SOPHiA GENETICS™

Detect more with less

Maximize your insight from small biopsy samples

Discover SOPHiA DDM™ RNAtarget Oncology Solution, an end-to-end application to characterize complex genomic variants by combining a capture-based target enrichment kit with the analytical performance and advanced features of the SOPHiA DDM™ Platform.

Make the most of your precious biopsy samples with our all-in-one solution to detect and interpret novel fusions, SNVs, and Indels in major lung cancer biomarkers such as ***EGFR* (vIII exon skipping), *KRAS* (G12C), *ALK, ROS1, BRAF* (V600E), *NTRK, MET* (exon 14 skipping), *RET, ERBB2* and *PD-L1*.**

ALL NCCN Guidelines® recommended biomarkers for NSCLC[1] are covered

Low input amount

Set up to work with as little as **10ng RNA/tNA** to exploit fully scarce biopsy samples

Comprehensive variant detection

Designed to accurately detect **novel fusions** (partner-agnostic), **SNVs, and Indels**

Powered by SOPHiA DDM™

Easy variants **visualization and filtering** with access to the latest scientific evidence via **OncoPortal™ Plus**

Benefits of SOPHiA DDM™ RNAtarget Oncology Solution

- Get the application built to meet your specific needs with our **customization** options and full Set-up program.
- Streamline your workflow with a **1.5-day end-to-end protocol**, compatible with automation.
- Accelerate your research with our powerful proprietary algorithms and versatile **SOPHiA DDM™ Platform**.

45 genes covered

SNVs/Indels ☆ Fusions

AKT1	*DPYD*	*FGFR2* ☆	*KIT*	*NTRK2* ☆	*RET* ☆
ALK ☆	*EGFR* ☆	*FGFR3* ☆	*KRAS*	*NTRK3* ☆	*ROS1* ☆
ATM	*ERBB2*	*FGFR4* ☆	*MAP2K1*	*PALB2*	*STK11*
BRAF ☆	*ERBB3*	*FOXL2*[a]	*MDM2*	*PD-L1*	*TERT*
BRCA1	*ERBB4*	*GNAS*	*MET* ☆	*PDGFRA*	*TP53*
BRCA2	*ERG* ☆	*HRAS*	*NRAS*	*PIK3CA*	
CTNNB1	*ESR1*	*IDH1*	*NRG1* ☆	*PPARG* ☆	
DDR2	*FGFR1* ☆	*IDH2*	*NTRK1* ☆	*PTEN*	

ADVANCED ANALYTICAL PERFORMANCES*

SOPHiA DDM™ RNAtarget Oncology Solution

shows excellent analytical performances with both RNA and tNA samples and provides experts with the required confidence in their NGS results.

SNV/Indel detection
LoD 5% VAF

99.80%	99.99%
Sensitivity	Specificity

Novel fusion detection
LoD 10 molecules

100%	99.99%
Sensitivity	Specificity

*Based on 50ng RNA samples sequenced on Illumina NextSeq®. Specificity for SNVs/Indels based on reference samples only. Data on file

Product Specifications

Panel size	45 genes covered 97kb
Sample type	FFPE and fresh frozen tissues
Starting material	Minimum: 10 ng RNA or tNA Recommended: 50ng
Sequencer compatibility	Illumina NextSeq® and MiSeq®
Multiplexing example for lung samples[b]	16 samples on MiSeq® v3 86 samples on NextSeq® 500/550 Mid Output
Product code	CS2535ILLRSRY07-32

Want to learn more?

Or contact us at:
info@sophiagenetics.com

SOPHiA GENETICS also offers the CE-IVD product, SOPHiA DDM™ Dx RNAtarget Oncology Solution[c]

FFPE, formalin-fixed paraffin-embedded; Indels, Insertions/deletions; LoD, limit of detection; NCCN, National Comprehensive Cancer Network; NSCLC, Non-Small Cell Lung Cancer; RNA, ribonucleic acid; SNVs, single nucleotide variants; tNA, total nucleic acid. VAF, variant allele fraction. [a]Excluded from gene expression analysis, [b]Recommendation based on 3M reads and 1.5M fragments in a lung sample for 1000x coverage depth. Recommendations for other tissues, sequencing kits, and instruments are available upon request. [c]Refer to SOPHiA DDM™ Dx RNAtarget Oncology Solution webpage for product specifications and performance metrics.

[1] NCCN, NSCLC (v2.2023). https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf. Accessed April 13, 2023.

SOPHiA DDM™ RNAtarget Oncology Solution is for Research Use Only and is not intended for purposes other than research. SOPHiA DDM™ Dx RNAtarget Oncology Solution is available as CE-IVD products for In Vitro Diagnostic Use in Europe and Turkey.