

## Tumour and Liquid Biopsy NGS Gene Information

| Gene          | RefSeq      | SNV/Indel and Gene-Level CNV Detection | Fusion Detection                   |
|---------------|-------------|----------------------------------------|------------------------------------|
| <i>AKT1</i>   |             | All Coding Exons                       |                                    |
| <i>AKT2</i>   |             | All Coding Exons                       |                                    |
| <i>AKT3</i>   |             | All Coding Exons                       |                                    |
| <i>ALK</i>    | NM_004304.5 | All Coding Exons                       | All Coding Exons and Introns 18-19 |
| <i>APC</i>    |             | All Coding Exons                       |                                    |
| <i>ARAF</i>   |             | All Coding Exons                       |                                    |
| <i>ARID1A</i> |             | All Coding Exons                       |                                    |
| <i>ARID1B</i> |             | All Coding Exons                       |                                    |
| <i>ATM</i>    |             | All Coding Exons                       |                                    |
| <i>ATRX</i>   |             | All Coding Exons                       |                                    |
| <i>B2M</i>    |             | All Coding Exons                       |                                    |
| <i>BCL10</i>  |             | All Coding Exons                       |                                    |
| <i>BCL2</i>   |             | All Coding Exons                       |                                    |
| <i>BCL6</i>   |             | All Coding Exons                       |                                    |
| <i>BCOR</i>   | NM_017745.6 | All Coding Exons                       | All Coding Exons and All Introns   |
| <i>BRAF</i>   | NM_004333.6 | All Coding Exons                       | All Coding Exons and Introns 7-11  |
| <i>BTG2</i>   |             | All Coding Exons                       |                                    |
| <i>CARD11</i> |             | All Coding Exons                       |                                    |
| <i>CCND1</i>  |             | All Coding Exons                       |                                    |
| <i>CCND3</i>  |             | All Coding Exons                       |                                    |
| <i>CD274</i>  |             | All Coding Exons                       |                                    |
| <i>CD79B</i>  |             | All Coding Exons                       |                                    |
| <i>CDK4</i>   |             | All Coding Exons                       |                                    |
| <i>CDK6</i>   |             | All Coding Exons                       |                                    |
| <i>CDKN2A</i> |             | All Coding Exons                       |                                    |
| <i>CDKN2B</i> |             | All Coding Exons                       |                                    |
| <i>CIC</i>    | NM_015125.4 | Exons 16-20                            | Exons 16-20 and Introns 16-19      |
| <i>CIITA</i>  |             | All Coding Exons                       |                                    |
| <i>CREBBP</i> |             | All Coding Exons                       |                                    |
| <i>CSF1R</i>  |             | All Coding Exons                       |                                    |
| <i>CTNNB1</i> |             | All Coding Exons                       |                                    |

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| <i>DDX3X</i>           |             | All Coding Exons                       |                                              |
| <i>DICER1</i>          |             | All Coding Exons                       |                                              |
| <i>DNMT3A</i>          |             | All Coding Exons                       |                                              |
| <i>DUSP2</i>           |             | All Coding Exons                       |                                              |
| <i>EGFR</i>            |             | All Coding Exons                       |                                              |
| <i>ERBB3</i>           |             | All Coding Exons                       |                                              |
| <i>EWSR1</i>           | NM_013986.4 | Exons 8-14                             | Exons 8-14 and Introns 9-13                  |
| <i>EZH2</i>            |             | All Coding Exons                       |                                              |
| <i>FBXO11</i>          |             | All Coding Exons                       |                                              |
| <i>FBXW7</i>           |             | All Coding Exons                       |                                              |
| <i>FGFR1</i>           | NM_023110.3 | All Coding Exons                       | All Coding Exons and Introns 8-17 and 3'UTR  |
| <i>FGFR2</i>           | NM_000141.4 | All Coding Exons                       | All Coding Exons and Introns 15-17           |
| <i>FGFR3</i>           | NM_000142.4 | All Coding Exons                       | All Coding Exons and Introns 16-17 and 3'UTR |
| <i>FGFR4</i>           |             | All Coding Exons                       |                                              |
| <i>FUS</i>             | NM_004960.3 | Exons 5-10                             | Exons 5-10 and Introns 5-9                   |
| <i>GNA13</i>           |             | All Coding Exons                       |                                              |
| <i>H1-4</i>            |             | All Coding Exons                       |                                              |
| <i>H3-3A (H3F3A)</i>   |             | All Coding Exons                       |                                              |
| <i>H3C2 (HIST1H3B)</i> |             | All Coding Exons                       |                                              |
| <i>HIST1H3C</i>        |             | All Coding Exons                       |                                              |
| <i>HRAS</i>            |             | All Coding Exons                       |                                              |
| <i>ID3</i>             |             | All Coding Exons                       |                                              |
| <i>IDH1</i>            |             | All Coding Exons                       |                                              |
| <i>IDH2</i>            |             | All Coding Exons                       |                                              |
| <i>IRF8</i>            |             | All Coding Exons                       |                                              |
| <i>JAK3</i>            |             | All Coding Exons                       |                                              |
| <i>KIT</i>             |             | All Coding Exons                       |                                              |
| <i>KMT2C</i>           |             | All Coding Exons                       |                                              |
| <i>KMT2D</i>           |             | All Coding Exons                       |                                              |
| <i>KRAS</i>            |             | All Coding Exons                       |                                              |
| <i>MAP2K1</i>          |             | All Coding Exons                       |                                              |

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| <i>MAP3K1</i> |                | All Coding Exons                       |                                      |
| <i>MAPK1</i>  |                | All Coding Exons                       |                                      |
| <i>MAPK3</i>  |                | All Coding Exons                       |                                      |
| <i>MAPK7</i>  |                | All Coding Exons                       |                                      |
| <i>MDM2</i>   |                | All Coding Exons                       |                                      |
| <i>MET</i>    | NM_001127500.3 | All Coding Exons                       | All Coding Exons and Introns 1-14    |
| <i>MLH1</i>   |                | All Coding Exons                       |                                      |
| <i>MSH2</i>   |                | All Coding Exons                       |                                      |
| <i>MSH6</i>   |                | All Coding Exons                       |                                      |
| <i>MTOR</i>   |                | All Coding Exons                       |                                      |
| <i>MYB</i>    | NM_001130173.2 | Exons 9-15                             | Exons 9-15 and Introns 9-14          |
| <i>MYBL1</i>  | NM_001080416.4 | Exons 8-11                             | Exons 8-11 and Introns 8-10          |
| <i>MYC</i>    |                | All Coding Exons                       |                                      |
| <i>MYCN</i>   |                | All Coding Exons                       |                                      |
| <i>MYD88</i>  |                | All Coding Exons                       |                                      |
| <i>MYOD1</i>  |                | All Coding Exons                       |                                      |
| <i>NCOA2</i>  | NM_006540.4    | Exons 12-14                            | Exons 12-14 and Introns 11-14        |
| <i>NF1</i>    |                | All Coding Exons                       |                                      |
| <i>NFE2L2</i> |                | All Coding Exons                       |                                      |
| <i>NFKB1</i>  |                | All Coding Exons                       |                                      |
| <i>NFKB2</i>  |                | All Coding Exons                       |                                      |
| <i>NOTCH1</i> |                | All Coding Exons                       |                                      |
| <i>NOTCH2</i> |                | All Coding Exons                       |                                      |
| <i>NRAS</i>   |                | All Coding Exons                       |                                      |
| <i>NTRK1</i>  | NM_001012331.1 | All Coding Exons                       | All Coding Exons and Introns 3, 7-12 |
| <i>NTRK2</i>  | NM_006180.4    | All Coding Exons                       | All Coding Exons and Introns 10-16   |
| <i>NTRK3</i>  | NM_001012338.2 | All Coding Exons                       | All Coding Exons and Introns 13-15   |
| <i>PAX3</i>   | NM_181457.4    | Exons 7-8                              | Exons 7-8 and Intron 7               |
| <i>PAX5</i>   |                | All Coding Exons                       |                                      |
| <i>PAX7</i>   | NM_002584.8    | Exons 6-8                              | Exons 6-8 and Introns 6-7            |
| <i>PDGFRA</i> |                | All Coding Exons                       |                                      |

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| <i>PDGFRB</i>   |                | All Coding Exons                       |                                  |
| <i>PIK3CA</i>   |                | All Coding Exons                       |                                  |
| <i>PIK3CD</i>   |                | All Coding Exons                       |                                  |
| <i>PIM1</i>     |                | All Coding Exons                       |                                  |
| <i>PMS2</i>     |                | All Coding Exons                       |                                  |
| <i>POLD1</i>    |                | All Coding Exons                       |                                  |
| <i>POLE</i>     |                | All Coding Exons                       |                                  |
| <i>PTCH1</i>    |                | All Coding Exons                       |                                  |
| <i>PTEN</i>     |                | All Coding Exons                       |                                  |
| <i>PTPN11</i>   |                | All Coding Exons                       |                                  |
| <i>RET</i>      | NM_020630.5    | Exons 7-19                             | Exons 7-19 and Introns 10-11     |
| <i>RHOA</i>     |                | All Coding Exons                       |                                  |
| <i>ROS1</i>     | NM_002944.2    | Exons 31-43                            | Exons 31-43 and Introns 31-35    |
| <i>SF3B1</i>    | NM_012433.3    | Exons 12-17                            |                                  |
| <i>SMARCA4</i>  |                | All Coding Exons                       |                                  |
| <i>SMARCB1</i>  |                | All Coding Exons                       |                                  |
| <i>SPEN</i>     |                | All Coding Exons                       |                                  |
| <i>SS18</i>     | NM_001007559.3 | Exons 10-11                            | Exons 10-11 and Intron 10        |
| <i>STAT3</i>    |                | All Coding Exons                       |                                  |
| <i>STAT6</i>    |                | All Coding Exons                       |                                  |
| <i>SUFU</i>     |                | All Coding Exons                       |                                  |
| <i>TCF3</i>     |                | All Coding Exons                       |                                  |
| <i>TEK</i>      |                | All Coding Exons                       |                                  |
| <i>TERT</i>     | NM_198253.3    | Exon 1 , 5'UTR and upstream promoter   |                                  |
| <i>TET2</i>     |                | All Coding Exons                       |                                  |
| <i>TFE3</i>     | NM_006521.6    | Exons 3-6                              | Exons 3-6 and Introns 3-5        |
| <i>TNFAIP3</i>  |                | All Coding Exons                       |                                  |
| <i>TNFRSF14</i> |                | All Coding Exons                       |                                  |
| <i>TP53</i>     |                | All Coding Exons                       |                                  |
| <i>TRIM28</i>   |                | All Coding Exons                       |                                  |
| <i>VGLL2</i>    | NM_182645.3    | All Coding Exons                       | All Coding Exons and All Introns |

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| <i>VHL</i>    |                | All Coding Exons                       |                                  |
| <i>WT1</i>    |                | All Coding Exons                       |                                  |
| <i>YY1AP1</i> |                | All Coding Exons                       |                                  |
| <i>ZFTA</i>   | NM_001144936.2 | All Coding Exons                       | All Coding Exons and All Introns |