

HEMATO pro



For the analysis of complex genomic variants associated with Lymphoid and Myeloid Diseases

HEMATO pro

The HEMATO pro kit is dedicated to the analysis of complex genomic variants associated with Lymphoid and Myeloid Diseases.

HEMATO pro is a kit for the analysis of 137 relevant genes through a molecular protocol based on Next Generation Sequencing (NGS) technologies. The kit is validated for germline analysis (SNPs, indels, CNVs) of DNA extracted from blood or body tissues (fresh, frozen, FFPE, FNA) samples.

HEMATO pro kit contains all reagents required for the preparation of the capture of specifically designed probes and for the NGS analysis using Illumina.

TECHNOLOGY

The HEMATO pro kit is part of a DNA-to-variant solution that offers streamlined content, easy-to-perform library preparation, push-button sequencing systems, and simplified data analysis.

WORKFLOW

Library preparation follows a straightforward, capture-based protocol that can be completed in as little as 36 hours, with < 3 hours hands-on time. Resulting libraries can be normalized, pooled, and then loaded on to a flow cell for sequencing. Prepared libraries are sequenced on any compatible Illumina sequencers.

VALIDATION

To demonstrate assay capabilities, clinical samples were run in a clinical setting. DNA quality and quantity of the libraries prepared were verified using Qubit and Agilent Bioanalyzer.

Profile of the prepared libraries in Figure 1.

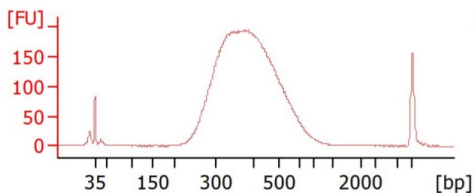


Figure 1. HEMATO pro library Bioanalyzer profile.

Table 1: List of genes in HEMATO pro

ABL1	CHEK2	GATA1	LUC7L2	RAD21	SRSF2	BIRC	IRF4	XPO1
ANKRD26	CREBBP	GATA2	MECOM	RAF1	STAG1	BTK	MAL	
ASXL1	CSF3R	GNAS	MET	RB1	STAG2	CARD11	MEF2B	
ASXL2	CSMD1	GNB1	MPL	RBBP6	STAT3	CCND1	MYD88	
ATM	CSNK1A1	HNRNPK	MYC	RPS19	STAT5B	CCND3	NFKBIE	
ATRX	CTCF	HRAS	NF1	RTEL1	TERC	CD58	NRAS	
BCOR	CUX1	IDH1	NOTCH1	RUNX1	TET	CD79A	PIM1	
BCORL1	DDX41	IDH2	NOTCH2	SAMD9	TET2	CD79B	PLCG2	
BRAF	DHX15	IKZF1	NPM1	SAMD9L	TP53	CDKN2B	POT1	
BRCC3	DNMT3A	JAK1	NRAS	SBDS	U2AF1	CHD2	PRDM1	
CALR	ELANE	JAK2	PAX5	SETBP1	WT1	CIITA	PTEN	
CBL	ETNK1	JAK3	PDGFRA	SF3B1	ZBTB7A	CXCR4	REL	
CBLB	ETV6	KDM6A	PHF6	SH2B3	ZRSR2	EP300	SOC1	
CBLC	EZH2	KIT	PIGA	SMC1A	ARID1A	FBXW7	STAT6	
CCND2	FANCA	KMT2A	PML	SMC3	B2M	FOXO1	TCF3	
CDKN2A	FANCL	KMT2D	PPM1D	SOS1	BCL2	GNA13	TNFAIP3	
CEBPA	FLT3	KRAS	PTPN11	SRP72	BCL6	ID3	TNFRSF14	

SAMPLE PER RUN

Instrument	Samples per run*
	Germline
MiSeq Kit v2 (300-cycles)/(500-cycles)	24
MiSeq Kit v3 (600-cycles)	48
MiniSeq Mid Output Kit (300-cycles)	8
MiniSeq High Output Kit (300-cycles)	40
NextSeq 550 Mid-Output Kit	208
NextSeq 550High-Output Kit	640

*the estimated maximum number of samples per cartridge assumes a reading depth of 300x for the germline. The optimal number of samples can be empirically estimated on the local setup.

The volume present in the kit is calculated to allow the subdivision into multiples of 8 analysis sessions. Dividing the kit in different ways decrease the total number of tests that can be performed.

ORDERING INFORMATION

Product**	REF
HEMATO pro	C3150-16X (16 test)
HEMATO pro	C3150-96X (96 test)
UDI***	
UDI Primers Set A	7001 (96 test)
UDI Primers Set B	7002 (96 test)
UDI Primers Set C	7003 (96 test)
UDI Primers Set D	7004 (96 test)
UDI Primers Set 16	7005 (16 test)

**the kit is also available in its version only for research use (RUO).

***UDI are always included in CEIVD kit.