454	C	T	Heterozygous	4.3	383	SNP	Novel	2230	---
KIT	chr4	55593470	C	T	Heterozygous	4.2	368	SNP	Novel	2226	---
KIT	chr4	55593474	C	T	Heterozygous	4.2	368	SNP	Novel	2226	---
KIT	chr4	55593496	C	T	Heterozygous	2.2	91	SNP	Novel	2220	---
KIT	chr4	55593661	T	C	Heterozygous	2.4	23	SNP	Hotspot	286	COSM1290
KIT	chr4	55594196	A	G	Heterozygous	1.4	11	SNP	Novel	362	---
KIT	chr4	55594220	C	T	Heterozygous	11.3	311	SNP	Novel	363	---
KIT	chr4	55599294	A	G	Heterozygous	3.2	37	SNP	Novel	285	---
KIT	chr4	55599320	G	A	Heterozygous	14.4	421	SNP	Hotspot	347	COSM1313
KIT	chr4	55599328	G	A	Heterozygous	20.3	699	SNP	Novel	349	---
ROS1	chr6	117638347	C	T	Heterozygous	16.5	863	SNP	Hotspot	575	MAN10
ROS1	chr6	117638357	C	T	Heterozygous	16.5	857	SNP	Novel	576	---
ROS1	chr6	117638359	G	A	Heterozygous	10.4	437	SNP	Novel	577	---
ROS1	chr6	117638379	G	A	Heterozygous	15	749	SNP	Novel	573	---
ROS1	chr6	117638392	G	A	Heterozygous	10.5	444	SNP	Novel	582	---
ROS1	chr6	117638394	C	T	Heterozygous	7.6	273	SNP	Novel	579	---
ROS1	chr6	117638407	G	A	Heterozygous	10.1	418	SNP	Novel	575	---
ROS1	chr6	117641101	C	T	Heterozygous	22.4	999	SNP	Novel	438	---
ROS1	chr6	117641136	C	T	Heterozygous	22.9	1029	SNP	Novel	437	---
ROS1	chr6	117641144	C	T	Heterozygous	21.9	944	SNP	Novel	433	---
ESR1	chr6	152419948	C	A	Heterozygous	1.5	15	SNP	Novel	615	---
ESR1	chr6	152419954	C	T	Heterozygous	16.5	915	SNP	Novel	613	---
ESR1	chr6	152419958	C	T	Heterozygous	11.1	507	SNP	Novel	613	---
ESR1	chr6	152419974	G	A	Heterozygous	5.4	163	SNP	Novel	614	---
EGFR	chr7	55198956	C	T	Heterozygous	2.2	62	SNP	Novel	1378	---
EGFR	chr7	55198957	G	A	Heterozygous	1.6	30	SNP	Novel	1379	---
EGFR	chr7	55198976	C	T	Heterozygous	3.3	155	SNP	Novel	1445	---
EGFR	chr7	55199001	C	T	Heterozygous	2.5	119	SNP	Novel	2080	---
EGFR	chr7	55199015	C	T	Heterozygous	1.5	35	SNP	Novel	2092	---
EGFR	chr7	55199021	C	T	Heterozygous	1.5	35	SNP	Novel	2092	---

EGFR	chr7	55199027	C	T	Heterozygous	1.1	13	SNP	Novel	2093	---
EGFR	chr7	55199030	C	T	Heterozygous	2.2	85	SNP	Novel	2091	---
EGFR	chr7	55199032	G	A	Heterozygous	1.7	49	SNP	Novel	2092	---
EGFR	chr7	55199034	C	T	Heterozygous	2.6	129	SNP	Novel	2086	---
EGFR	chr7	55211070	C	T	Heterozygous	2.6	186	SNP	Novel	3094	---
EGFR	chr7	55211078	C	T	Heterozygous	2.4	162	SNP	Novel	3134	---
EGFR	chr7	55211096	C	T	Heterozygous	2.3	140	SNP	Novel	3106	---
EGFR	chr7	55211097	G	A	Heterozygous	3.9	416	SNP	Novel	3094	---
EGFR	chr7	55211109	G	A	Heterozygous	1.6	53	SNP	Novel	3082	---
EGFR	chr7	55211118	G	A	Heterozygous	2.5	170	SNP	Novel	3030	---
EGFR	chr7	55219911	C	T	Heterozygous	2.3	67	SNP	Novel	1362	---
EGFR	chr7	55219942	C	T	Heterozygous	5.5	378	SNP	Novel	1409	---
EGFR	chr7	55219953	G	A	Heterozygous	2.4	82	SNP	Novel	1397	---
EGFR	chr7	55219967	C	T	Heterozygous	2.3	146	SNP	Novel	1403	---
EGFR	chr7	55219980	C	T	Heterozygous	2.8	134	SNP	Novel	1381	---
EGFR	chr7	55221799	C	T	Heterozygous	9.1	1897	SNP	Novel	1209	---
EGFR	chr7	55221819	G	T	Heterozygous	3.4	138	SNP	Novel	1252	---
EGFR	chr7	55221843	C	T	Heterozygous	5.3	323	SNP	Novel	1266	---
EGFR	chr7	55221904	C	A	Heterozygous	2.7	117	SNP	Novel	1267	---
EGFR	chr7	55221909	G	A	Heterozygous	1.2	13	SNP	Novel	1259	---
EGFR	chr7	55221917	G	A	Heterozygous	7.1	524	SNP	Novel	1245	---
EGFR	chr7	55227977	G	A	Heterozygous	10.9	206	SNP	Novel	248	---
EGFR	chr7	55227989	C	T	Heterozygous	6.8	111	SNP	Novel	263	---
EGFR	chr7	55228026	G	A	Heterozygous	8.9	162	SNP	Novel	259	---
EGFR	chr7	55228032	G	A	Heterozygous	6.2	93	SNP	Novel	260	---
EGFR	chr7	55228053	A	-	Homozygous	100	5024	DEL	Novel	257	---
EGFR	chr7	55232969	G	A	Heterozygous	3.5	447	SNP	Novel	4000	---
EGFR	chr7	55232976	C	T	Heterozygous	1.8	91	SNP	Novel	4000	---
EGFR	chr7	55232990	C	T	Heterozygous	2.1	148	SNP	Novel	3999	---
EGFR	chr7	55233002	C	T	Heterozygous	1.6	60	SNP	Novel	3999	---
EGFR	chr7	55233014	C	T	Heterozygous	1.7	90	SNP	Novel	3990	---
EGFR	chr7	55233024	G	A	Heterozygous	2.1	134	SNP	Novel	3999	---
EGFR	chr7	55233032	C	T	Heterozygous	2.2	155	SNP	Novel	3968	---
EGFR	chr7	55233037	C	T	Heterozygous	1	12	SNP	Novel	3989	---
EGFR	chr7	55233051	G	A	Heterozygous	1.7	317	SNP	Novel	3998	---
EGFR	chr7	55241648	C	T	Heterozygous	1.6	54	SNP	Novel	3342	---
EGFR	chr7	55241652	C	T	Heterozygous	3.5	372	SNP	Novel	3352	---
EGFR	chr7	55241664	G	A	Heterozygous	4.1	522	SNP	Novel	3355	---

EGFR	chr7	55241713	G	A	Heterozygous	7.2	1401	SNP	Novel	3292	---
EGFR	chr7	55242430	G	A	Heterozygous	35.8	826	SNP	Novel	193	---
EGFR	chr7	55242442	G	A	Heterozygous	11.4	160	SNP	Novel	193	---
EGFR	chr7	55242456	C	T	Heterozygous	2.1	16	SNP	Novel	191	---
EGFR	chr7	55242498	C	T	Heterozygous	1.6	11	SNP	Novel	184	---
EGFR	chr7	55248980	C	T	Heterozygous	4.5	119	SNP	Novel	603	---
EGFR	chr7	55249002	C	T	Heterozygous	1.5	16	SNP	Novel	598	---
EGFR	chr7	55249029	G	A	Heterozygous	11.3	511	SNP	Novel	600	---
EGFR	chr7	55249045	C	T	Heterozygous	11.6	534	SNP	Novel	602	---
EGFR	chr7	55249048	C	T	Heterozygous	13.1	640	SNP	Novel	602	---
EGFR	chr7	55249082	C	T	Heterozygous	7.1	251	SNP	Novel	607	---
EGFR	chr7	55249083	C	T	Heterozygous	8.4	327	SNP	Novel	607	---
EGFR	chr7	55259426	G	A	Heterozygous	3.8	199	SNP	Novel	1418	---
EGFR	chr7	55259427	G	A	Heterozygous	8.5	802	SNP	Novel	1418	---
EGFR	chr7	55259434	G	A	Heterozygous	7.6	667	SNP	Novel	1423	---
EGFR	chr7	55259448	C	T	Heterozygous	5.6	403	SNP	Novel	1422	---
EGFR	chr7	55259454	C	T	Heterozygous	4.8	303	SNP	Novel	1422	---
EGFR	chr7	55259465	G	A	Heterozygous	6.4	506	SNP	Novel	1435	---
EGFR	chr7	55259474	G	A	Heterozygous	6.5	523	SNP	Novel	1437	---
EGFR	chr7	55259508	T	C	Heterozygous	6.6	536	SNP	Novel	1433	---
EGFR	chr7	55259515	T	G	Heterozygous	6.4	508	SNP	Hotspot	1432	COSM6224
EGFR	chr7	55259529	G	A	Heterozygous	1.4	21	SNP	Novel	1430	---
MET	chr7	116313560	G	A	Heterozygous	35.2	621	SNP	Novel	125	---
MET	chr7	116339368	A	G	Heterozygous	5	173	SNP	Novel	742	---
MET	chr7	116339370	C	T	Heterozygous	9.5	480	SNP	Novel	739	---
MET	chr7	116339390	C	T	Heterozygous	5	174	SNP	Novel	737	---
MET	chr7	116339406	C	T	Heterozygous	8.6	418	SNP	Novel	741	---
MET	chr7	116339438	C	T	Heterozygous	13.2	791	SNP	Novel	735	---
MET	chr7	116340216	T	C	Heterozygous	4.2	408	SNP	Novel	2499	---
MET	chr7	116340251	C	T	Heterozygous	4.5	466	SNP	Novel	2513	---
MET	chr7	116340289	G	A	Heterozygous	3	216	SNP	Novel	2500	---
MET	chr7	116340291	T	C	Heterozygous	2.7	171	SNP	Novel	2496	---
MET	chr7	116340300	C	T	Heterozygous	3.2	241	SNP	Novel	2490	---
MET	chr7	116398763	C	T	Heterozygous	3.4	223	SNP	Novel	2073	---
MET	chr7	116398773	G	A	Heterozygous	2.9	164	SNP	Novel	2063	---
MET	chr7	116398777	C	T	Heterozygous	2.2	95	SNP	Novel	2089	---
MET	chr7	116398801	C	T	Heterozygous	1.8	101	SNP	Novel	2089	---
MET	chr7	116398806	C	T	Heterozygous	4	315	SNP	Novel	2094	---

MET	chr7	116403149	C	T	Heterozygous	10.8	177	SNP	Novel	223	---
MET	chr7	116403208	A	G	Heterozygous	3	29	SNP	Novel	232	---
MET	chr7	116403236	C	T	Heterozygous	16.1	328	SNP	Novel	230	---
MET	chr7	116411969	G	A	Heterozygous	15.8	208	SNP	Novel	158	---
MET	chr7	116412040	G	A	Heterozygous	37.2	670	SNP	Novel	156	---
MET	chr7	116415113	A	G	Heterozygous	1.8	19	SNP	Novel	448	---
MET	chr7	116415114	G	A	Heterozygous	3.6	64	SNP	Novel	447	---
MET	chr7	116415146	C	T	Heterozygous	14.1	531	SNP	Novel	455	---
MET	chr7	116415159	G	A	Heterozygous	2.2	28	SNP	Novel	454	---
MET	chr7	116415163	G	A	Heterozygous	1.3	11	SNP	Novel	453	---
MET	chr7	116417463	C	T	Heterozygous	13.5	323	SNP	Hotspot	274	COSM696
MET	chr7	116417489	C	T	Heterozygous	9.9	203	SNP	Novel	274	---
MET	chr7	116423416	G	A	Heterozygous	2.4	194	SNP	Novel	3998	---
MET	chr7	116423431	A	T	Heterozygous	2	131	SNP	Novel	3998	---
MET	chr7	116423466	G	A	Heterozygous	3.3	384	SNP	Novel	3922	---
MET	chr7	116423472	G	A	Heterozygous	2.7	251	SNP	Novel	3918	---
MET	chr7	116423475	G	A	Heterozygous	2.4	190	SNP	Hotspot	3913	COSM694
MET	chr7	116423481	G	A	Heterozygous	5.6	1060	SNP	Novel	3908	---
MET	chr7	116434481	G	A	Heterozygous	17.3	678	SNP	Novel	423	---
MET	chr7	116434494	T	C	Heterozygous	3.1	47	SNP	Novel	420	---
MET	chr7	116434561	G	A	Heterozygous	14.4	539	SNP	Novel	416	---
SMO	chr7	128845519	G	A	Heterozygous	16.9	1089	SNP	Novel	681	---
SMO	chr7	128845587	G	A	Heterozygous	2.8	60	SNP	Novel	715	---
SMO	chr7	128846338	G	A	Heterozygous	1.4	44	SNP	Novel	4000	---
SMO	chr7	128846356	C	A	Heterozygous	1.2	27	SNP	Novel	3997	---
SMO	chr7	128846361	C	T	Heterozygous	1.5	55	SNP	Novel	4000	---
SMO	chr7	128846373	C	T	Heterozygous	1.2	30	SNP	Novel	4000	---
SMO	chr7	128846379	G	A	Heterozygous	1.1	18	SNP	Novel	3999	---
SMO	chr7	128846389	G	A	Heterozygous	1.7	74	SNP	Novel	3997	---
SMO	chr7	128846391	C	T	Heterozygous	1.9	103	SNP	Novel	3999	---
SMO	chr7	128846396	T	C	Heterozygous	1.8	95	SNP	Novel	3999	---
SMO	chr7	128846397	G	A	Heterozygous	2.9	294	SNP	Novel	4000	---
SMO	chr7	128846398	C	T	Heterozygous	1.1	21	SNP	Hotspot	4000	COSM216037
SMO	chr7	128846407	G	T	Heterozygous	1.1	15	SNP	Novel	3997	---
SMO	chr7	128850275	C	T	Heterozygous	3.6	415	SNP	Novel	3375	---
SMO	chr7	128850283	C	T	Heterozygous	6.2	1102	SNP	Novel	3377	---
SMO	chr7	128850286	G	A	Heterozygous	3	270	SNP	Novel	3376	---
SMO	chr7	128850289	G	A	Heterozygous	3.5	388	SNP	Novel	3380	---

SMO	chr7	128850307	G	A	Heterozygous	1.9	98	SNP	Novel	3393	---
SMO	chr7	128850308	C	T	Heterozygous	3.5	381	SNP	Novel	3389	---
SMO	chr7	128850312	G	A	Heterozygous	3	282	SNP	Novel	3391	---
SMO	chr7	128850314	T	A	Heterozygous	1.8	79	SNP	Novel	3390	---
SMO	chr7	128850338	C	T	Heterozygous	2.5	179	SNP	Novel	3383	---
BRAF	chr7	140434403	G	A	Heterozygous	15.4	1701	SNP	Novel	1230	---
BRAF	chr7	140434425	C	T	Heterozygous	5.8	409	SNP	Novel	1229	---
BRAF	chr7	140434458	G	A	Heterozygous	7.4	572	SNP	Novel	1264	---
BRAF	chr7	140434475	C	T	Heterozygous	7.6	584	SNP	Novel	1248	---
BRAF	chr7	140434491	G	A	Heterozygous	7.1	618	SNP	Novel	1094	---
BRAF	chr7	140434492	C	T	Heterozygous	7.1	468	SNP	Novel	1180	---
BRAF	chr7	140453167	C	T	Heterozygous	80.8	929	SNP	Novel	73	---
BRAF	chr7	140476867	G	A	Heterozygous	2.3	125	SNP	Novel	2562	---
BRAF	chr7	140476894	C	T	Heterozygous	4.1	405	SNP	Novel	2582	---
BRAF	chr7	140476909	G	A	Heterozygous	2.2	105	SNP	Novel	2582	---
BRAF	chr7	140476922	G	A	Heterozygous	2.8	192	SNP	Novel	2580	---
BRAF	chr7	140481375	C	T	Heterozygous	5.4	408	SNP	Novel	1559	---
BRAF	chr7	140481380	CC	TT	Heterozygous	5	358	MNP	Novel	1559	---
BRAF	chr7	140481397	C	T	Heterozygous	6.4	541	SNP	Novel	1558	---
BRAF	chr7	140481423	C	T	Heterozygous	5.8	461	SNP	Novel	1545	---
BRAF	chr7	140481451	G	A	Heterozygous	5.5	410	SNP	Novel	1523	---
BRAF	chr7	140482825	C	T	Heterozygous	29	712	SNP	Novel	207	---
BRAF	chr7	140494215	G	A	Heterozygous	9.1	464	SNP	Novel	760	---
BRAF	chr7	140494216	C	T	Heterozygous	6.2	251	SNP	Novel	760	---
BRAF	chr7	140494218	G	A	Heterozygous	1.3	13	SNP	Novel	760	---
BRAF	chr7	140494227	G	A	Heterozygous	3.5	94	SNP	Novel	761	---
BRAF	chr7	140494244	G	A	Heterozygous	3.7	109	SNP	Novel	777	---
BRAF	chr7	140494247	G	A	Heterozygous	6.8	301	SNP	Novel	779	---
BRAF	chr7	140494283	C	T	Heterozygous	6.4	267	SNP	Novel	769	---
BRAF	chr7	140500220	C	T	Heterozygous	1.2	21	SNP	Novel	3999	---
BRAF	chr7	140500228	G	A	Heterozygous	1.6	64	SNP	Novel	4000	---
BRAF	chr7	140500236	C	T	Heterozygous	1.5	55	SNP	Novel	3998	---
BRAF	chr7	140500238	G	A	Heterozygous	1.6	71	SNP	Novel	4000	---
BRAF	chr7	140500250	G	A	Heterozygous	1.7	84	SNP	Novel	4000	---
BRAF	chr7	140500260	G	A	Heterozygous	2.6	228	SNP	Novel	4000	---
BRAF	chr7	140500277	G	A	Heterozygous	1.2	25	SNP	Novel	4000	---
BRAF	chr7	140500278	C	T	Heterozygous	1.2	23	SNP	Novel	3979	---
BRAF	chr7	140500284	G	A	Heterozygous	1	12	SNP	Novel	4000	---

BRAF	chr7	140501267	G	A	Heterozygous	1.9	109	SNP	Novel	3993	---
BRAF	chr7	140501278	C	T	Heterozygous	1.3	30	SNP	Novel	3999	---
BRAF	chr7	140501279	C	T	Heterozygous	1.6	65	SNP	Novel	3969	---
BRAF	chr7	140501284	G	A	Heterozygous	2.4	189	SNP	Novel	3999	---
BRAF	chr7	140501294	G	A	Heterozygous	1.5	52	SNP	Novel	3999	---
BRAF	chr7	140501304	G	A	Heterozygous	1.2	26	SNP	Novel	3984	---
BRAF	chr7	140501312	G	A	Heterozygous	1.4	47	SNP	Novel	4000	---
BRAF	chr7	140501318	G	A	Heterozygous	1.1	16	SNP	Novel	3998	---
BRAF	chr7	140507789	C	T	Heterozygous	4.1	558	SNP	Novel	3702	---
BRAF	chr7	140507805	C	T	Heterozygous	1.2	22	SNP	Novel	3740	---
BRAF	chr7	140507846	C	T	Heterozygous	2.6	218	SNP	Novel	3738	---
BRAF	chr7	140507859	C	T	Heterozygous	1.8	76	SNP	Novel	3714	---
GNAQ	chr9	80409466	C	T	Heterozygous	17.9	626	SNP	Novel	369	---
GNAQ	chr9	80412456	G	A	Heterozygous	6.9	556	SNP	Novel	1416	---
GNAQ	chr9	80412489	G	A	Heterozygous	6.7	540	SNP	Novel	1425	---
GNAQ	chr9	80412504	C	T	Heterozygous	8.3	771	SNP	Novel	1422	---
RET	chr10	43609095	G	A	Heterozygous	2.6	57	SNP	Novel	757	---
RET	chr10	43609136	C	T	Heterozygous	1.3	13	SNP	Novel	766	---
RET	chr10	43609182	C	T	Heterozygous	6.7	287	SNP	Novel	759	---
RET	chr10	43609901	C	T	Heterozygous	10.5	559	SNP	Novel	706	---
RET	chr10	43609912	C	T	Heterozygous	11.9	678	SNP	Novel	705	---
RET	chr10	43609916	C	T	Heterozygous	9.2	457	SNP	Novel	698	---
RET	chr10	43609955	C	T	Heterozygous	4.8	154	SNP	Novel	712	---
RET	chr10	43609958	T	C	Heterozygous	1.4	15	SNP	Novel	714	---
RET	chr10	43609989	C	T	Heterozygous	10.7	582	SNP	Novel	708	---
RET	chr10	43613805	C	T	Heterozygous	2.7	192	SNP	Novel	2936	---
RET	chr10	43613825	C	T	Heterozygous	2.7	203	SNP	Novel	2949	---
RET	chr10	43613826	G	A	Heterozygous	2.1	102	SNP	Novel	2948	---
RET	chr10	43613834	G	A	Heterozygous	3.3	1113	SNP	Novel	2925	---
RET	chr10	43613843	G	T	Heterozygous	59.5	27884	SNP	Novel	2929	---
RET	chr10	43613852	G	A	Heterozygous	2.5	158	SNP	Novel	2924	---
RET	chr10	43613867	C	T	Heterozygous	3.8	391	SNP	Novel	2924	---
RET	chr10	43613871	C	T	Heterozygous	2	98	SNP	Novel	2920	---
RET	chr10	43613873	G	A	Heterozygous	4.6	564	SNP	Novel	2920	---
RET	chr10	43613876	G	A	Heterozygous	1.6	56	SNP	Novel	2919	---
RET	chr10	43613885	C	T	Heterozygous	2.8	207	SNP	Novel	2903	---
RET	chr10	43613889	C	T	Heterozygous	1.6	50	SNP	Novel	2903	---
RET	chr10	43617339	C	T	Heterozygous	11.9	179	SNP	Novel	201	---

FGFR2	chr10	123247549	C	T	Heterozygous	8.3	573	SNP	Novel	1070	---
FGFR2	chr10	123258009	C	T	Heterozygous	7.8	574	SNP	Novel	1189	---
FGFR2	chr10	123258027	C	T	Heterozygous	8.8	686	SNP	Novel	1188	---
FGFR2	chr10	123274729	G	A	Heterozygous	29.2	956	SNP	Novel	295	---
FGFR2	chr10	123274767	C	T	Heterozygous	3.7	49	SNP	Novel	295	---
FGFR2	chr10	123279634	G	A	Heterozygous	4.8	304	SNP	Novel	1406	---
FGFR2	chr10	123279653	G	A	Heterozygous	5.4	379	SNP	Novel	1436	---
FGFR2	chr10	123279658	G	A	Heterozygous	4.2	244	SNP	Novel	1446	---
FGFR2	chr10	123279680	C	T	Heterozygous	2.7	107	SNP	Novel	1460	---
FGFR2	chr10	123279682	C	A	Heterozygous	2.8	112	SNP	Novel	1461	---
FGFR2	chr10	123279709	G	A	Heterozygous	5.5	387	SNP	Novel	1443	---
FGFR2	chr10	123306044	G	A	Heterozygous	3.1	90	SNP	Novel	944	---
FGFR2	chr10	123306050	G	A	Heterozygous	1.6	23	SNP	Novel	935	---
FGFR2	chr10	123306062	A	G	Heterozygous	3.5	115	SNP	Novel	947	---
FGFR2	chr10	123306073	C	T	Heterozygous	4	149	SNP	Novel	947	---
FGFR2	chr10	123306075	G	A	Heterozygous	5.7	274	SNP	Novel	950	---
FGFR2	chr10	123306076	C	T	Heterozygous	3.8	134	SNP	Novel	951	---
FGFR2	chr10	123306123	C	T	Heterozygous	3.2	96	SNP	Novel	952	---
FGFR2	chr10	123354431	C	T	Heterozygous	1.8	63	SNP	Novel	2285	---
FGFR2	chr10	123354433	C	T	Heterozygous	3.1	203	SNP	Novel	2285	---
FGFR2	chr10	123354452	C	T	Heterozygous	1.4	32	SNP	Novel	2284	---
HRAS	chr11	533867	C	T	Heterozygous	16.2	455	SNP	Novel	320	---
HRAS	chr11	533907	G	A	Heterozygous	9.1	194	SNP	Novel	317	---
HRAS	chr11	533913	C	T	Heterozygous	13.3	334	SNP	Novel	316	---
HRAS	chr11	533929	G	A	Heterozygous	22.1	688	SNP	Novel	312	---
HRAS	chr11	534248	C	T	Heterozygous	2.2	133	SNP	Novel	2934	---
HRAS	chr11	534257	C	T	Heterozygous	4	445	SNP	Novel	2948	---
HRAS	chr11	534271	C	T	Heterozygous	4.1	452	SNP	Novel	2947	---
HRAS	chr11	534280	C	T	Heterozygous	6.8	1128	SNP	Novel	2943	---
HRAS	chr11	534292	C	T	Heterozygous	4.8	605	SNP	Novel	2928	---
HRAS	chr11	534294	C	T	Heterozygous	3.4	305	SNP	Novel	2880	---
HRAS	chr11	534302	C	T	Heterozygous	3.3	291	SNP	Novel	2895	---
HRAS	chr11	534304	C	T	Heterozygous	3.3	291	SNP	Novel	2895	---
HRAS	chr11	534307	G	T	Heterozygous	1	10	SNP	Novel	2899	---
HRAS	chr11	534308	C	T	Heterozygous	4.1	440	SNP	Novel	2900	---
HRAS	chr11	534320	C	T	Heterozygous	3.4	316	SNP	Novel	2892	---
HRAS	chr11	534340	C	T	Heterozygous	4.2	459	SNP	Novel	2857	---
HRAS	chr11	534351	C	T	Heterozygous	3.7	355	SNP	Novel	2788	---



KRAS	chr12	25364810	C	T	Heterozygous	20.9	406	SNP	Novel	201	---
KRAS	chr12	25380272	C	T	Heterozygous	7.1	597	SNP	Novel	1424	---
KRAS	chr12	25380274	C	T	Heterozygous	7.4	647	SNP	Novel	1426	---
KRAS	chr12	25380306	C	T	Heterozygous	7.1	599	SNP	Novel	1435	---
KRAS	chr12	25380313	C	T	Heterozygous	7.2	612	SNP	Novel	1434	---
KRAS	chr12	25380315	C	T	Heterozygous	6.3	497	SNP	Novel	1435	---
KRAS	chr12	25380324	A	G	Heterozygous	1.4	22	SNP	Novel	1329	---
KRAS	chr12	25380325	C	T	Heterozygous	7.4	638	SNP	Novel	1435	---
KRAS	chr12	25386033	C	T	Heterozygous	28.4	353	SNP	Novel	109	---
KRAS	chr12	25386054	C	G	Heterozygous	6.6	51	SNP	Novel	121	---
KRAS	chr12	25386063	C	A	Homozygous	100	2473	SNP	Novel	122	---
KRAS	chr12	25387226	G	A	Heterozygous	24.1	479	SNP	Novel	195	---
KRAS	chr12	25398208	C	T	Heterozygous	16.4	606	SNP	Novel	396	---
KRAS	chr12	25398209	T	G	Heterozygous	1.5	13	SNP	Novel	396	---
KRAS	chr12	25398210	C	T	Heterozygous	14.4	500	SNP	Novel	396	---
KRAS	chr12	25398246	G	A	Heterozygous	2.7	36	SNP	Novel	406	---
ERBB3	chr12	56477591	C	T	Heterozygous	13.2	1011	SNP	Novel	921	---
ERBB3	chr12	56477611	C	T	Heterozygous	5.1	226	SNP	Novel	937	---
ERBB3	chr12	56477694	A	T	Homozygous	99.9	18728	SNP	Novel	910	---
ERBB3	chr12	56478847	CC	TT	Heterozygous	10.3	739	MNP	Novel	967	---
ERBB3	chr12	56478898	C	T	Heterozygous	9.5	642	SNP	Novel	969	---
ERBB3	chr12	56478904	G	A	Heterozygous	9.9	693	SNP	Novel	968	---
ERBB3	chr12	56481597	C	T	Heterozygous	29.5	775	SNP	Novel	227	---
ERBB3	chr12	56482294	C	T	Heterozygous	8.7	590	SNP	Novel	1037	---
ERBB3	chr12	56482308	TCC	-	Heterozygous	8	513	DEL	Novel	1024	---
ERBB3	chr12	56482351	C	T	Heterozygous	8.4	551	SNP	Novel	1029	---
ERBB3	chr12	56482363	C	T	Heterozygous	9.4	658	SNP	Novel	1024	---
ERBB3	chr12	56482366	G	A	Heterozygous	3.2	108	SNP	Novel	1023	---
ERBB3	chr12	56482384	A	G	Heterozygous	3.2	102	SNP	Novel	1013	---
ERBB3	chr12	56482538	A	G	Heterozygous	1.9	16	SNP	Novel	267	---
ERBB3	chr12	56482578	G	A	Heterozygous	19.7	544	SNP	Novel	269	---
ERBB3	chr12	56482631	T	C	Heterozygous	1.5	11	SNP	Novel	268	---
CDK4	chr12	58142102	C	T	Heterozygous	4.6	40	SNP	Novel	151	---
CDK4	chr12	58142138	G	A	Heterozygous	24.7	360	SNP	Novel	146	---
CDK4	chr12	58142148	G	A	Heterozygous	31	558	SNP	Novel	142	---
CDK4	chr12	58142273	A	G	Heterozygous	5.3	85	SNP	Novel	301	---
CDK4	chr12	58142283	C	T	Heterozygous	2	18	SNP	Novel	301	---
CDK4	chr12	58142355	C	T	Heterozygous	18.2	502	SNP	Novel	303	---

CDK4	chr12	58142896	C	T	Heterozygous	5.5	524	SNP	Novel	1932	---
CDK4	chr12	58142915	C	T	Heterozygous	1.3	54	SNP	Novel	1951	---
CDK4	chr12	58142926	C	T	Heterozygous	4.7	400	SNP	Novel	2000	---
CDK4	chr12	58142938	C	T	Heterozygous	5.7	768	SNP	Novel	1996	---
CDK4	chr12	58142947	C	T	Heterozygous	1.5	32	SNP	Novel	2020	---
CDK4	chr12	58142956	C	T	Heterozygous	4.6	398	SNP	Novel	2026	---
CDK4	chr12	58142964	C	T	Heterozygous	4.9	447	SNP	Novel	2029	---
CDK4	chr12	58142983	C	T	Heterozygous	6.1	652	SNP	Novel	2004	---
CDK4	chr12	58143256	G	A	Heterozygous	7	300	SNP	Novel	746	---
CDK4	chr12	58143310	G	A	Heterozygous	6.1	239	SNP	Novel	741	---
CDK4	chr12	58143318	C	T	Heterozygous	11.9	682	SNP	Novel	737	---
CDK4	chr12	58144665	C	T	Heterozygous	47.2	707	SNP	Novel	108	---
CDK4	chr12	58144921	C	T	Heterozygous	7.5	791	SNP	Novel	1766	---
CDK4	chr12	58144943	C	T	Heterozygous	3.1	159	SNP	Novel	1756	---
CDK4	chr12	58144953	C	T	Heterozygous	1.5	29	SNP	Novel	1747	---
CDK4	chr12	58144954	C	T	Heterozygous	7.4	767	SNP	Novel	1747	---
CDK4	chr12	58144960	C	T	Heterozygous	6.9	686	SNP	Novel	1732	---
CDK4	chr12	58144972	C	T	Heterozygous	5.2	426	SNP	Novel	1723	---
CDK4	chr12	58145735	T	C	Heterozygous	3.2	41	SNP	Novel	308	---
CDK4	chr12	58145759	C	T	Heterozygous	25.2	886	SNP	Novel	330	---
CDK4	chr12	58145953	C	T	Heterozygous	2.6	234	SNP	Novel	4000	---
CDK4	chr12	58145962	C	T	Heterozygous	1.1	16	SNP	Novel	3991	---
CDK4	chr12	58145967	G	A	Heterozygous	3.4	428	SNP	Novel	4000	---
CDK4	chr12	58145969	C	T	Heterozygous	1	13	SNP	Novel	4000	---
CDK4	chr12	58145971	G	A	Heterozygous	2.6	239	SNP	Novel	3981	---
CDK4	chr12	58145977	C	T	Heterozygous	4.3	713	SNP	Novel	3989	---
CDK4	chr12	58146002	C	T	Heterozygous	2.8	426	SNP	Novel	3970	---
CDK4	chr12	58146010	C	T	Heterozygous	2.2	165	SNP	Novel	4000	---
MAP2K1	chr15	66727449	C	G	Heterozygous	4.7	166	SNP	Novel	779	---
MAP2K1	chr15	66727508	G	A	Heterozygous	10.9	652	SNP	Novel	786	---
MAP2K1	chr15	66729214	T	C	Heterozygous	3.2	100	SNP	Novel	977	---
MAP2K1	chr15	66774101	C	T	Heterozygous	1.7	13	SNP	Novel	236	---
ERBB2	chr17	37868218	C	T	Heterozygous	23.3	681	SNP	Novel	266	---
ERBB2	chr17	37872388	C	T	Heterozygous	7.6	414	SNP	Novel	904	---
ERBB2	chr17	37872389	C	T	Heterozygous	5.4	234	SNP	Novel	903	---
ERBB2	chr17	37872390	C	T	Heterozygous	7.9	439	SNP	Novel	904	---
ERBB2	chr17	37872392	C	T	Heterozygous	2.4	54	SNP	Novel	889	---
ERBB2	chr17	37872424	C	T	Heterozygous	3.1	88	SNP	Novel	863	---

ERBB2	chr17	37872462	GCCACAG-		Heterozygous	2.2	138	DEL	Novel	801	---
ERBB2	chr17	37872477	C	T	Heterozygous	7.6	379	SNP	Novel	811	---
ERBB2	chr17	37879612	C	T	Heterozygous	1	13	SNP	Novel	4000	---
ERBB2	chr17	37879614	G	A	Heterozygous	2.3	175	SNP	Novel	4000	---
ERBB2	chr17	37879621	G	A	Heterozygous	1.8	88	SNP	Novel	3986	---
ERBB2	chr17	37879628	GGG	AGA	Heterozygous	1.8	524	MNP	Novel	3976	---
ERBB2	chr17	37879647	C	T	Heterozygous	2.6	245	SNP	Novel	3999	---
ERBB2	chr17	37879654	C	T	Heterozygous	1.9	106	SNP	Novel	4000	---
ERBB2	chr17	37879658	G	A	Heterozygous	1.5	58	SNP	Hotspot	4000	COSM436498
ERBB2	chr17	37879663	C	T	Heterozygous	1.2	28	SNP	Novel	3983	---
ERBB2	chr17	37879672	C	T	Heterozygous	1.3	36	SNP	Novel	4000	---
ERBB2	chr17	37879683	G	A	Heterozygous	1.2	23	SNP	Novel	4000	---
ERBB2	chr17	37879686	G	A	Heterozygous	1.2	30	SNP	Novel	4000	---
ERBB2	chr17	37879691	G	A	Heterozygous	1.1	16	SNP	Novel	4000	---
ERBB2	chr17	37879832	G	A	Heterozygous	3.6	480	SNP	Novel	3998	---
ERBB2	chr17	37879835	G	A	Heterozygous	1.6	71	SNP	Novel	3997	---
ERBB2	chr17	37879843	G	A	Heterozygous	2.3	184	SNP	Novel	3998	---
ERBB2	chr17	37879850	G	A	Heterozygous	4.2	653	SNP	Novel	3997	---
ERBB2	chr17	37879854	G	A	Heterozygous	1.5	58	SNP	Novel	3997	---
ERBB2	chr17	37879856	G	A	Heterozygous	1.8	98	SNP	Novel	3997	---
ERBB2	chr17	37879858	C	T	Heterozygous	2.4	194	SNP	Novel	3995	---
ERBB2	chr17	37879860	G	A	Heterozygous	1.6	71	SNP	Novel	3998	---
ERBB2	chr17	37879865	G	A	Heterozygous	1.2	21	SNP	Novel	3998	---
ERBB2	chr17	37879877	G	A	Heterozygous	1.9	106	SNP	Novel	3997	---
ERBB2	chr17	37879880	G	A	Heterozygous	2.2	150	SNP	Novel	3997	---
ERBB2	chr17	37879890	G	A	Heterozygous	1.9	106	SNP	Novel	3997	---
ERBB2	chr17	37879893	G	A	Heterozygous	3.7	515	SNP	Novel	3995	---
ERBB2	chr17	37879899	G	A	Heterozygous	2.9	300	SNP	Novel	3972	---
ERBB2	chr17	37879913	G	A	Heterozygous	2.6	245	SNP	Novel	3996	---
ERBB2	chr17	37880245	C	A	Heterozygous	7.6	137	SNP	Novel	277	---
ERBB2	chr17	37880319	G	A	Heterozygous	16.4	424	SNP	Novel	287	---
ERBB2	chr17	37880321	C	G	Heterozygous	15.6	461	SNP	Novel	340	---
ERBB2	chr17	37880323	G	A	Heterozygous	2.9	41	SNP	Novel	340	---
ERBB2	chr17	37880325	G	A	Heterozygous	2.9	36	SNP	Novel	344	---
ERBB2	chr17	37880333	C	T	Heterozygous	17	526	SNP	Novel	341	---
ERBB2	chr17	37880982	G	T	Heterozygous	3.9	229	SNP	Novel	1603	---
ERBB2	chr17	37880983	C	T	Heterozygous	5.5	428	SNP	Novel	1604	---
ERBB2	chr17	37881017	C	T	Heterozygous	5.2	387	SNP	Novel	1605	---

ERBB2	chr17	37881029	G	A	Heterozygous	2.1	61	SNP	Novel	1605	---
ERBB2	chr17	37881049	C	T	Heterozygous	4.6	309	SNP	Novel	1602	---
ERBB2	chr17	37881327	G	A	Heterozygous	12.2	795	SNP	Novel	811	---
ERBB2	chr17	37881341	G	A	Heterozygous	10.3	617	SNP	Novel	814	---
ERBB2	chr17	37881372	G	A	Heterozygous	4	131	SNP	Novel	819	---
ERBB2	chr17	37881401	G	A	Heterozygous	17.2	2560	SNP	Novel	822	---
ERBB2	chr17	37881430	G	A	Heterozygous	10	604	SNP	Novel	831	---
ERBB2	chr17	37881452	G	A	Heterozygous	10.6	630	SNP	Novel	803	---
ERBB2	chr17	37881576	C	T	Heterozygous	23.9	983	SNP	Novel	368	---
ERBB2	chr17	37881580	G	A	Heterozygous	15.6	508	SNP	Novel	365	---
ERBB2	chr17	37882849	C	T	Heterozygous	4.4	302	SNP	Novel	1698	---
ERBB2	chr17	37882850	C	T	Heterozygous	2.3	83	SNP	Novel	1698	---
ERBB2	chr17	37882863	C	T	Heterozygous	2.5	103	SNP	Novel	1700	---
ERBB2	chr17	37882865	G	A	Heterozygous	3.5	200	SNP	Novel	1699	---
ERBB2	chr17	37882873	C	T	Heterozygous	7	694	SNP	Novel	1698	---
ERBB2	chr17	37882890	C	T	Heterozygous	5	378	SNP	Novel	1689	---
ERBB2	chr17	37882897	C	T	Heterozygous	2.2	78	SNP	Novel	1692	---
ERBB2	chr17	37882909	C	T	Heterozygous	4.9	373	SNP	Novel	1692	---
ERBB2	chr17	37882912	G	A	Heterozygous	6.5	609	SNP	Novel	1692	---
ERBB2	chr17	37882935	C	T	Heterozygous	4.7	342	SNP	Novel	1671	---
ERBB2	chr17	37882941	C	T	Heterozygous	5	370	SNP	Novel	1653	---
ERBB2	chr17	37883183	G	T	Heterozygous	9.9	365	SNP	Novel	514	---
ERBB2	chr17	37883213	C	T	Heterozygous	13.2	554	SNP	Novel	509	---
ERBB2	chr17	37883220	C	T	Heterozygous	9.8	348	SNP	Novel	502	---
ERBB2	chr17	37883226	C	T	Heterozygous	15.2	774	SNP	Novel	561	---
ERBB2	chr17	37883231	A	G	Heterozygous	1.6	18	SNP	Novel	558	---
GNA11	chr19	3114984	G	A	Heterozygous	52.1	1787	SNP	Novel	234	---
GNA11	chr19	3115025	C	T	Heterozygous	3	29	SNP	Novel	234	---
GNA11	chr19	3115076	G	A	Heterozygous	52.2	1897	SNP	Novel	245	---
GNA11	chr19	3115095	G	A	Heterozygous	52.7	1892	SNP	Novel	243	---
GNA11	chr19	3118885	C	T	Heterozygous	1.5	37	SNP	Novel	2667	---
GNA11	chr19	3118895	C	T	Heterozygous	3	228	SNP	Novel	2680	---
GNA11	chr19	3118897	G	A	Heterozygous	2.3	130	SNP	Novel	2682	---
GNA11	chr19	3118899	G	A	Heterozygous	3.2	263	SNP	Novel	2681	---
GNA11	chr19	3118904	G	A	Heterozygous	2.6	166	SNP	Novel	2684	---
GNA11	chr19	3118907	G	A	Heterozygous	1.1	15	SNP	Novel	2683	---
GNA11	chr19	3118912	G	A	Heterozygous	4.1	426	SNP	Novel	2687	---
GNA11	chr19	3118925	G	A	Heterozygous	3.9	390	SNP	Novel	2688	---

GNA11	chr19	3118932	G	A	Heterozygous	4.3	456	SNP	Novel	2680	---
GNA11	chr19	3118938	G	A	Heterozygous	4.3	464	SNP	Novel	2654	---
GNA11	chr19	3118941	C	T	Heterozygous	3.2	274	SNP	Novel	2675	---
GNA11	chr19	3118945	G	A	Heterozygous	2.6	161	SNP	Novel	2674	---
MAP2K2	chr19	4117553	G	A	Heterozygous	1.5	11	SNP	Novel	266	---
MAP2K2	chr19	4117616	A	G	Heterozygous	2.8	27	SNP	Novel	250	---
MAP2K2	chr19	4117645	G	A	Heterozygous	22.2	566	SNP	Novel	243	---
JAK3	chr19	17945895	C	T	Heterozygous	18.1	1145	SNP	Novel	657	---
JAK3	chr19	17945917	G	A	Heterozygous	15.8	956	SNP	Novel	665	---
JAK3	chr19	17945920	C	T	Heterozygous	16.1	983	SNP	Novel	664	---
JAK3	chr19	17945947	C	T	Heterozygous	1.4	13	SNP	Novel	658	---
JAK3	chr19	17945972	G	A	Heterozygous	15.6	954	SNP	Novel	673	---
JAK3	chr19	17948832	C	T	Heterozygous	2.1	28	SNP	Novel	338	---
JAK3	chr19	17948863	G	A	Heterozygous	3.3	55	SNP	Novel	331	---
JAK3	chr19	17949137	G	A	Heterozygous	2	245	SNP	Novel	3990	---
JAK3	chr19	17949144	C	T	Heterozygous	1.8	88	SNP	Novel	3998	---
JAK3	chr19	17949162	G	A	Heterozygous	2.4	194	SNP	Novel	3999	---
AR	chrX	66776187	C	T	Heterozygous	2.7	113	SNP	Novel	1618	---
AR	chrX	66776191	G	A	Heterozygous	2.7	109	SNP	Novel	1618	---
AR	chrX	66776208	A	G	Heterozygous	1.8	48	SNP	Novel	1625	---
AR	chrX	66776211	G	A	Heterozygous	2.8	120	SNP	Novel	1623	---
AR	chrX	66776224	G	A	Heterozygous	5.8	479	SNP	Novel	1609	---
AR	chrX	66776236	T	C	Heterozygous	3.1	152	SNP	Novel	1594	---
AR	chrX	66776245	G	A	Heterozygous	3.2	159	SNP	Novel	1585	---
AR	chrX	66776252	G	A	Heterozygous	2.6	102	SNP	Novel	1580	---
AR	chrX	66799226	C	T	Heterozygous	1.7	32	SNP	Novel	1180	---
AR	chrX	66799232	T	C	Heterozygous	1.5	24	SNP	Novel	1189	---
AR	chrX	66799287	C	T	Heterozygous	5.3	300	SNP	Novel	1193	---
AR	chrX	66799290	C	T	Heterozygous	6	367	SNP	Novel	1191	---
AR	chrX	66799306	T	C	Heterozygous	3.4	130	SNP	Novel	1162	---
AR	chrX	66866172	G	A	Heterozygous	84.3	1513	SNP	Novel	102	---
AR	chrX	66906867	T	C	Heterozygous	1.9	90	SNP	Novel	3064	---
AR	chrX	66906871	C	T	Heterozygous	2.4	152	SNP	Novel	3069	---
AR	chrX	66906907	C	T	Heterozygous	1.2	23	SNP	Novel	3102	---
AR	chrX	66906915	G	A	Heterozygous	1.6	51	SNP	Novel	3064	---
AR	chrX	66906923	G	A	Heterozygous	2.1	109	SNP	Novel	3096	---
AR	chrX	66915226	C	T	Heterozygous	9.4	109	SNP	Novel	170	---
AR	chrX	66938987	C	T	Heterozygous	15.7	1040	SNP	Novel	744	---

AR	chrX	66939005	G	T	Heterozygous	3.9	115	SNP	Novel	737	---
AR	chrX	66939047	C	T	Heterozygous	4.2	126	SNP	Novel	721	---
AR	chrX	66943527	G	A	Heterozygous	2.8	277	SNP	Novel	3998	---
AR	chrX	66943535	G	A	Heterozygous	3.3	408	SNP	Novel	3997	---
AR	chrX	66943543	C	T	Heterozygous	2	118	SNP	Hotspot	3997	COSM238555
AR	chrX	66943546	C	T	Heterozygous	2.5	219	SNP	Novel	3996	---
AR	chrX	66943554	T	C	Heterozygous	1.1	15	SNP	Novel	3993	---
AR	chrX	66943572	G	A	Heterozygous	2.7	261	SNP	Novel	3996	---
AR	chrX	66943579	A	G	Heterozygous	1.5	50	SNP	Novel	3996	---
AR	chrX	66943587	C	T	Heterozygous	3.3	390	SNP	Novel	3994	---
AR	chrX	66943588	G	A	Heterozygous	3	323	SNP	Novel	3998	---
AR	chrX	66943591	G	A	Heterozygous	3.1	348	SNP	Novel	3996	---
AR	chrX	66945218	C	T	Heterozygous	30.9	931	SNP	Novel	249	---