

Data Sheet

Product Name: CancerSeq AMS Paraffin Tissue Curl

Catalog No.: T2235152-AC

Lot No.: C201058

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

Pathological Diagnosis: Adenocarcinoma, Papillary

Tumor Size: diameter 4 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) |

C201058

| Gene ID | Chrom | Position | Ref | Variant | Allele Call | Frequency | Quality | Type | Allele Source | Coverage | Allele Name |
|---------|-------|-----------|-----|---------|--------------|-----------|---------|------|---------------|----------|-------------|
| MTOR | chr1 | 11174374 | C | T | Heterozygous | 3.6 | 16 | SNP | Novel | 664 | --- |
| MTOR | chr1 | 11174376 | G | A | Heterozygous | 4.7 | 34 | SNP | Novel | 664 | --- |
| MTOR | chr1 | 11174406 | A | G | Heterozygous | 4.1 | 28 | SNP | Novel | 664 | --- |
| MTOR | chr1 | 11174466 | C | T | Heterozygous | 5.5 | 53 | SNP | Novel | 654 | --- |
| MTOR | chr1 | 11174487 | G | A | Heterozygous | 4.2 | 23 | SNP | Novel | 625 | --- |
| MTOR | chr1 | 11184581 | G | A | Heterozygous | 5.1 | 37 | SNP | Novel | 528 | --- |
| MTOR | chr1 | 11184582 | T | C | Heterozygous | 3.4 | 11 | SNP | Novel | 528 | --- |
| MTOR | chr1 | 11184595 | G | A | Heterozygous | 3.4 | 12 | SNP | Novel | 526 | --- |
| MTOR | chr1 | 11184641 | C | T | Heterozygous | 5.1 | 37 | SNP | Novel | 530 | --- |
| MTOR | chr1 | 11188189 | G | A | Heterozygous | 5.9 | 45 | SNP | Novel | 422 | --- |
| MTOR | chr1 | 11188225 | G | A | Heterozygous | 6.5 | 57 | SNP | Novel | 428 | --- |
| MTOR | chr1 | 11188239 | G | A | Heterozygous | 8.2 | 93 | SNP | Novel | 426 | --- |
| MTOR | chr1 | 11189774 | C | T | Heterozygous | 4.9 | 42 | SNP | Novel | 737 | --- |
| MTOR | chr1 | 11189782 | C | T | Heterozygous | 5.2 | 51 | SNP | Novel | 743 | --- |
| MTOR | chr1 | 11189808 | G | A | Heterozygous | 4 | 23 | SNP | Novel | 755 | --- |
| MTOR | chr1 | 11189853 | G | A | Heterozygous | 3.7 | 18 | SNP | Novel | 754 | --- |
| MTOR | chr1 | 11189859 | C | T | Heterozygous | 5.2 | 50 | SNP | Novel | 752 | --- |
| MTOR | chr1 | 11190819 | C | T | Heterozygous | 3.5 | 18 | SNP | Novel | 1083 | --- |
| MTOR | chr1 | 11190842 | G | A | Heterozygous | 3.1 | 11 | SNP | Novel | 1088 | --- |
| MTOR | chr1 | 11190877 | C | T | Heterozygous | 3.6 | 21 | SNP | Novel | 1096 | --- |
| MTOR | chr1 | 11190886 | G | A | Heterozygous | 4.4 | 41 | SNP | Novel | 1093 | --- |
| JAK1 | chr1 | 65310470 | G | A | Heterozygous | 3.1 | 11 | SNP | Novel | 1367 | --- |
| JAK1 | chr1 | 65310557 | C | T | Heterozygous | 3.2 | 13 | SNP | Novel | 1364 | --- |
| JAK1 | chr1 | 65312382 | G | A | Heterozygous | 3.1 | 10 | SNP | Novel | 1035 | --- |
| NRAS | chr1 | 115252241 | C | T | Heterozygous | 6.4 | 44 | SNP | Novel | 327 | --- |
| NRAS | chr1 | 115252271 | C | T | Heterozygous | 7.8 | 67 | SNP | Novel | 333 | --- |
| NRAS | chr1 | 115256538 | G | A | Heterozygous | 4.2 | 43 | SNP | Novel | 1426 | --- |
| NRAS | chr1 | 115258753 | C | T | Heterozygous | 4.8 | 63 | SNP | Novel | 1258 | --- |
| DDR2 | chr1 | 162724528 | G | A | Heterozygous | 4.2 | 23 | SNP | Novel | 568 | --- |
| ALK | chr2 | 29416085 | C | T | Heterozygous | 4.1 | 12 | SNP | Novel | 194 | --- |
| ALK | chr2 | 29416102 | C | T | Heterozygous | 4 | 12 | SNP | Novel | 200 | --- |
| ALK | chr2 | 29416184 | C | T | Heterozygous | 5.7 | 24 | SNP | Novel | 193 | --- |
| ALK | chr2 | 29416430 | C | T | Heterozygous | 4 | 26 | SNP | Novel | 842 | --- |
| ALK | chr2 | 29416542 | C | T | Heterozygous | 4.3 | 36 | SNP | Novel | 1002 | --- |
| ALK | chr2 | 29416572 | T | C | Heterozygous | 96.1 | 15892 | SNP | Novel | 1082 | --- |

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|--------|------|-----------|---|---|--------------|-----|-------|-----|---------|------|-------------|
| ALK | chr2 | 29416603 | G | A | Heterozygous | 4.1 | 32 | SNP | Novel | 1109 | --- |
| ALK | chr2 | 29416623 | G | A | Heterozygous | 3.7 | 23 | SNP | Novel | 1134 | --- |
| ALK | chr2 | 29420434 | G | A | Heterozygous | 2.9 | 11 | SNP | Novel | 2178 | --- |
| ALK | chr2 | 29436908 | C | T | Heterozygous | 3.3 | 12 | SNP | Novel | 883 | --- |
| ALK | chr2 | 29436948 | C | T | Heterozygous | 3.4 | 14 | SNP | Novel | 889 | --- |
| ALK | chr2 | 29443638 | G | A | Heterozygous | 3.7 | 22 | SNP | Novel | 1174 | --- |
| ALK | chr2 | 29445404 | G | A | Heterozygous | 5.4 | 106 | SNP | Novel | 1569 | --- |
| ALK | chr2 | 29497987 | C | T | Heterozygous | 4.7 | 31 | SNP | Novel | 578 | --- |
| CTNNB1 | chr3 | 41266103 | G | A | Heterozygous | 6 | 18 | SNP | Hotspot | 267 | COSM5686 |
| PIK3CA | chr3 | 178916684 | G | A | Heterozygous | 7.7 | 36 | SNP | Novel | 156 | --- |
| PIK3CA | chr3 | 178916941 | G | A | Heterozygous | 5.6 | 17 | SNP | Novel | 319 | --- |
| PIK3CA | chr3 | 178921522 | G | A | Heterozygous | 6.4 | 85 | SNP | Novel | 735 | --- |
| PIK3CA | chr3 | 178921537 | G | A | Heterozygous | 3.5 | 14 | SNP | Novel | 747 | --- |
| PIK3CA | chr3 | 178922309 | A | G | Heterozygous | 4.8 | 19 | SNP | Novel | 228 | --- |
| PIK3CA | chr3 | 178922349 | C | T | Heterozygous | 5.1 | 21 | SNP | Novel | 214 | --- |
| PIK3CA | chr3 | 178922364 | G | A | Heterozygous | 4.9 | 10 | SNP | Hotspot | 204 | COSM1041478 |
| PIK3CA | chr3 | 178936166 | C | T | Heterozygous | 4.4 | 14 | SNP | Novel | 206 | --- |
| PIK3CA | chr3 | 178938833 | G | A | Heterozygous | 4.5 | 27 | SNP | Novel | 557 | --- |
| PIK3CA | chr3 | 178952042 | C | T | Heterozygous | 4.1 | 25 | SNP | Novel | 724 | --- |
| FGFR3 | chr4 | 1797252 | G | A | Heterozygous | 4 | 16 | SNP | Novel | 372 | --- |
| FGFR3 | chr4 | 1797273 | G | A | Heterozygous | 7.7 | 72 | SNP | Novel | 379 | --- |
| FGFR3 | chr4 | 1807834 | G | A | Heterozygous | 2.9 | 11 | SNP | Novel | 3139 | --- |
| FGFR3 | chr4 | 1807894 | G | A | Homozygous | 100 | 51149 | SNP | Novel | 3207 | --- |
| FGFR3 | chr4 | 1809235 | G | A | Heterozygous | 3.8 | 19 | SNP | Novel | 650 | --- |
| FGFR3 | chr4 | 1809255 | G | A | Heterozygous | 5 | 41 | SNP | Novel | 663 | --- |
| FGFR3 | chr4 | 1809289 | G | A | Heterozygous | 6.3 | 83 | SNP | Novel | 729 | --- |
| FGFR3 | chr4 | 1809309 | G | A | Heterozygous | 3.2 | 10 | SNP | Novel | 719 | --- |
| FGFR3 | chr4 | 1809329 | G | A | Heterozygous | 4.5 | 32 | SNP | Novel | 715 | --- |
| FGFR3 | chr4 | 1809484 | C | T | Heterozygous | 4.8 | 48 | SNP | Novel | 967 | --- |
| FGFR3 | chr4 | 1809487 | G | A | Heterozygous | 3.8 | 23 | SNP | Novel | 967 | --- |
| PDGFRA | chr4 | 55097810 | C | T | Heterozygous | 4.8 | 43 | SNP | Novel | 784 | --- |
| PDGFRA | chr4 | 55097836 | C | T | Heterozygous | 3.9 | 21 | SNP | Novel | 779 | --- |
| PDGFRA | chr4 | 55104307 | C | T | Heterozygous | 4.4 | 19 | SNP | Novel | 383 | --- |
| PDGFRA | chr4 | 55104346 | C | T | Heterozygous | 5.1 | 30 | SNP | Novel | 392 | --- |
| PDGFRA | chr4 | 55104354 | C | T | Heterozygous | 7.2 | 65 | SNP | Novel | 391 | --- |
| PDGFRA | chr4 | 55104362 | C | T | Heterozygous | 4.4 | 22 | SNP | Novel | 387 | --- |
| PDGFRA | chr4 | 55123730 | G | A | Heterozygous | 4.3 | 24 | SNP | Novel | 588 | --- |
| PDGFRA | chr4 | 55123732 | G | A | Heterozygous | 3.9 | 19 | SNP | Novel | 588 | --- |

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|--------|------|-----------|----|----|--------------|------|------|-----|-------|------|-----|
| PDGFRA | chr4 | 55123739 | G | A | Heterozygous | 3.7 | 16 | SNP | Novel | 590 | --- |
| PDGFRA | chr4 | 55123751 | G | A | Heterozygous | 4.3 | 24 | SNP | Novel | 585 | --- |
| PDGFRA | chr4 | 55123804 | C | T | Heterozygous | 4 | 19 | SNP | Novel | 579 | --- |
| PDGFRA | chr4 | 55133699 | G | A | Heterozygous | 3.1 | 52 | SNP | Novel | 732 | --- |
| PDGFRA | chr4 | 55140997 | G | A | Heterozygous | 4.3 | 18 | SNP | Novel | 348 | --- |
| PDGFRA | chr4 | 55141034 | G | A | Heterozygous | 8.7 | 87 | SNP | Novel | 344 | --- |
| PDGFRA | chr4 | 55141055 | AG | GA | Heterozygous | 6.5 | 5260 | MNP | Novel | 341 | --- |
| PDGFRA | chr4 | 55141055 | A | G | Heterozygous | 93.5 | 5260 | SNP | Novel | 341 | --- |
| PDGFRA | chr4 | 55141060 | G | A | Heterozygous | 6.4 | 46 | SNP | Novel | 343 | --- |
| PDGFRA | chr4 | 55141079 | G | A | Heterozygous | 4.4 | 18 | SNP | Novel | 344 | --- |
| PDGFRA | chr4 | 55141101 | G | A | Heterozygous | 8.7 | 87 | SNP | Novel | 344 | --- |
| PDGFRA | chr4 | 55152137 | C | T | Heterozygous | 3.8 | 33 | SNP | Novel | 1560 | --- |
| KIT | chr4 | 55529122 | G | A | Heterozygous | 4.7 | 14 | SNP | Novel | 148 | --- |
| KIT | chr4 | 55529197 | C | T | Heterozygous | 9.6 | 54 | SNP | Novel | 157 | --- |
| KIT | chr4 | 55566266 | G | A | Heterozygous | 51.9 | 975 | SNP | Novel | 183 | --- |
| KIT | chr4 | 55573081 | C | T | Heterozygous | 4.8 | 17 | SNP | Novel | 210 | --- |
| KIT | chr4 | 55573106 | G | A | Heterozygous | 7.2 | 40 | SNP | Novel | 209 | --- |
| KIT | chr4 | 55593691 | G | A | Heterozygous | 4.9 | 38 | SNP | Novel | 586 | --- |
| KIT | chr4 | 55594184 | C | T | Heterozygous | 3.4 | 14 | SNP | Novel | 726 | --- |
| KIT | chr4 | 55594220 | C | T | Heterozygous | 3.4 | 13 | SNP | Novel | 744 | --- |
| KIT | chr4 | 55598891 | C | T | Heterozygous | 12 | 143 | SNP | Novel | 301 | --- |
| KIT | chr4 | 55598919 | G | A | Heterozygous | 8.5 | 75 | SNP | Novel | 305 | --- |
| KIT | chr4 | 55599295 | G | A | Heterozygous | 4.1 | 17 | SNP | Novel | 419 | --- |
| ROS1 | chr6 | 117638365 | G | A | Heterozygous | 3.9 | 18 | SNP | Novel | 589 | --- |
| ROS1 | chr6 | 117638425 | G | A | Heterozygous | 3.7 | 16 | SNP | Novel | 587 | --- |
| ROS1 | chr6 | 117638438 | G | A | Heterozygous | 5.5 | 48 | SNP | Novel | 579 | --- |
| ROS1 | chr6 | 117641030 | C | T | Heterozygous | 3.8 | 17 | SNP | Novel | 582 | --- |
| ROS1 | chr6 | 117641063 | C | T | Heterozygous | 5.1 | 41 | SNP | Novel | 603 | --- |
| ESR1 | chr6 | 152419921 | C | T | Heterozygous | 4.5 | 39 | SNP | Novel | 938 | --- |
| ESR1 | chr6 | 152419946 | G | A | Heterozygous | 3.7 | 20 | SNP | Novel | 942 | --- |
| ESR1 | chr6 | 152419974 | G | A | Heterozygous | 3.2 | 11 | SNP | Novel | 941 | --- |
| ESR1 | chr6 | 152419991 | G | A | Heterozygous | 3.1 | 10 | SNP | Novel | 936 | --- |
| EGFR | chr7 | 55221832 | G | A | Heterozygous | 3.3 | 14 | SNP | Novel | 928 | --- |
| EGFR | chr7 | 55221856 | C | T | Heterozygous | 6.6 | 116 | SNP | Novel | 972 | --- |
| EGFR | chr7 | 55221875 | G | A | Heterozygous | 3.4 | 15 | SNP | Novel | 982 | --- |
| EGFR | chr7 | 55221881 | G | A | Heterozygous | 3.3 | 13 | SNP | Novel | 982 | --- |
| EGFR | chr7 | 55221893 | C | T | Heterozygous | 3.6 | 18 | SNP | Novel | 978 | --- |
| EGFR | chr7 | 55227964 | G | A | Heterozygous | 3.6 | 12 | SNP | Novel | 385 | --- |

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|------|------|-----------|----|----|--------------|------|-------|-----|---------|------|----------|
| EGFR | chr7 | 55242456 | C | T | Heterozygous | 5 | 36 | SNP | Novel | 564 | --- |
| EGFR | chr7 | 55242511 | G | A | Heterozygous | 5.2 | 18 | SNP | Novel | 555 | --- |
| EGFR | chr7 | 55249050 | C | T | Heterozygous | 3.5 | 18 | SNP | Novel | 1117 | --- |
| EGFR | chr7 | 55249063 | G | A | Heterozygous | 27.8 | 2219 | SNP | Novel | 1122 | --- |
| EGFR | chr7 | 55259498 | G | A | Heterozygous | 3.3 | 19 | SNP | Novel | 1922 | --- |
| MET | chr7 | 116403209 | G | A | Heterozygous | 4.8 | 27 | SNP | Novel | 414 | --- |
| MET | chr7 | 116412005 | C | T | Heterozygous | 5.8 | 35 | SNP | Novel | 329 | --- |
| MET | chr7 | 116412021 | C | T | Heterozygous | 8.2 | 74 | SNP | Novel | 329 | --- |
| MET | chr7 | 116412061 | G | A | Heterozygous | 5.4 | 29 | SNP | Novel | 316 | --- |
| MET | chr7 | 116415150 | G | A | Heterozygous | 5 | 31 | SNP | Novel | 437 | --- |
| MET | chr7 | 116415176 | C | T | Heterozygous | 6.7 | 61 | SNP | Novel | 431 | --- |
| MET | chr7 | 116415181 | C | T | Heterozygous | 5.5 | 39 | SNP | Novel | 433 | --- |
| MET | chr7 | 116417503 | G | A | Heterozygous | 5.9 | 69 | SNP | Novel | 727 | --- |
| MET | chr7 | 116417510 | G | A | Heterozygous | 3.4 | 15 | SNP | Novel | 725 | --- |
| MET | chr7 | 116434500 | GG | AA | Heterozygous | 4.7 | 94 | MNP | Novel | 425 | --- |
| SMO | chr7 | 128845510 | C | T | Heterozygous | 3.2 | 13 | SNP | Novel | 1147 | --- |
| SMO | chr7 | 128845600 | C | T | Heterozygous | 3.2 | 13 | SNP | Novel | 1213 | --- |
| SMO | chr7 | 128849116 | C | T | Heterozygous | 4.2 | 37 | SNP | Novel | 1193 | --- |
| SMO | chr7 | 128849179 | C | T | Heterozygous | 4.8 | 63 | SNP | Novel | 1243 | --- |
| BRAF | chr7 | 140434449 | G | A | Heterozygous | 3.1 | 13 | SNP | Novel | 1512 | --- |
| BRAF | chr7 | 140453104 | C | T | Heterozygous | 5.8 | 34 | SNP | Novel | 312 | --- |
| BRAF | chr7 | 140453137 | C | T | Heterozygous | 5.8 | 18 | SNP | Hotspot | 312 | COSM1130 |
| BRAF | chr7 | 140453139 | G | A | Heterozygous | 5.8 | 34 | SNP | Novel | 312 | --- |
| BRAF | chr7 | 140453221 | G | A | Heterozygous | 4.1 | 15 | SNP | Novel | 290 | --- |
| BRAF | chr7 | 140476698 | C | T | Heterozygous | 5.3 | 45 | SNP | Novel | 625 | --- |
| BRAF | chr7 | 140476705 | A | G | Heterozygous | 3.3 | 11 | SNP | Novel | 627 | --- |
| BRAF | chr7 | 140476731 | G | A | Heterozygous | 3.5 | 13 | SNP | Novel | 633 | --- |
| BRAF | chr7 | 140476737 | C | T | Heterozygous | 5.4 | 48 | SNP | Novel | 633 | --- |
| BRAF | chr7 | 140476759 | C | T | Heterozygous | 3.9 | 19 | SNP | Novel | 619 | --- |
| BRAF | chr7 | 140476936 | G | A | Heterozygous | 52.1 | 12553 | SNP | Novel | 2324 | --- |
| BRAF | chr7 | 140482808 | C | T | Heterozygous | 3.7 | 12 | SNP | Novel | 349 | --- |
| BRAF | chr7 | 140482840 | G | A | Heterozygous | 4 | 15 | SNP | Novel | 351 | --- |
| BRAF | chr7 | 140482857 | C | T | Heterozygous | 4 | 15 | SNP | Novel | 351 | --- |
| BRAF | chr7 | 140507789 | C | T | Heterozygous | 2.9 | 12 | SNP | Novel | 2994 | --- |
| JAK2 | chr9 | 5073749 | G | A | Heterozygous | 10.2 | 96 | SNP | Novel | 275 | --- |
| JAK2 | chr9 | 5073818 | C | T | Heterozygous | 14.2 | 177 | SNP | Novel | 267 | --- |
| GNAQ | chr9 | 80409426 | C | T | Heterozygous | 4.5 | 19 | SNP | Novel | 313 | --- |
| GNAQ | chr9 | 80412470 | C | T | Heterozygous | 3.4 | 22 | SNP | Novel | 1873 | --- |

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|-------|-------|-----------|---|---|--------------|------|------|-----|-------|------|-----|
| RET | chr10 | 43609138 | G | A | Heterozygous | 3 | 13 | SNP | Novel | 1949 | --- |
| RET | chr10 | 43609933 | C | T | Heterozygous | 3.2 | 14 | SNP | Novel | 1505 | --- |
| RET | chr10 | 43615576 | G | T | Heterozygous | 4.3 | 23 | SNP | Novel | 540 | --- |
| RET | chr10 | 43615613 | G | A | Heterozygous | 6.6 | 35 | SNP | Novel | 487 | --- |
| RET | chr10 | 43615625 | G | A | Heterozygous | 5.2 | 37 | SNP | Novel | 523 | --- |
| RET | chr10 | 43615632 | C | A | Heterozygous | 6.5 | 66 | SNP | Novel | 522 | --- |
| RET | chr10 | 43615648 | C | T | Heterozygous | 7 | 77 | SNP | Novel | 514 | --- |
| RET | chr10 | 43615651 | G | A | Heterozygous | 4.8 | 31 | SNP | Novel | 517 | --- |
| RET | chr10 | 43615664 | G | A | Heterozygous | 3.7 | 14 | SNP | Novel | 486 | --- |
| RET | chr10 | 43615666 | G | A | Heterozygous | 4.8 | 29 | SNP | Novel | 484 | --- |
| RET | chr10 | 43615686 | G | A | Heterozygous | 6.6 | 61 | SNP | Novel | 457 | --- |
| RET | chr10 | 43617316 | G | A | Heterozygous | 7.8 | 55 | SNP | Novel | 257 | --- |
| RET | chr10 | 43617395 | G | A | Heterozygous | 7.7 | 51 | SNP | Novel | 247 | --- |
| FGFR2 | chr10 | 123247528 | C | T | Heterozygous | 3.7 | 29 | SNP | Novel | 1622 | --- |
| FGFR2 | chr10 | 123274727 | C | T | Heterozygous | 3.4 | 13 | SNP | Novel | 732 | --- |
| FGFR2 | chr10 | 123274749 | C | T | Heterozygous | 3.4 | 13 | SNP | Novel | 741 | --- |
| FGFR2 | chr10 | 123274801 | G | A | Heterozygous | 3.8 | 19 | SNP | Novel | 740 | --- |
| FGFR2 | chr10 | 123274828 | C | T | Heterozygous | 3.5 | 15 | SNP | Novel | 739 | --- |
| FGFR2 | chr10 | 123276936 | G | A | Heterozygous | 3.8 | 23 | SNP | Novel | 913 | --- |
| FGFR2 | chr10 | 123284059 | G | A | Heterozygous | 4.3 | 32 | SNP | Novel | 860 | --- |
| FGFR2 | chr10 | 123312183 | C | T | Heterozygous | 3.8 | 16 | SNP | Novel | 496 | --- |
| FGFR2 | chr10 | 123312186 | C | T | Heterozygous | 3.6 | 13 | SNP | Novel | 496 | --- |
| FGFR2 | chr10 | 123312209 | C | T | Heterozygous | 3.9 | 18 | SNP | Novel | 484 | --- |
| FGFR2 | chr10 | 123312241 | C | T | Heterozygous | 4.8 | 30 | SNP | Novel | 501 | --- |
| FGFR2 | chr10 | 123312263 | G | A | Heterozygous | 3.9 | 16 | SNP | Novel | 493 | --- |
| HRAS | chr11 | 533883 | G | A | Heterozygous | 3.5 | 20 | SNP | Novel | 1192 | --- |
| HRAS | chr11 | 533890 | G | A | Heterozygous | 4.3 | 41 | SNP | Novel | 1184 | --- |
| HRAS | chr11 | 533912 | C | T | Heterozygous | 3.1 | 10 | SNP | Novel | 1177 | --- |
| KRAS | chr12 | 25378552 | C | T | Heterozygous | 5.3 | 30 | SNP | Novel | 337 | --- |
| KRAS | chr12 | 25378561 | G | T | Heterozygous | 4.4 | 8 | SNP | Novel | 340 | --- |
| KRAS | chr12 | 25380274 | C | T | Heterozygous | 3.5 | 21 | SNP | Novel | 1294 | --- |
| KRAS | chr12 | 25380316 | C | T | Heterozygous | 4.2 | 41 | SNP | Novel | 1303 | --- |
| KRAS | chr12 | 25386063 | C | A | Homozygous | 98.8 | 2578 | SNP | Novel | 171 | --- |
| KRAS | chr12 | 25386067 | C | T | Heterozygous | 7 | 33 | SNP | Novel | 171 | --- |
| KRAS | chr12 | 25386123 | C | T | Heterozygous | 4.1 | 11 | SNP | Novel | 172 | --- |
| KRAS | chr12 | 25386918 | C | T | Heterozygous | 3.8 | 13 | SNP | Novel | 372 | --- |
| KRAS | chr12 | 25387191 | G | A | Heterozygous | 4 | 16 | SNP | Novel | 428 | --- |
| KRAS | chr12 | 25387196 | G | A | Heterozygous | 6.8 | 62 | SNP | Novel | 428 | --- |

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|-------|-------|----------|---|---|--------------|------|-------|-----|-------|------|-----|
| KRAS | chr12 | 25387219 | G | A | Heterozygous | 4.2 | 20 | SNP | Novel | 429 | --- |
| KRAS | chr12 | 25389200 | G | A | Heterozygous | 3.5 | 14 | SNP | Novel | 593 | --- |
| KRAS | chr12 | 25391162 | G | A | Heterozygous | 6.3 | 35 | SNP | Novel | 255 | --- |
| KRAS | chr12 | 25391165 | C | T | Heterozygous | 6.7 | 40 | SNP | Novel | 254 | --- |
| KRAS | chr12 | 25391220 | G | A | Heterozygous | 5.7 | 29 | SNP | Novel | 261 | --- |
| KRAS | chr12 | 25391232 | C | T | Heterozygous | 6.9 | 43 | SNP | Novel | 261 | --- |
| KRAS | chr12 | 25391239 | G | A | Heterozygous | 4.6 | 17 | SNP | Novel | 261 | --- |
| KRAS | chr12 | 25398215 | G | A | Heterozygous | 4.8 | 32 | SNP | Novel | 567 | --- |
| KRAS | chr12 | 25398222 | C | T | Heterozygous | 4.2 | 23 | SNP | Novel | 568 | --- |
| KRAS | chr12 | 25398241 | A | G | Heterozygous | 4.2 | 23 | SNP | Novel | 592 | --- |
| KRAS | chr12 | 25398244 | C | T | Heterozygous | 3.4 | 12 | SNP | Novel | 593 | --- |
| KRAS | chr12 | 25398246 | G | A | Heterozygous | 4.2 | 23 | SNP | Novel | 593 | --- |
| KRAS | chr12 | 25398253 | C | T | Heterozygous | 5.7 | 54 | SNP | Novel | 592 | --- |
| KRAS | chr12 | 25398269 | C | T | Heterozygous | 4.9 | 36 | SNP | Novel | 586 | --- |
| KRAS | chr12 | 25398279 | C | T | Heterozygous | 5.3 | 21 | SNP | Novel | 584 | --- |
| KRAS | chr12 | 25398298 | C | T | Heterozygous | 3.8 | 17 | SNP | Novel | 578 | --- |
| ERBB3 | chr12 | 56477629 | G | A | Heterozygous | 4.5 | 35 | SNP | Novel | 824 | --- |
| ERBB3 | chr12 | 56477681 | C | T | Heterozygous | 4 | 24 | SNP | Novel | 829 | --- |
| ERBB3 | chr12 | 56477694 | A | T | Homozygous | 100 | 12878 | SNP | Novel | 810 | --- |
| ERBB3 | chr12 | 56481614 | C | T | Heterozygous | 4.1 | 29 | SNP | Novel | 892 | --- |
| ERBB3 | chr12 | 56481643 | C | T | Heterozygous | 3.8 | 23 | SNP | Novel | 914 | --- |
| ERBB3 | chr12 | 56481685 | C | T | Heterozygous | 3.7 | 19 | SNP | Novel | 930 | --- |
| ERBB3 | chr12 | 56482572 | G | A | Heterozygous | 6.4 | 105 | SNP | Novel | 937 | --- |
| CDK4 | chr12 | 58142287 | C | T | Heterozygous | 3.7 | 20 | SNP | Novel | 829 | --- |
| CDK4 | chr12 | 58142306 | G | A | Heterozygous | 4.1 | 26 | SNP | Novel | 832 | --- |
| CDK4 | chr12 | 58142347 | C | T | Heterozygous | 3.4 | 14 | SNP | Novel | 829 | --- |
| CDK4 | chr12 | 58142350 | C | T | Heterozygous | 5.7 | 69 | SNP | Novel | 829 | --- |
| CDK4 | chr12 | 58143267 | G | A | Heterozygous | 3.3 | 15 | SNP | Novel | 1181 | --- |
| CDK4 | chr12 | 58144403 | G | A | Heterozygous | 4.7 | 27 | SNP | Novel | 465 | --- |
| CDK4 | chr12 | 58144408 | C | T | Heterozygous | 4.7 | 27 | SNP | Novel | 470 | --- |
| CDK4 | chr12 | 58144665 | C | T | Heterozygous | 63.7 | 6188 | SNP | Novel | 835 | --- |
| CDK4 | chr12 | 58144955 | C | T | Heterozygous | 3.6 | 32 | SNP | Novel | 2328 | --- |
| CDK4 | chr12 | 58145362 | C | T | Heterozygous | 7.9 | 141 | SNP | Novel | 764 | --- |
| CDK4 | chr12 | 58145364 | C | T | Heterozygous | 3.2 | 11 | SNP | Novel | 772 | --- |
| CDK4 | chr12 | 58145420 | G | A | Heterozygous | 4.6 | 38 | SNP | Novel | 823 | --- |
| CDK4 | chr12 | 58145423 | G | A | Heterozygous | 4.5 | 36 | SNP | Novel | 819 | --- |
| CDK4 | chr12 | 58145729 | C | T | Heterozygous | 4.2 | 27 | SNP | Novel | 706 | --- |
| CDK4 | chr12 | 58145802 | C | T | Heterozygous | 4.8 | 40 | SNP | Novel | 777 | --- |

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|--------|-------|----------|----|----|--------------|-----|-----|-----|-------|------|-----|
| MAP2K1 | chr15 | 66727465 | G | A | Heterozygous | 3.2 | 15 | SNP | Novel | 1567 | --- |
| MAP2K1 | chr15 | 66729130 | G | A | Heterozygous | 5.5 | 73 | SNP | Novel | 1026 | --- |
| IDH2 | chr15 | 90631847 | G | A | Heterozygous | 4.3 | 25 | SNP | Novel | 632 | --- |
| IDH2 | chr15 | 90631891 | G | A | Heterozygous | 5.4 | 45 | SNP | Novel | 615 | --- |
| IDH2 | chr15 | 90631907 | C | T | Heterozygous | 7 | 92 | SNP | Novel | 628 | --- |
| IDH2 | chr15 | 90631912 | G | A | Heterozygous | 4.2 | 23 | SNP | Novel | 625 | --- |
| ERBB2 | chr17 | 37868145 | C | T | Heterozygous | 3.5 | 14 | SNP | Novel | 711 | --- |
| ERBB2 | chr17 | 37868149 | G | A | Heterozygous | 3.4 | 12 | SNP | Novel | 712 | --- |
| ERBB2 | chr17 | 37868175 | C | T | Heterozygous | 3.5 | 14 | SNP | Novel | 715 | --- |
| ERBB2 | chr17 | 37872442 | C | T | Heterozygous | 4.3 | 29 | SNP | Novel | 772 | --- |
| ERBB2 | chr17 | 37872482 | C | T | Heterozygous | 3.2 | 11 | SNP | Novel | 742 | --- |
| ERBB2 | chr17 | 37872483 | C | T | Heterozygous | 4.7 | 38 | SNP | Novel | 741 | --- |
| ERBB2 | chr17 | 37880221 | G | A | Heterozygous | 5.7 | 87 | SNP | Novel | 1044 | --- |
| ERBB2 | chr17 | 37880223 | G | A | Heterozygous | 3.7 | 23 | SNP | Novel | 1044 | --- |
| ERBB2 | chr17 | 37880264 | G | A | Heterozygous | 3.6 | 20 | SNP | Novel | 1057 | --- |
| ERBB2 | chr17 | 37880299 | G | A | Heterozygous | 3.6 | 20 | SNP | Novel | 1058 | --- |
| ERBB2 | chr17 | 37880330 | GG | AA | Heterozygous | 3.6 | 21 | MNP | Novel | 1074 | --- |
| ERBB2 | chr17 | 37881427 | C | T | Heterozygous | 3.2 | 13 | SNP | Novel | 1183 | --- |
| ERBB2 | chr17 | 37881571 | C | T | Heterozygous | 3.4 | 14 | SNP | Novel | 1007 | --- |
| ERBB2 | chr17 | 37882937 | C | T | Heterozygous | 3.5 | 26 | SNP | Novel | 1996 | --- |
| ERBB2 | chr17 | 37883130 | C | T | Heterozygous | 6.1 | 97 | SNP | Novel | 1008 | --- |
| ERBB2 | chr17 | 37883139 | G | A | Heterozygous | 3.1 | 12 | SNP | Novel | 994 | --- |
| MAP2K2 | chr19 | 4117557 | C | T | Heterozygous | 4.1 | 46 | SNP | Novel | 1744 | --- |
| MAP2K2 | chr19 | 4117603 | C | T | Heterozygous | 3.3 | 18 | SNP | Novel | 1666 | --- |
| MAP2K2 | chr19 | 4117614 | C | T | Heterozygous | 4 | 42 | SNP | Novel | 1662 | --- |
| JAK3 | chr19 | 17948773 | C | T | Heterozygous | 3.1 | 10 | SNP | Novel | 902 | --- |
| JAK3 | chr19 | 17948849 | G | A | Heterozygous | 3.6 | 18 | SNP | Novel | 880 | --- |
| AR | chrX | 66776203 | C | T | Heterozygous | 3.7 | 28 | SNP | Novel | 1581 | --- |
| AR | chrX | 66866126 | G | A | Heterozygous | 8.1 | 111 | SNP | Novel | 570 | --- |
| AR | chrX | 66866141 | T | C | Heterozygous | 4 | 20 | SNP | Novel | 576 | --- |
| AR | chrX | 66866162 | G | A | Heterozygous | 4.4 | 27 | SNP | Novel | 587 | --- |
| AR | chrX | 66866183 | G | A | Heterozygous | 4.4 | 26 | SNP | Novel | 592 | --- |
| AR | chrX | 66866193 | G | A | Heterozygous | 6.8 | 80 | SNP | Novel | 592 | --- |
| AR | chrX | 66874539 | C | T | Heterozygous | 4.9 | 25 | SNP | Novel | 371 | --- |
| AR | chrX | 66874579 | C | T | Heterozygous | 5.2 | 31 | SNP | Novel | 384 | --- |
| AR | chrX | 66874603 | G | A | Heterozygous | 3.4 | 10 | SNP | Novel | 381 | --- |
| AR | chrX | 66874607 | C | T | Heterozygous | 3.7 | 12 | SNP | Novel | 382 | --- |
| AR | chrX | 66906886 | G | A | Heterozygous | 3.6 | 28 | SNP | Novel | 1842 | --- |

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|----|------|----------|---|---|--------------|------|-----|-----|-------|------|-----|
| AR | chrX | 66915199 | G | A | Heterozygous | 5.8 | 39 | SNP | Novel | 380 | --- |
| AR | chrX | 66915252 | C | T | Heterozygous | 11.5 | 168 | SNP | Novel | 391 | --- |
| AR | chrX | 66915263 | C | T | Heterozygous | 6.4 | 49 | SNP | Novel | 392 | --- |
| AR | chrX | 66915282 | C | T | Heterozygous | 8 | 81 | SNP | Novel | 388 | --- |
| AR | chrX | 66917716 | G | A | Heterozygous | 5.3 | 20 | SNP | Novel | 190 | --- |
| AR | chrX | 66938950 | C | T | Heterozygous | 3.1 | 13 | SNP | Novel | 1371 | --- |
| AR | chrX | 66938985 | C | T | Heterozygous | 3 | 10 | SNP | Novel | 1369 | --- |
| AR | chrX | 66938994 | C | T | Heterozygous | 4.6 | 57 | SNP | Novel | 1365 | --- |
| AR | chrX | 66941724 | C | T | Heterozygous | 4.4 | 20 | SNP | Novel | 361 | --- |
| AR | chrX | 66941825 | G | A | Heterozygous | 5.3 | 43 | SNP | Novel | 585 | --- |
| AR | chrX | 66941845 | C | T | Heterozygous | 5.7 | 52 | SNP | Novel | 580 | --- |
| AR | chrX | 66945122 | C | T | Heterozygous | 8.9 | 136 | SNP | Novel | 537 | --- |
| AR | chrX | 66945126 | C | T | Heterozygous | 3.4 | 11 | SNP | Novel | 537 | --- |
| AR | chrX | 66945196 | C | T | Heterozygous | 4.7 | 30 | SNP | Novel | 554 | --- |
| AR | chrX | 66945217 | C | T | Heterozygous | 3.8 | 16 | SNP | Novel | 558 | --- |