SOPHiA GENETICS™

Accelerate your analysis with pre-designed and tested panels

COMMUNITY PANELS FOR SOLID TUMORS

HIGHLIGHTS

- Uniform coverage of target regions
- High quality probe design to optimize on-target rate
- Customizable gene content developed with genomic experts in cancerology
- Simple and reliable data analysis and interpretation

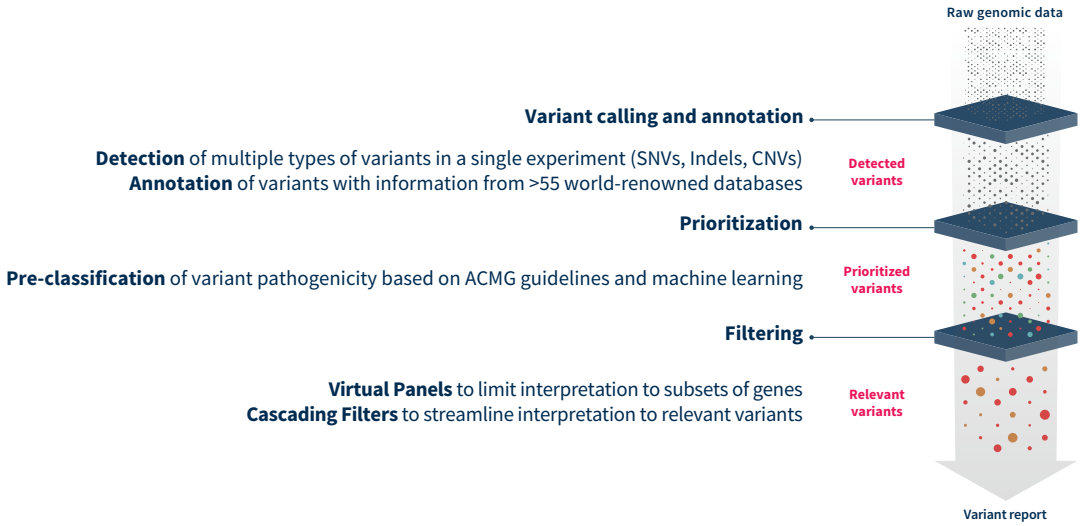
Designing, creating, and testing a new gene panel takes considerable time and effort. **SOPHiA GENETICS™ Community Panels for Solid Tumors are targeted, capture-based NGS panels** developed and tested by genomic experts to minimize set-up challenges and accelerate your research. These panels target biomarkers associated with various solid tumors, including lung, colorectal, skin, brain, breast and gynecological cancers. They are fully customizable, with the flexibility to add or remove genes to meet your unique requirements.

In combination with the analytical and interpretation capabilities of the SOPHiA DDM™ Platform, our Community Panels help you to gain accurate and cost-effective insights from your target regions of interest.

DNA EXTRACTION → CAPTURE-BASED LIBRARY PREPARATION → SEQUENCING → ANALYSIS → VARIANT STATUS REPORT GENERATION

For a fast and worry-free transition to routine analysis, the **SOPHiA GENETICS™ MaxCare Program** provides full set-up assistance.

The SOPHiA GENETICS™ **Community Panels** leverage on the SOPHiA DDM™ Platform to ensure accurate variant detection and streamlined variant assessment.



Discover our Community Panels for Solid Tumors in this flyer.

GDPR HIPAA COMPLIANCE

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

Panel name	Associated disorders*	Genes covered
CSTS_49 (29 kb)	Endometrial cancer	**49 genes:** AKT1, ALK, BRAF, CDK4, CDKN2A, CTNNB1, DDR2, DICER1, EGFR, ERBB2, **ERBB3**, ERBB4, **ESR1**, FBXW7, FGFR1, FGFR2, FGFR3, FOXL2, GNA11, GNAQ, GNAS, H3F3A, H3F3B, HIST1H3B, HRAS, IDH1, IDH2, **KEAP1**, KIT, KRAS, MAP2K1, **MED12**, MET, MYOD1, NRAS, PDGFRA, PIK3CA, **POLE**, **PTEN**, PTPN11, RAC1, RAF1, RET, ROS1, SF3B1, SMAD4, **STK11**, TERT, TP53
CSTS_51 (44 kb)	Breast and ovarian cancers	**51 genes:** AKT1, ALK, **ARID1A**, BRAF, **BRCA1**, **BRCA2**, CDK4, CDKN2A, CTNNB1, DDR2, DICER1, EGFR, ERBB2, ERBB4, **ESR1**, FBXW7, FGFR1, FGFR2, FGFR3, FOXL2, GNA11, GNAQ, GNAS, H3F3A, H3F3B, HIST1H3B, HRAS, IDH1, IDH2, KIT, **KMT2A**, **KMT2D**, KRAS, MAP2K1, **MAP2K2**, MET, **MTOR**, MYOD1, NRAS, PDGFRA, PIK3CA, PTPN11, RAC1, RAF1, RET, ROS1, SF3B1, SMAD4, TERT, **TGFBR2**, TP53
CSTS_55 (71 kb)	Ovarian and endometrial cancers	**55 genes:** AKT1, ALK, **ARID1A**, **ARID5B**, BRAF, **BRCA1**, **BRCA2**, CDK4, CDKN2A, **CTCF**, CTNNB1, DDR2, DICER1, EGFR, ERBB2, ERBB4, FBXW7, FGFR1, FGFR2, FGFR3, FOXL2, GNA11, GNAQ, GNAS, H3F3A, H3F3B, HIST1H3B, HRAS, IDH1, IDH2, **KEAP1**, KIT, KRAS, MAP2K1, MET, MYOD1, **NF1**, NRAS, PDGFRA, PIK3CA, **PIK3R1**, **POLE**, **PPP2R1A**, **PTEN**, PTPN11, RAC1, RAF1, RET, ROS1, **RPL22**, SF3B1, SMAD4, **STK11**, TERT, TP53
CSTS_228 (660 kb)	Lung, colorectal, skin, and brain cancers	**228 genes:** **ABL**, **ACVR1**, AKT1, **AKT2**, **AKT3**, ALK, **APC**, **AR**, **ARID1A**, **ARID1B**, **ARID2**, **ASXL1**, **ATM**, **ATR**, **ATRX**, **AURKA**, **AURKB**, **AXIN1**, **AXIN2**, **B2M**, **BCL10**, **BCL2**, **BCL6**, **BCOR**, **BIRC3**, BRAF, **BRCA1**, **BRCA2**, **BRPF1**, **BRPF3**, **BTG2**, **BTK**, **C11orf95**, **CALR**, **CARD11**, **CBL**, **CCND1**, **CCND2**, **CCND3**, **CD58**, **CD70**, **CD79B**, **CDH1**, CDK4, **CDK6**, **CDKN1A**, **CDKN1C**, CDKN2A, **CDKN2B**, **CDKN2C**, **CEBPA**, **CHD7**, **CHEK2**, **CIC**, **CREBBP**, **CSF1R**, **CSF3R**, **CTDNEP1**, CTNNB1, **CTR9**, **CXCR4**, **D2HGDH**, **DAXX**, **DDR1**, DDR2, **DDX3X**, DICER1, **DNMT1**, **DNMT3A**, **DNMT3B**, EGFR, **EGR1**, **EIF1AX**, **EP300**, ERBB2, **ERBB3**, **ETS1**, **ETV6**, **EZH2**, **FAM46C**, **FAS**, FBXW7, FGFR1, FGFR2, FGFR3, **FGFR4**, **FLT3**, **FMR1**, **FOXE1**, **FOXO1**, **FOXO3**, **FUBP1**, **FYN**, **GABRA6**, **GATA2**, **GLI2**, GNA11, **GNA13**, GNAQ, GNAS, **GSE1**, **H2AFX**, H3F3A, H3F3B, **HDAC2**, **HDAC7**, **HIST1H1B**, **HIST1H1C**, HIST1H3B, **HIST1H3C**, **HNF1A**, HRAS, IDH1, IDH2, **IDO2**, **IKZF1**, **IKZF3**, **IRF4**, **JAK2**, **JAK3**, **KBTBD4**, **KCNH2**, **KDM6A**, **KDR**, KIT, **KLF4**, **KLHL6**, **KLK1**, **KMT2A**, **KMT2C**, **KMT2D**, KRAS, **LDB1**, **LHX1**, **LZTR1**, MAP2K1, **MDM2**, **MDM4**, **MEF2B**, MET, **MLH1**, **MPL**, **MSH2**, **MSH6**, **MYB**, **MYBL1**, **MYC**, **MYCN**, **MYD88**, **MYL1**, **NBN**, **NDRG2**, **NF1**, **NF2**, **NOTCH1**, **NOTCH2**, **NPM1**, NRAS, **NSD1**, **NTRK2**, **PALB2**, **PAX5**, **PCDH8**, PDGFRA, **PDGFRB**, **PHF6**, **PIK3C2G**, PIK3CA, **PIK3CG**, **PIK3R1**, **PLCG1**, **PLCG2**, **PMS2**, **PPM1D**, **PRDM1**, **PRKAR1A**, **PTCH1**, **PTCH2**, **PTEN**, PTPN11, **RAD50**, RAF1, **RASA1**, **RASAL1**, **RB1**, **REST**, RET, **RHOA**, ROS1, **RUNX1**, **SETBP1**, **SETD2**, SF3B1, **SGK1**, SMAD4, **SMARCA2**, **SMARCA4**, **SMARCB1**, **SMARCD1**, **SMARCD2**, **SMARCE1**, **SMO**, **SNCAIP**, **SRSF2**, **STAG2**, **STAT3**, **STAT5B**, **STAT6**, **STK11**, **SUFU**, **TBR1**, **TCF4**, TERT, **TET2**, **TMEM30A**, **TNFAIP3**, **TOP2A**, TP53, **TRAF7**, **TSC1**, **TSC2**, **TSHR**, **U2AF1**, **VHL**, **WT1**, **ZIC1**, **ZMYM3**, **ZRSR2**

*The disorders covered by the Community Panels include, but are not limited to, those listed here.
In blue are additional targeted genes compared to SOPHiA DDM™ Solid Tumor Solution (42 genes).

Panel name	Samples per run / Sequencer**	Existing product codes***
CSTS_49 (CSTS_L_V1)	16 on MiSeq v3 (2x300bp)	**CS2479ILLRSMY10**
CSTS_51 (CSTS_A_V1)	12 on MiSeq v3 (2x300bp)	**CS2155ILLRSMY10**
CSTS_55 (CSTS_N_V2)	36 on NextSeq 500/550 Mid-Output (2x150bp) 112 on NextSeq 500/550 High-Output (2x150bp)	**CS2505ILLRSMY10**
CSTS_228 (CSTS_I_V2)	4 on NextSeq 500/550 Mid-Output (2x150bp) 16 on NextSeq 500/550 High-Output (2x150bp)	**CS2355ILLRSMY10**

**Sequencing recommendations and pipelines for other sequencing kits and instruments are available upon request. Number of samples per run is recommended for 1000x coverage depth.
***Product codes for SOPHiA GENETICS™ Universal Library Prep (ULP), replacing CS2479ILLRSMY05, CS2155ILLRSMY05, CS2505ILLRSMY05 and CS2355ILLRSMY05.

The information provided in this document is for informational purposes only. Full details of the availability and technicals of the panels should be individually confirmed. Please contact us at info@sophiagenetics.com to obtain appropriate further information and discuss the panel(s) that suit(s) your needs.
MiSeq and NextSeq are trademarks or registered trademarks of Illumina, Inc.

About SOPHiA GENETICS

SOPHiA GENETICS (Nasdaq: SOPH) is a healthcare technology company dedicated to establishing the practice of data-driven medicine as the standard of care and for life sciences research. It is the creator of the SOPHiA DDM™ Platform, a cloud-based SaaS platform capable of analyzing data and generating insights from complex multimodal data sets and different diagnostic modalities. The SOPHiA DDM™ Platform and related solutions, products and services are currently used by hundreds of healthcare institutions globally.

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

CNVs, copy number variants; Indels, insertions/deletions; SNVs, single nucleotide variants