

# Solutions for your hematological cancer research

**Hematological malignancies are known to have a multitude of aberrations across the genome, including:**

- Fusion genes
- Somatic mutations (SMs) such as single nucleotide variants (SNVs) and insertions/deletions (indels)
- Copy number (CN) changes such as duplications, deletions, loss of heterozygosity (LOH), copy neutral (cn) LOH, ploidy, and more

No matter the type of aberration you are interested in analyzing, we offer a wide range of tools for comprehensive sample profiling and confirmation of results.

## Applied Biosystems™ CytoScan™ HD Suite

**Identify whole-genome CN changes**

- Increase detection rate of abnormalities compared to karyotyping, FISH, SNP arrays, and array CGH
- Identify new abnormalities

**Detect CN gains and losses, LOH, cnLOH, mosaicism, and clonal heterogeneity in one assay**

- Process one to tens of samples per day



CytoScan HD Suite includes arrays, reagents, and software—runs on the Applied Biosystems™ GeneChip™ Scanner 3000 7G System

## Applied Biosystems™ Sanger sequencing technology

**Identify known cancer-specific SMs**

- Clearly identify somatic mosaicism down to 5%
- Ideal for low- to medium-throughput needs

**Detect known CN changes using MLPA analysis**

- Obtain CN data for known target genes
- Ideal for detecting known genomic deletions and insertions



Runs on Applied Biosystems™ SeqStudio™ Genetic Analyzer

## Ion Torrent™ OncoPrint™ Myeloid Research Assay

**Obtain a comprehensive view of DNA mutations (SNVs, indels) and all major gene fusions for myeloid malignancies**

- Analyze and detect even challenging genes like *CEBPA* and the internal tandem duplications of *FLT3* (*FLT3-ITDs*)

**Easily assess all disorders and mutation types in a single, standardized run**

- Process one to twelve samples per chip



Runs on Ion GeneStudio™ S5 instrument

## Applied Biosystems™ TaqMan™ Assays

**Accurately detect known SMs, CN changes, and fusion genes**

- Quickly and easily detect known targets
- Ideal for identifying known abnormalities

**Cover known abnormalities with targeted analysis**

- Verify microarray and next-generation sequencing results
- One abnormality per assay



Runs on Applied Biosystems™ QuantStudio™ family of real-time PCR instruments

Find out more at [thermofisher.com/hemeonc](http://thermofisher.com/hemeonc)