Oncomine Myeloid MRD Assays (RUO)

Comprehensive myeloid MRD panel
33 genes (DNA), 42 fusion drivers (RNA), 990 unique fusions

Fast and simple workflow
2-3 days for results and ~2 hours hands-on time

High sensitivity
Limit of detection down to 0.05% allele frequency (AF)

Integrated reporting
Complete informatics pipeline with reporting

Streamlined workflow from sample to results

Day 1		Day 2	Day 3	
Extract sample	Construct library	Prepare template	Run sequence	Analyze data

DNA and RNA from:
• Blood
• Bone marrow
	• Ion AmpliSeq HD Library Kit
	• Ion AmpliSeq HD Dual Barcode Kit
		Automated
		• Ion Chef Instrument
			Ion GeneStudio S5 Prime or XL system	• Torrent Suite Software
				• Ion Reporter Software
				  – FLT3-ITD detection
				  – MRD longitudinal tracking
				• Customizable reporting tools*
				• Chimerism analysis

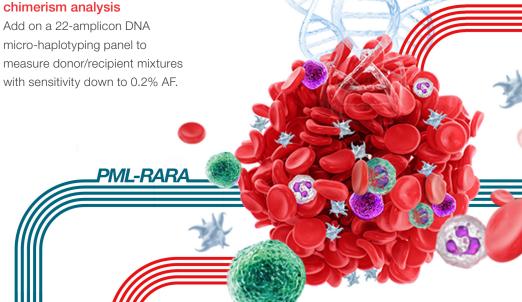## Ion Torrent™ Oncomine™ Myeloid MRD Assays have targets covering the major myeloid disorders. ✓ AML ✓ MDS ✓ MPN

DNA assay			RNA assay						
DNA gene targets			Fusion driver genes				Expression control genes	Exon splicing variants	
ABL1	GATA2	PTPN11	ABL1	FUS	MYBL1	RARA	ABL1	KMT2A	
ASXL1	IDH1	RUNX1	ABL2	GLIS2	MYH11	RARB	GUSB	RUNX1	
BCOR	IDH2	SETBP1	ALK	HMGA2	NOTCH1	RARG	PSMB2	NOTCH1	
BRAF	JAK2	SF3B1	BCL2	JAK2	NTRK1	RET	PUM1	ETV6	
CALR	KIT	SH2B3	BRAF	KAT6A (MOZ)	NTRK2	RUNX1	TRIM27	IKZF1	
CBL	KRAS	SRSF2	CCND1	KAT6B	NTRK3	TAL1		NTRK1	
CEBPA*	MPL	STAG2	CREBBP	KMT2A (includes PTD)*	NUP214	TCF3			
CSF3R	MYD88	TET2	CSF1R	MECOM	NUP98	TCF4			
DNMT3A	NPM1	TP53*	EGFR	MLLT10	PAX5	TFE3			
EZH2	NRAS	U2AF1	ETV6	MRTFA (MLK1)	PDGFRA	ZNF384			
FLT3**	PHF6	WT1	FGFR1		PDGFRB				

* Full gene coverage.
** Exon 14 and 15, includes *FLT3*-ITDs and TKD mutations.

Optional chimerism analysis
Add on a 22-amplicon DNA micro-haplotyping panel to measure donor/recipient mixtures with sensitivity down to 0.2% AF.

PML-RARA

*Reporting tools include Oncomine Reporter, the laboratory's own software, or other third-party software.