|  |  |  |
| --- | --- | --- |
| **Gene** | **FoundationACT (62 genes)** | **Additions in FoundationOne Liquid (70 genes)** |
|  | **Exons** | **Introns** | **Amplifications called?** | **Exons** | **Introns** | **Amplifications called?** |
| *ABL1* | 4-9 |  | No |  |  |  |
| *AKT1* | 3 |  | No |  |  |  |
| *ALK* | 20-29 | 18,19 | Yes |  |  |  |
| *APC* |  |  |  | All exons |  | No |
| *AR* |  |  |  | All exons |  | Yes |
| *ARAF* | 4,5,7,11,13,15,16 |  | Yes |  |  |  |
| *ATM* |  |  |  | All exons |  | No |
| *BRAF* | 11-18 |  | Yes |  |  |  |
| *BRCA1* | All exons |  | No |  |  |  |
| *BRCA2* | All exons |  | No |  |  |  |
| *BTK* | 2,15 |  | No |  |  |  |
| *CCND1* | All exons |  | No |  |  |  |
| *CD274* | All exons |  | Yes |  |  |  |
| *CDH1* | All exons |  | No |  |  |  |
| *CDK12* |  |  |  | All exons |  | No |
| *CDK4* | All exons |  | Yes |  |  |  |
| *CDK6* | All exons |  | Yes |  |  |  |
| *CDKN2A* | All exons |  | No |  |  |  |
| *CHEK2* |  |  |  | All exons |  | No |
| *CRKL* | All exons |  | Yes |  |  |  |
| *CTNNB1* | 3 |  | No |  |  |  |
| *DDR2* | 5,17,18 |  | Yes |  |  |  |
| *EGFR* | All exons | 7 | Yes |  |  |  |
| *ERBB2* | All exons |  | Yes |  |  |  |
| *ERRIF1* | All exons |  | No |  |  |  |
| *ESR1* | 4-8 |  | Yes |  |  |  |
| *EZH2* | 16 |  | No | 4,18 |  | No |
| *FGFR1* | All exons |  | Yes |  |  |  |
| *FGFR2* | All exons |  | Yes |  | 17 | Yes |
| *FGFR3* | 7,9,14 | 17 | Yes |  |  |  |
| *FLT3* | 14,15,20 |  | Yes |  |  |  |
| *FOXL2* | All exons |  | No |  |  |  |
| *GNA11* | 4,5 |  | No |  |  |  |
| *GNAQ* | 4,5 |  | No |  |  |  |
| *GNAS* | 1 |  | No |  |  |  |
| *HRAS* | 2,3 |  | No |  |  |  |
| *IDH1* | 4 |  | No |  |  |  |
| *IDH2* | 4 |  | No |  |  |  |
| *JAK2* | 14 |  | No |  |  |  |
| *JAK3* | 5,11,12,13,15,16 |  | No |  |  |  |
| *KIT* | 8,11,12,17 |  | Yes | 9,13 |  | Yes |
| *KRAS* | All exons |  | Yes |  |  |  |
| *MAP2K1* | 2,3 |  | No |  |  |  |
| *MAP2K2* | 2-4,6,7 |  | Yes |  |  |  |
| *MDM2* | All exons |  | Yes |  |  |  |
| *MET* | All exons |  | Yes |  |  |  |
| *MPL* | 10 |  | No |  |  |  |
| *MTOR* | 19,30,39,40,43-45,47,48,53,56 |  | Yes |  |  |  |
| *MYC* | All exons |  | Yes |  |  |  |
| *MYCN* | All exons |  | Yes |  |  |  |
| *MYD88* | 4 |  | No |  |  |  |
| *NF1* | All exons |  | No |  |  |  |
| *NPM1* | 4-6,8,10 |  | No |  |  |  |
| *NRAS* | 2,3 |  | No |  |  |  |
| *PALB2* |  |  |  | All exons |  | No |
| *PCD1LG2* | All exons |  | Yes |  |  |  |
| *PDGFRA* | 18 | 7,9 | No | 6 |  | No |
| *PDGFRB* | 12,-21,23 |  | Yes |  |  |  |
| *PIK3CA* | 2,3,5-8,10,14,19,21 |  | Yes |  |  |  |
| *PTEN* | All exons |  | No |  |  |  |
| *PTPN11* | All exons  |  | No |  |  |  |
| *RAF1* | 3,4,6,7,10,14,15,17 |  | Yes |  |  |  |
| *RB1* |  |  |  | All exons |  | No |
| *RET* | 11,13-16 | 9,10,11 | Yes |  |  |  |
| *ROS1* |  | 32-34 | No | 36, 37, 38, 40 |  | No |
| *SMO* | All exons |  | No |  |  |  |
| *STK11* |  |  |  | All exons |  | No |
| *TERT* | promoter |  | No |  |  |  |
| *TP53* | All exons |  | No |  |  |  |
| *VEGFA* | All exons |  | Yes |  |  |  |

**Table S1.** Regions of the genome baited in the two liquid biopsy assays, FoundationACT and FoundationOne Liquid.