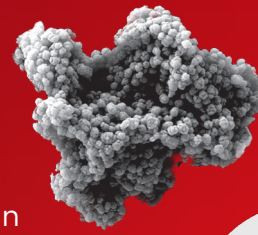




# superRCA<sup>®</sup> Assay Technology

Ultra-Sensitive and Highly Specific Molecular Amplification Technology for MRD Detection in Hemato-Oncology Research



## Why Choose superRCA<sup>®</sup>?

In the evolving landscape of molecular diagnostics, the superRCA<sup>®</sup> assay stands out as a transformative solution for ultra-sensitive and specific mutation detection. Designed to meet the demands of modern hemato-oncology research, the superRCA assay redefines what's possible in minimal residual disease (MRD) monitoring.

### Higher Sensitivity

superRCA delivers 10 to 100 times greater sensitivity than conventional methods such as NGS, digital PCR, or qPCR—detecting mutations at frequencies as low as 1 in 100,000 cells.<sup>1</sup>

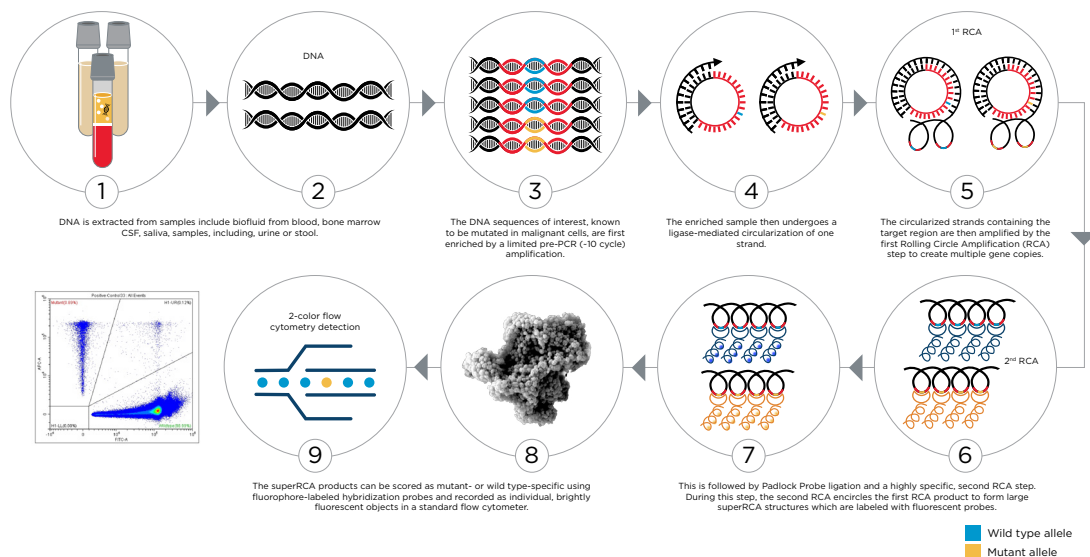
### Faster Results

Achieve rapid turnaround for timely identification of targetable mutations and early relapse detection. The workflow is automation-ready, enabling high-throughput and standardized processing for consistent, efficient results.

### Seamless Integration

Compatible with any standard flow cytometer equipped with a plate loader. No need for specialized equipment or extensive training—superRCA fits right into your existing lab infrastructure.

## How It Works



The superRCA particles contain sequence specific oligos, which can be labelled for direct readout using flow cytometry. The result is presented as the ratio between sequences, the Variant/Mutant Allele Frequency

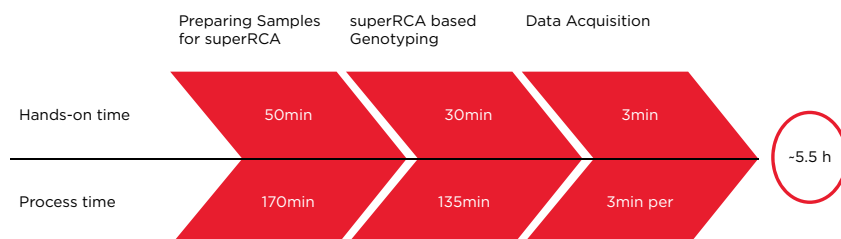
1. Ultra-sensitive monitoring of leukemia patients using superRCA mutation detection assays | Nature Communications

ACCELERATING  
answers



## Easy Workflow Integration

- The superRCA assay is optimized for a low-volume format using standard 96-well plates. Most steps in the superRCA protocol are isothermal and involve serial additions of reagents to the same reaction well, followed by mixing and incubation at defined temperatures using a thermocycler and vortexer.
- The assay is fully compatible with automation and can be run on a liquid handling platform equipped with an on-deck thermocycler, such as the Biomek i5 or i7 Automated Workstation.



DNA input ranges from 5 ng to 2,640 ng. The DNA extraction step must be completed prior to this stage.

## Assays

The superRCA product line includes two components: target-specific mutation kits and a generic accessory kit used to support assay performance.

- Customize with confidence: Assays can be tailored to detect a wide range of sequence variants, including single nucleotide variants (SNVs), deletions, and insertions.
- Enable multiplexing: Run multiple targets in a single reaction to streamline workflows and increase efficiency.
- Access a broad portfolio: Choose from over 150 made-to-order, pre-verified assays designed for use with the superRCA Accessory Kit, for MRD monitoring in routine and large-scale hematological clinical research.

## Our Offering on superRCA Technology

<b>ASXL1</b>	DNMT3A	<b>IDH1</b>	MYD88	PTEN	SMC3	<b>WT1</b>
<b>BCOR</b>	ETV6	<b>IDH2</b>	NF1	<b>PTPN11</b>	<b>SRSF2</b>	<b>ZRSR2</b>
<b>BRAF</b>	EZH2	JAK2	NOTCH1	<b>RUNX1</b>	<b>STAG2</b>	
CBL	FLT3	JAK3	<b>NPM1</b>	SETBP1	TET2	
CSF3R	GATA2	<b>KIT</b>	<b>NRAS</b>	<b>SF3B1</b>	<b>TP53</b>	
CUX1	HRAS	<b>KRAS</b>	PF6	SMC1A	<b>U2AF1</b>	

Most commonly mutated genes in AML in red. Probes for multiple mutations are available in each of these genes.

### Reference

- Chen L, et al. Ultra-sensitive monitoring of leukemia patients using superRCA mutation detection assays. Nature Communications 2021;12:5103.

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

superRCA is a trademark or registered trademark of Rarity Bioscience AB.

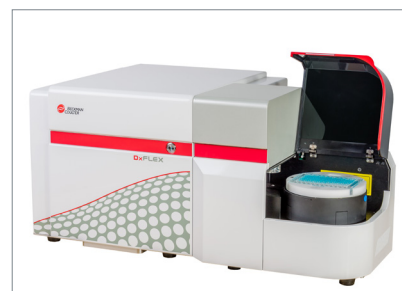
\*superRCA Assay is compatible with the DxFLEX Flow Cytometer exclusively configured with a plate loader. DxFLEX Flow Cytometer with plate loader is for Research Use Only. Not for use in diagnostic procedures.

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Biomek i-Series Automated Workstations



DxFLEX Flow Cytometer (with plate loader\*)



CytoFLEX Flow Cytometer (with plate loader)

The assay can be performed on DxFLEx and CytoFLEx flow cytometers equipped with a plate loader module. It can also be automated using Biomek i-Series Automated Workstations.

For more information, visit [beclis.co/Rarity](https://beclis.co/Rarity) or scan the QR code .

