

# Gene list<sup>1</sup>

Designed to match the content of the  
324-gene FoundationOne® CDx panel

Genes with full coding exonic regions for the detection of substitutions, insertion-deletions (InDels), and copy-number alterations (CNAs).

ABL1	ACVR1B	AKT1	AKT2	AKT3	ALK	ALOX12B	AMER1(FAM123B)	APC
AR	ARAF	ARFRP1	ARID1A	ASXL1	ATM	ATR	ATRX	AURKA
AURKB	AXIN1	AXL	BAP1	BARD1	BCL2	BCL2L1	BCL2L2	BCL6
BCOR	BCORL1	BRAF	BRCA1	BRCA2	BRD4	BRIP1	BTG1	BTG2
BTK	C11ORF30(EMSY)	CALR	CARD11	CASP8	CBFB	CBL	CCND1	CCND2
CCND3	CCNE1	CD22	CD274(PD-L1)	CD70	CD79A	CD79B	CDC73	CDH1
CDK12	CDK4	CDK6	CDK8	CDKN1A	CDKN1B	CDKN2A	CDKN2B	CDKN2C
CEBPA	CHEK1	CHEK2	CIC	CREBBP	CRKL	CSF1R	CSF3R	CTCF
CTNNA1	CTNNB1	CUL3	CUL4A	CXCR4	CYP17A1	DAXX	DDR1	DDR2
DIS3	DNMT3A	DOT1L	EED	EGFR	EP300	EPHA3	EPHB1	EPHB4
ERBB2	ERBB3	ERBB4	ERCC4	ERG	ERRF1	ESR1	EZH2	FAM46C
FANCA	FANCC	FANCG	FANCL	FAS	FBXW7	FGF10	FGF12	FGF14
FGF19	FGF23	FGF3	FGF4	FGF6	FGFR1	FGFR2	FGFR3	FGFR4
FH	FLCN	FLT1	FLT3	FOXL2	FUBP1	GABRA6	GATA3	GATA4
GATA6	GID4(C17ORF39)	GNA11	GNA13	GNAQ	GNAS	GRM3	GSK3B	H3F3A
HDAC1	HGF	HNF1A	HRAS	HSD3B1	ID3	IDH1	IDH2	IGF1R
IKBKE	IKZF1	INPP4B	IRF2	IRF4	IRS2	JAK1	JAK2	JAK3
JUN	KDM5A	KDM5C	KDM6A	KDR	KEAP1	KEL	KIT	KLHL6
KMT2A(MLL)	KMT2D(MLL2)	KRAS	LTK	LYN	MAF	MAP2K1(MEK1)	MAP2K2(MEK2)	MAP2K4
MAP3K1	MAP3K13	MAPK1	MCL1	MDM2	MDM4	MED12	MEF2B	MEN1
MERTK	MET	MITF	MKMK1	MLH1	MPL	MRE11A	MSH2	MSH3
MSH6	MST1R	MTAP	MTOR	MUTYH	MYC	MYCL(MYCL1)	MYCN	MYD88
NBN	NF1	NF2	NFE2L2	NFKBIA	NKX2-1	NOTCH1	NOTCH2	NOTCH3
NPM1	NRAS	NT5C2	NTRK1	NTRK2	NTRK3	P2RY8	PALB2	PARK2
PARP1	PARP2	PARP3	PAX5	PBRM1	PDCD1(PD-1)	PDCD1LG2(PD-L2)	PDGFRA	PDGFRB
PDK1	PIK3C2B	PIK3C2G	PIK3CA	PIK3CB	PIK3R1	PIM1	PMS2	POLD1
POLE	PPARG	PPP2R1A	PPP2R2A	PRDM1	PRKAR1A	PRKCI	PTCH1	PTEN
PTPN11	PTPRO	QKI	RAC1	RAD21	RAD51	RAD51B	RAD51C	RAD51D
RAD52	RAD54L	RAF1	RARA	RB1	RBM10	REL	RET	RICTOR
RNF43	ROS1	RPTOR	SDHA	SDHB	SDHC	SDHD	SETD2	SF3B1
SGK1	SMAD2	SMAD4	SMARCA4	SMARCB1	SMO	SNCAIP	SOCS1	SOX2
SOX9	SPEN	SPOP	SRC	STAG2	STAT3	STK11	SUFU	SYK
TBX3	TEK	TET2	TGFBR2	TIPARP	TNFAIP3	TNFRSF14	TP53	TSC1
TSC2	TYRO3	U2AF1	VEGFA	VHL	WHSC1(MMSET)	WHSC1L1	WT1	XPO1
XRCC2	ZNF217	ZNF703						

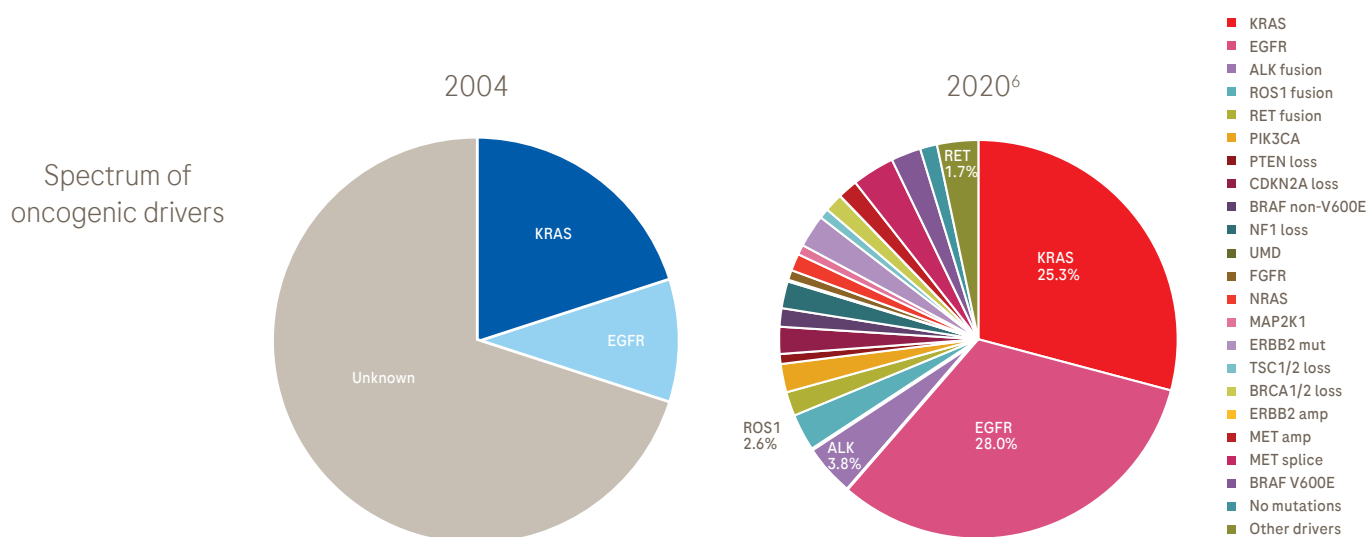
## Select Rearrangements<sup>1,2</sup>

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

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

# CGP offers the greatest insights from a single assay

Our understanding of the genomic landscape of cancer continues to expand. As we identify more markers, tools that can interrogate and generate results in a single test become increasingly relevant.<sup>3-5</sup>



The AVENIO Tumor Tissue CGP kit detects all 4 classes of genomic alterations and 3 genomic signatures with a 5 day turnaround time.<sup>7\*</sup>

#### Genomic Alterations

- Single Nucleotide Variants (SNV)
- Insertions and Deletions (InDel)
- Rearrangements
- Copy Number Alterations (CNA)

#### Genomic Signatures

- Microsatellite instability (MSI)
- Tumor Mutational Burden (TMB)
- Loss of Heterozygosity (LOH)

For Research Use Only. Not for use in diagnostic procedures.

\* Data on file

1. Current as of July 2021. Please visit [www.foundationmedicine.com/f1cdx](http://www.foundationmedicine.com/f1cdx) for the most up-to-date gene list.

2. Refer to our full label for listing of intronic regions at <http://www.F1CDxLabel.com>.

3. Pao, W., et al. (2011) Lancet Oncol 12:175-80;

4. Johnson, B.E., et al. (2013) ASCO Annual Meeting: abstract 8019;

5. Jordan, E.J., et al. (2017) Cancer Discov 7:596-609

6. Global Oncology Trends 2021. Available at: <https://www.iqvia.com/en/insights/the-iqvia-institute/reports/global-oncology-trends-2021> (Accessed October 2021)

7. Foundation Medicine technical specifications. Available at: <https://www.foundationmedicine.qrad.eifu.online/foundationmedicine/en/foundationmedicine> (Accessed October 2021).

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