










Oncomine Myeloid MRD Assays (RUO)

Streamlined workflow from sample to results

-  **Comprehensive MRD panel**
33 genes (DNA), 43 fusion drivers (RNA), 990 unique fusions
-  **Fast and simple workflow**
2–3 days for results
~2 hours hands-on time
-  **High sensitivity**
Limit of detection down to 0.05% allele frequency (AF)
-  **Integrated reporting**
Complete informatics pipeline with reporting

Day 1		Day 2	Day 3	
				
Extract sample	Construct library	Prepare template	Run sequence	Analyze data
DNA and RNA from: <ul style="list-style-type: none"> Blood Bone marrow 	<ul style="list-style-type: none"> Ion AmpliSeq HD Library Kit Ion AmpliSeq HD Dual Barcode Kit 	Automated Ion Chef Instrument	Ion GeneStudio S5 Prime or XL system	<ul style="list-style-type: none"> Torrent Suite Software Ion Reporter Software – FLT3-ITD detection MRD longitudinal tracking Oncomine Reporter software Chimerism analysis

Ion Torrent™ Oncomine™ Myeloid MRD Assay has targets for all major myeloid neoplasm sample types

✓ 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*	NUP214	TCF3		
CSF3R	MYD88	TET2	CSF1R	KMT2A-PTD	NUP98	TCR4		
DNMT3A	NPM1	TP53*	EGFR	MECOM	PAX5	TFE3		
EZH2	NRAS	U2AF1	ETV6	MLL10	PDGFRA	ZNF384		
FLT3**	PHF6	WT1	FGFR1	MRTFA (MLK1)	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.

