

Current Gene List²

Genes with full coding exonic regions included in FoundationOne CDx for the detection of substitutions, insertion-deletions (indels), and copy-number alterations (CNAs).

<i>ABL1</i>	<i>ACVR1B</i>	<i>AKT1</i>	<i>AKT2</i>	<i>AKT3</i>	<i>ALK</i>	<i>ALOX12B</i>	<i>AMER1 (FAM123B)</i>	<i>APC</i>
<i>AR</i>	<i>ARAF</i>	<i>ARFRP1</i>	<i>ARID1A</i>	<i>ASXL1</i>	<i>ATM</i>	<i>ATR</i>	<i>ATRX</i>	<i>AURKA</i>
<i>AURKB</i>	<i>AXIN1</i>	<i>AXL</i>	<i>BAP1</i>	<i>BARD1</i>	<i>BCL2</i>	<i>BCL2L1</i>	<i>BCL2L2</i>	<i>BCL6</i>
<i>BCOR</i>	<i>BCORL1</i>	<i>BRAF</i>	<i>BRCA1</i>	<i>BRCA2</i>	<i>BRD4</i>	<i>BRIP1</i>	<i>BTG1</i>	<i>BTG2</i>
<i>BTK</i>	<i>CT1orf30 (EMSY)</i>	<i>CALR</i>	<i>CARD11</i>	<i>CASP8</i>	<i>CBFB</i>	<i>CBL</i>	<i>CCND1</i>	<i>CCND2</i>
<i>CCND3</i>	<i>CCNE1</i>	<i>CD22</i>	<i>CD274 (PD-L1)</i>	<i>CD70</i>	<i>CD79A</i>	<i>CD79B</i>	<i>CDC73</i>	<i>CDH1</i>
<i>CDK12</i>	<i>CDK4</i>	<i>CDK6</i>	<i>CDK8</i>	<i>CDKN1A</i>	<i>CDKN1B</i>	<i>CDKN2A</i>	<i>CDKN2B</i>	<i>CDKN2C</i>
<i>CEBPA</i>	<i>CHEK1</i>	<i>CHEK2</i>	<i>CIC</i>	<i>CREBBP</i>	<i>CRKL</i>	<i>CSF1R</i>	<i>CSF3R</i>	<i>CTCF</i>
<i>CTNNA1</i>	<i>CTNNB1</i>	<i>CUL3</i>	<i>CUL4A</i>	<i>CXCR4</i>	<i>CYP17A1</i>	<i>DAXX</i>	<i>DDR1</i>	<i>DDR2</i>
<i>DIS3</i>	<i>DNMT3A</i>	<i>DOT1L</i>	<i>EED</i>	<i>EGFR</i>	<i>EP300</i>	<i>EPHA3</i>	<i>EPHB1</i>	<i>EPHB4</i>
<i>ERBB2</i>	<i>ERBB3</i>	<i>ERBB4</i>	<i>ERCC4</i>	<i>ERG</i>	<i>ERRFI1</i>	<i>ESR1</i>	<i>EZH2</i>	<i>FAM46C</i>
<i>FANCA</i>	<i>FANCC</i>	<i>FANCG</i>	<i>FANCL</i>	<i>FAS</i>	<i>FBXW7</i>	<i>FGF10</i>	<i>FGF12</i>	<i>FGF14</i>
<i>FGF19</i>	<i>FGF23</i>	<i>FGF3</i>	<i>FGF4</i>	<i>FGF6</i>	<i>FGFR1</i>	<i>FGFR2</i>	<i>FGFR3</i>	<i>FGFR4</i>
<i>FH</i>	<i>FLCN</i>	<i>FLT1</i>	<i>FLT3</i>	<i>FOXL2</i>	<i>FUBP1</i>	<i>GABRA6</i>	<i>GATA3</i>	<i>GATA4</i>
<i>GATA6</i>	<i>GID4 (C17orf39)</i>	<i>GNA11</i>	<i>GNA13</i>	<i>GNAQ</i>	<i>GNAS</i>	<i>GRM3</i>	<i>GSK3B</i>	<i>H3F3A</i>
<i>HDAC1</i>	<i>HGF</i>	<i>HNF1A</i>	<i>HRAS</i>	<i>HSD3B1</i>	<i>ID3</i>	<i>IDH1</i>	<i>IDH2</i>	<i>IGF1R</i>
<i>IKBKE</i>	<i>IKZF1</i>	<i>INPP4B</i>	<i>IRF2</i>	<i>IRF4</i>	<i>IRS2</i>	<i>JAK1</i>	<i>JAK2</i>	<i>JAK3</i>
<i>JUN</i>	<i>KDM5A</i>	<i>KDM5C</i>	<i>KDM6A</i>	<i>KDR</i>	<i>KEAP1</i>	<i>KEL</i>	<i>KIT</i>	<i>KLHL6</i>
<i>KMT2A (MLL)</i>	<i>KMT2D (MLL2)</i>	<i>KRAS</i>	<i>LTK</i>	<i>LYN</i>	<i>MAF</i>	<i>MAP2K1 (MEK1)</i>	<i>MAP2K2 (MEK2)</i>	<i>MAP2K4</i>
<i>MAP3K1</i>	<i>MAP3K13</i>	<i>MAPK1</i>	<i>MCL1</i>	<i>MDM2</i>	<i>MDM4</i>	<i>MED12</i>	<i>MEF2B</i>	<i>MEN1</i>
<i>MERTK</i>	<i>MET</i>	<i>MITF</i>	<i>MKNK1</i>	<i>MLH1</i>	<i>MPL</i>	<i>MRE11A</i>	<i>MSH2</i>	<i>MSH3</i>
<i>MSH6</i>	<i>MST1R</i>	<i>MTAP</i>	<i>MTOR</i>	<i>MUTYH</i>	<i>MYC</i>	<i>MYCL (MYCL1)</i>	<i>MYCN</i>	<i>MYD88</i>
<i>NBN</i>	<i>NF1</i>	<i>NF2</i>	<i>NFE2L2</i>	<i>NFKB1A</i>	<i>NKX2-1</i>	<i>NOTCH1</i>	<i>NOTCH2</i>	<i>NOTCH3</i>
<i>NPM1</i>	<i>NRAS</i>	<i>NT5C2</i>	<i>NTRK1</i>	<i>NTRK2</i>	<i>NTRK3</i>	<i>P2RY8</i>	<i>PALB2</i>	<i>PARK2</i>
<i>PARP1</i>	<i>PARP2</i>	<i>PARP3</i>	<i>PAX5</i>	<i>PBRM1</i>	<i>PDCD1 (PD-1)</i>	<i>PDCD1LG2 (PD-L2)</i>		<i>PDGFRA</i>
<i>PDGFRB</i>	<i>PDK1</i>	<i>PIK3C2B</i>	<i>PIK3C2G</i>	<i>PIK3CA</i>	<i>PIK3CB</i>	<i>PIK3R1</i>	<i>PIM1</i>	<i>PMS2</i>
<i>POLD1</i>	<i>POLE</i>	<i>PPARG</i>	<i>PPP2R1A</i>	<i>PPP2R2A</i>	<i>PRDM1</i>	<i>PRKAR1A</i>	<i>PRKCI</i>	<i>PTCH1</i>
<i>PTEN</i>	<i>PTPN11</i>	<i>PTPRO</i>	<i>QKI</i>	<i>RAC1</i>	<i>RAD21</i>	<i>RAD51</i>	<i>RAD51B</i>	<i>RAD51C</i>
<i>RAD51D</i>	<i>RAD52</i>	<i>RAD54L</i>	<i>RAF1</i>	<i>RARA</i>	<i>RB1</i>	<i>RBM10</i>	<i>REL</i>	<i>RET</i>
<i>RICTOR</i>	<i>RNF43</i>	<i>ROS1</i>	<i>RPTOR</i>	<i>SDHA</i>	<i>SDHB</i>	<i>SDHC</i>	<i>SDHD</i>	<i>SETD2</i>
<i>SF3B1</i>	<i>SGK1</i>	<i>SMAD2</i>	<i>SMAD4</i>	<i>SMARCA4</i>	<i>SMARCB1</i>	<i>SMO</i>	<i>SNCAIP</i>	<i>SOCS1</i>
<i>SOX2</i>	<i>SOX9</i>	<i>SPEN</i>	<i>SPOP</i>	<i>SRC</i>	<i>STAG2</i>	<i>STAT3</i>	<i>STK11</i>	<i>SUFU</i>
<i>SYK</i>	<i>TBX3</i>	<i>TEK</i>	<i>TET2</i>	<i>TGFBR2</i>	<i>TIPARP</i>	<i>TNFAIP3</i>	<i>TNFRSF14</i>	<i>TP53</i>
<i>TSC1</i>	<i>TSC2</i>	<i>TYRO3</i>	<i>U2AF1</i>	<i>VEGFA</i>	<i>VHL</i>	<i>WHSC1 (MMSET)</i>	<i>WHSC1L1</i>	<i>WT1</i>
<i>XPO1</i>	<i>XRCC2</i>	<i>ZNF217</i>	<i>ZNF703</i>					

Select Rearrangements^{2,3}

Genes with select intronic regions for the detection of gene rearrangements, one gene with a promoter region and one non-coding RNA gene.

<i>ALK</i>	<i>BCL2</i>	<i>BCR</i>	<i>BRAF</i>	<i>BRCA1</i>	<i>BRCA2</i>	<i>CD74</i>	<i>EGFR</i>	<i>ETV4</i>
<i>ETV5</i>	<i>ETV6</i>	<i>EWSR1</i>	<i>EZR</i>	<i>FGFR1</i>	<i>FGFR2</i>	<i>FGFR3</i>	<i>KIT</i>	<i>KMT2A (MLL)</i>
<i>MSH2</i>	<i>MYB</i>	<i>MYC</i>	<i>NOTCH2</i>	<i>NTRK1</i>	<i>NTRK2</i>	<i>NUTM1</i>	<i>PDGFRA</i>	<i>RAF1</i>
<i>RARA</i>	<i>RET</i>	<i>ROS1</i>	<i>RSPO2</i>	<i>SDC4</i>	<i>SLC34A2</i>	<i>TERC*</i>	<i>TERT (promoter only)**</i>	
<i>TMPRSS2</i>								

TERC* is non-coding RNA gene. *TERT* is gene with promoter region.

FoundationOne CDx™ is a next-generation sequencing based *in vitro* diagnostic device for detection of substitutions, insertion and deletion alterations, and copy number alterations in 324 genes and select gene rearrangements, as well as genomic signatures including microsatellite instability (MSI) and tumor mutational burden (TMB) using DNA isolated from formalin-fixed, paraffin-embedded (FFPE) tumor tissue specimens. For the complete intended use statement, including companion diagnostic indications and warnings and limitations, please see the FoundationOne CDx Technical Information, www.foundationmedicine.com/f1cdx.

Reference

- Li M. Statistical Methods for Clinical Validation of Follow-On Companion Diagnostic Devices via an External Concordance Study. *Statistics in Biopharmaceutical Research* 8, 355-363 (2016).
- Current as of December 12, 2017. Please visit www.foundationmedicine.com/f1cdx for the most up-to-date gene list.
- Refer to our full label for listing of intronic regions at www.foundationmedicine.com/f1cdx.