SOPHiA GENETICS™

SOPHiA DDM™ for Myeloid Malignancies

Confidently identify genomic drivers associated with myeloid malignancies

Leverage up-to-date NGS-based solutions and the analytical power of the SOPHiA DDM™ Platform to precisely characterize the complex mutational landscape of myeloid malignancies. Whether you need high sensitivity for rare variants, expanded biomarker coverage, or a simplified workflow, our comprehensive portfolio provides solutions designed to meet your unique needs.

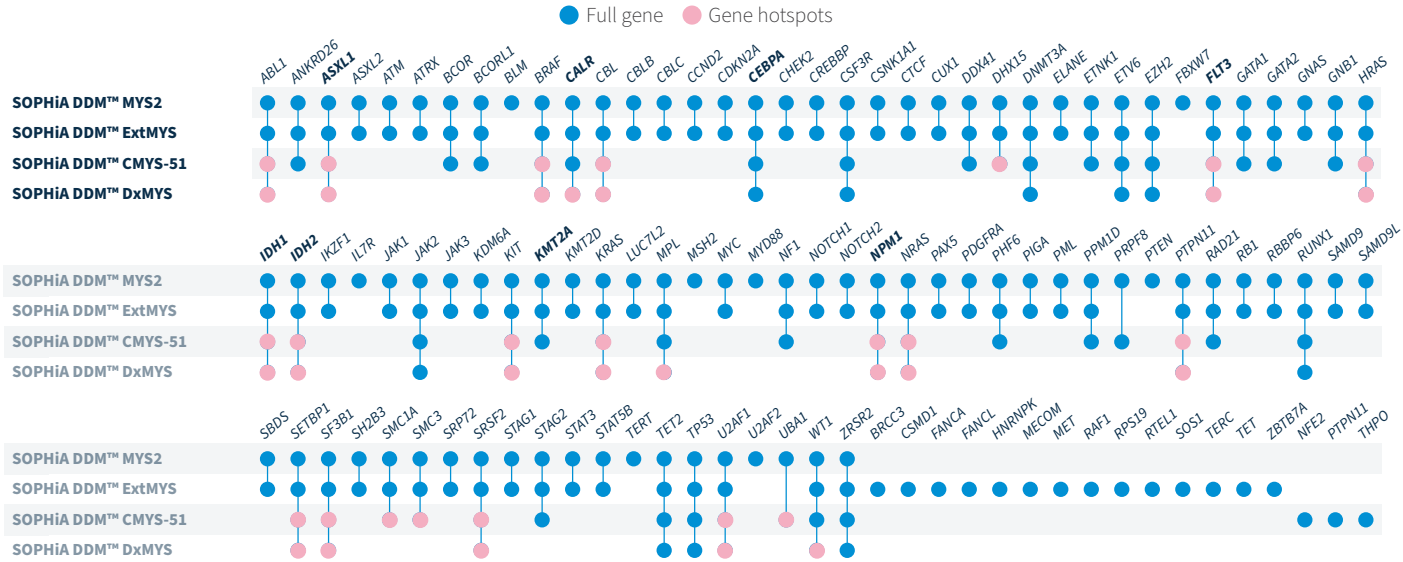
DISCOVER OUR COMPREHENSIVE PORTFOLIO OF MYELOID MALIGNANCIES APPLICATIONS

	SOPHiA DDM™ Community Myeloid Solution v2 (MYS2)	SOPHiA DDM™ Extended Myeloid Plus Solution (ExtMYS+)[1]	SOPHiA DDM™ Community Myeloid Plus Solution 51 genes (CMYS-51+)[1]	SOPHiA DDM™ Dx Myeloid Solution (DxMYS) CE IVD
Gene content	↑↑↑ High (94 genes, full CDS)	↑↑↑ High (98 genes, full CDS)	↑↑ Moderate (51 genes, 28 full CDS)	↑↑ Moderate (30 genes, 10 full CDS)
Fusion calling	28 genes (∞ fusion partners)	118 fusion pairs (predefined fusion partners)	118 fusion pairs (predefined fusion partners)	✕
Sample type	**DNA** only	**DNA** + **RNA** (for fusion detection)	**DNA** + **RNA** (for fusion detection)	**DNA** only
Starting material	Blood and bone marrow	Blood and bone marrow	Blood and bone marrow	Blood
Variants called	SNVs, Indels, CNVs, *FLT3* ITDs, *KMT2A* PDTs, Fusions, Chr. aberrations, LoH[2]	SNVs, Indels, CNVs, *FLT3* ITDs, *KTM2A* PDTs, Fusions	SNVs, Indels, CNVs, *FLT3* ITDs, *KTM2A* PDTs, Fusions	SNVs, Indels, CNVs, *FLT3* ITDs
Library prep	**1.5** days	**3** days (DNA + RNA)	**3** days (DNA + RNA)	**1.5** days
Sequencers	Illumina NextSeq®	Illumina NextSeq®	Illumina MiniSeq® Illumina MiSeq® Illumina NextSeq®	Illumina MiSeq® (for CE-IVD purposes)
Reads/ sample[3]	25 million	18 million	5.0-6.7 million[4]	2.0-2.7 million[4]
Best for	Biomarker discovery, comprehensive coverage, consolidated workflows	Routine analysis	Routine analysis	Clinical diagnostics[5]
Product codes	**CS2598ILLRSMY13**	**DNA only: BS2201ILLRSMY10** **DNA&RNA: BS0118ILLRSMY10**	**DNA only: CS2520ILLRSMY10** **DNA&RNA: CS2556ILLRSMY10**	**BS0103ILLCSML01**

CDS, coding sequences; chr. Aberrations, chromosomal aberrations; CNVs, copy number variants; Indels, insertions/deletions; ITDs, internal tandem duplications; LoH, loss of heterozygosity; PTDs, partial tandem duplications; SNVs, single nucleotide variants.
1. Fusion calling is optional in these applications, requiring the add-on module SOPHiA DDM™ Blood Cancers Plus Solution. 2. The application enables client inference on LoH; future developments are planned to optimize clients' LoH analysis. 3. Reads per sample recommendations based on blood samples. 4. Reads per sample ranges are for Illumina MiSeq® instruments with 2x300bp or 2x150bp flow cells. 5. SOPHiA DDM™ Dx Myeloid Solution is available as a CE-IVD product for In Vitro Diagnostic Use in Europe, Turkey and Israel.

OVERVIEW OF GENE CONTENT BETWEEN OUR KEY TARGETED APPLICATIONS

Gene coverage for variant detection in SOPHiA DDM™ targeted applications for Myeloid Malignancies, excluding fusion detection.



DNA VERSUS RNA-BASED FUSION DETECTION IN SOPHIA DDM™ FOR MYELOID MALIGNANCIES

DNA-based approaches for fusion detection are well-suited for identifying novel fusion events and discovering new biomarkers, while RNA-based methods are ideal for reliably detecting validated fusion pairs with high confidence and specificity.

	Fusion calling	Fusion genes	Discovery potential	Analysis complexity
SOPHiA DDM™ MYS2	Partner-agnostic	∞	↑ High (detects novel fusions)	↑ High
SOPHiA DDM™ ExtMYS+ and CMYS-51+	Known fusions	118 pairs	↓ Low (limited to known pairs)	↓ Low

KEY FEATURES OF SOPHIA DDM™ FOR MYELOID MALIGNANCIES

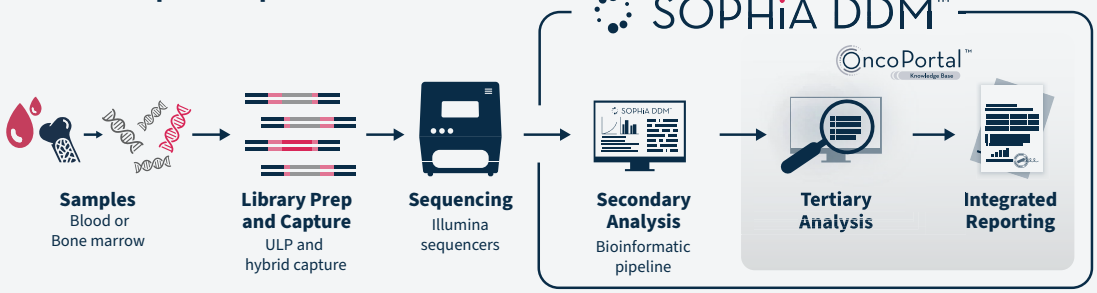
SOPHiA GENETICS Universal Library Prep (ULP)

Streamline and unify workflows across oncology and rare and inherited diseases with our ULP—enhancing logistics and resource management without compromising data quality.

Automation in Hamilton liquid handlers[1]

Automate library prep and capture with our verified scripts for Hamilton's NGS STAR and STARlet to reduce hands-on time and enhance lab productivity.

Streamlined sample-to-report workflow



Rapid adoption in-house with SOPHiA DDM™ MaxCare Program

Want to know more? Contact us at: **info@sophiagenetics.com**

1. Verified automation scripts are currently available for SOPHiA DDM™ MYS and ExtMYS, for other targeted solutions, automation is available on-demand.