

Table S1. Genes interrogated by FoundationOne® CDx (adapted from <https://www.foundationmedicine.com/test/foundationone-cdx>)

Genes with full coding exonic regions included in FoundationOne®CDx 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	AXINI	AXL	BAP1	BARD1	BCL2	BCL2L1	BCL2L2	BCL6
BCOR	BCORL1	BRAF	BRCA1	BRCA2	BRD4	BRIP1	BTG1	BTG2
BTK	CT1orf30 (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	MKNK1	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	PRKARIA	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	SOC1
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 (HMSET)	WHSC1L1	WT1
XPO1	XRCC2	ZNF217	ZNF703					

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)**	
TPRSS2								

*TERC is non-coding RNA gene.

**TERT is gene with promoter region.

Table S2. Genes interrogated by FoundationOne® Heme (adapted from <https://www.foundationmedicine.com/test/foundationone-heme>)

ABL1	ACTB	AKT1	AKT2	AKT3	ALK	AMER1 (FAM123B or WTX)	APC
APH1A	AR	ARAF	ARFRP1	ARHGAP26 (GRAF)	ARID1A	ARID2	ASMTL
ATM	ATR	ATRX	AURKA	AURKB	AXIN1	AXL	B2M
BARD1	BCL10	BCL11B	BCL2	BCL2L2	BCL6	BCL7A	BCOR
BIRC3	BLM	BRAF	BRCA1	BRCA2	BRD4	BRIP1 (BACH1)	BRSK1
BTX	BTLA	CT1orf30 (EHMSY)	CAD	CALR	CARD11	CBFB	CBL
CCND2	CCND3	CCNE1	CCT6B	CD22	CD274 (PD-L1)	CD36	CD58
CD79A	CD79B	CD73	CDH1	CDK1	CDK4	CDK6	CDK8
CDKN2A	CDKN2B	CDKN2C	CEBPA	CHD2	CHEK1	CHEK2	CIC
CKS1B	CPS1	CREBBP	CRKL	CRLF2	CSF1R	CSF3R	CTCF
CTNNB1	CUX1	CXCR4	DAXX	DDR2	DDX3X	DNM2	DNMT3A
DTX1	DUSP2	DUSP9	EBF1	ECT2L	EED	EGFR	ELP2
EPHA3	EPHA5	EPHA7	EPHB1	ERBB2	ERBB3	ERBB4	ERG
ETS1	ETV6	EXOSC6	EZH2	FAF1	FAM46C	FANCA	FANCC
FANCE	FANCF	FANCG	FANCL	FAS (TNFRSF6)	FBXO11	FBXO31	FBXW7
FGF14	FGF19	FGF23	FGF3	FGF4	FGF6	FGFR1	FGFR2
FGFR4	FHIT	FLCN	FLT1	FLT3	FLT4	FLYWCH1	FOXL2
FOXO3	FOXO1	FRS2	GADD45B	GATA1	GATA2	GATA3	GID4 (C17orf39)
GNAI2	GNAI3	GNAQ	GNAS	GPR124	GRIN2A	GSK3B	GTSE1
HDAC4	HDAC7	HGF	HIST1H1C	HIST1H1D	HIST1H1E	HIST1H2AC	HIST1H2AG
HIST1H2AM	HIST1H2BC	HIST1H2BJ	HIST1H2BK	HIST1H2BO	HIST1H3B	HNF1A	HRAS
ICK	ID3	IDH1	IDH2	IGF1R	IKBKE	IKZF1	IKZF2
IL7R	INHBA	INPP4B	INPP5D (SHIP)	IRF1	IRF4	IRF8	IRS2
JAK2	JAK3	JARID2	JUN	KAT6A (MYST3)	KDM2B	KDM4C	KDMSA
KDM6A	KDR	KEAP1	KIT	KLHL6	KMT2A (MLL)	KMT2C (MLL3)	KMT2D (MLL2)
LEF1	LRR1B	LRRK2	MAF	MAGED1	MALTI	MALT1	MAP2K1 (MEK1)
MAP2K4	MAP3K1	MAP3K14	MAP3K6	MAP3K7	MAPK1	MCL1	MDM2
MED12	MEF2B	MEF2C	MEN1	MET	MIB1	MITF	MKI67
MPL	MRE11A	MSH2	MSH3	MSH6	MTOR	MUTYH	MYC
MYCN	MYD88	MYO18A	NCOR2	NCSTN	NF1	NF2	NFE2L2
NOX2-1	NOD1	NOTCH1	NOTCH2	NPM1	NRAS	NSD1	NTSC2
NTRK2	NTRK3	NUP93	NUP98	P2RY8	PAG1	PAK3	PALB2
PAX5	PBRM1	PC	PCBP1	PCLO	PDCD1 (PD-1)	PDCD11	PDCD1LG2 (PD-L2)
PDGFRB	PKD1	PHF6	PIK3CA	PIK3CG	PIK3R1	PIK3R2	PIM1
POT1	PPP2R1A	PRDM1	PRKARIA	PRKDC	PRSS8	PTCH1	PTEN
PTPN2	PTPN6 (SHIP-1)	PTPRO	RAD21	RAD50	RAD51	RAF1	RARA
RBI	RELN	RET	RHOA	RICTOR	RNF43	ROSI	RPTOR
SIPR2	SDHA	SDHB	SDHC	SDHD	SERP2	SETBP1	SETD2
SGK1	SMAD2	SMAD4	SMARCA1	SMARCA4	SMARCB1	SMC1A	SMC3
SOCS1	SOCS2	SOCS3	SOX10	SOX2	SPEN	SPOP	SRC
STAG2	STAT3	STAT4	STAT5A	STAT5B	STAT6	STK11	SUFU
TAF1	TBL1XR1	TCF3 (E2A)	TCL1A (TCL1)	TET2	TGFBR2	TLL2	TMEM30A
(TMSL3)	TNFAIP3	TNFRSF11A	TNFRSF14	TNFRSF17	TOP1	TP53	TP63
TRAF3	TRAF5	TSC1	TSC2	TSHR	TUSC3	TYK2	UZAF1
VHL	WDR90	WHSC1 (HMSET or NSD2)	WISP3	WT1	XBP1	XPO1	YY1A1
ZMYM3	ZNF217	ZNF24 (ZSCAN3)	ZNF703	ZRSR2			

I Genes with RNA sequencing coverage

AB11	ABL1	ABL2	ACSL6	AFF1	AFF4	ALK	ARHGAP26 (GRAF)
ARHGEF2	ARID1A	ARNT	ASXL1	ATF1	ATG5	ATIC	BCL10
BCL11B	BCL2	BCL3	BCL6	BCL7A	BCL9	BCOR	BCR
BRAF	BTG1	CAMTA1	CARS	CBFA2T3	CBFB	CBL	CCND1
CCND3	CD274 (PD-L1)	CDK6	CDX2	CHIC2	CHN1	CIC	CIITA
CLTC	CLTCL1	CNTRL (CEP110)	COL1A1	CREB3L1	CREB3L2	CREBBP	CRLF2
CTNINB1	DDIT3	DDX10	DDX6	DEK	DUSP22	EGFR	EIF4A2
ELL	ELN	EML4	EP300	EPOR	EPS15	ERBB2	ERG
ETV1	ETV4	ETV5	ETV6	EWSR1	FCGR2B	FCRL4	FEV
FGFR1OP	FGFR2	FGFR3	FLI1	FNBP1	FOXO1	FOXO3	FOXO4
FSTL3	FUS	GAS7	GLI1	GMPS	GPHN	HERPUD1	HEY1
HIST1H4I	HLF	HMGAI1	HMGAI2	HOXA11	HOXA13	HOXA3	HOXA9
HOXC13	HOXD11	HOXD13	HSP90AA1	HSP90AB1	IGH	IGK	IGL
IL2IR	IL3	IRF4	ITK	JAK1	JAK2	JAK3	JAZF1
KDSR	KIF5B	KMT2A (MLL)	LASP1	LCPI	LMO1	LMO2	LPP
MAF	MAFB	MALTI	MDS2	MECOM	MKL1	MLF1	MLLT1 (ENL)
MLLT3	MLLT4 (AF6)	MLLT6	MN1	MXN1	MSI2	MSN	MUC1
MYC	MYH11	MYH9	NACA	NBEAP1 (BCL8)	NCOA2	NDRG1	NF1
NFKB2	NIN	NOTCH1	NPM1	NR4A3	NSD1	NTRK1	NTRK2
NUMA1	NUP214	NUP98	NUTM2A	OMD	P2RY8	PAFAH1B2	PAX3
PAX7	PBX1	PCM1	PCSK7	PDCD1LG2 (PD-L2)	PDE4DIP	PDGFB	PDGFRA
PER1	PHF1	PICALM	PIM1	PLAG1	PML	POU2AF1	PPP1CB
PRDM16	PRRX1	PSIP1	PTCH1	PTK7	RABEP1	RAF1	RALGDS
RARA	RBM15	RET	RHOH	RNF213	ROSI	RPL22	RPNI
RUNX1T1 (ETO)	RUNX2	SEC31A	SEPT5	SEPT6	SEPT9	SET	SH3GL1
SNX29 (RUNDC2A)	SRSF3	SSI8	SSX1	SSX2	SSX4	STAT6	STL
TAF15	TAL1	TAL2	TBL1XR1	TCF3 (E2A)	TCL1A (TCL1)	TEC	TET1
TFG	TFPT	TRFC	TLX1	TLX3	TMPS2	TNFRSF11A	TOP1
TPM3	TPM4	TRIM24	TRIP11	TTL	TYK2	USP6	WHSC1 (HMSET or NSD2)
WHSC1L1	YPEL5	ZBTB16	ZMYM2	ZNF384	ZNF521		

I Genes With Select Intronic (Non-Coding) Coverage*

ALK	BCL2	BCL6	BCR	BRAF	CCND1	CRLF2	EGFR	EPOR
ETV1	ETV4	ETV5	ETV6	EWSR1	FGFR2	IGH	IGK	IGL
JAK1	JAK2	KMT2A (MLL)	MYC	NTRK1	PDGFRA	PDGFRB	RAF1	RARA
RET	ROSI	TMPS2	TRG					