Featured Germline Panels

Next Generation Sequencing at its Best

Michigan Medicine Laboratories (MLabs) offers comprehensive clinical testing for germline genetic diseases and is committed to assisting clinicians in identifying genetic aberrations to facilitate clinical diagnosis, management and genetic counseling. Combined with 30+ years' experience, state of the art CLIA-certified laboratories and ABMGG board-certified Geneticists, we are committed to providing cutting-edge, comprehensive next-generation sequencing germline panels.

64* GENES

11 TARGETED CANCER PANELS

20x ALL CODING EXONS ACHEIVED

Available Panels

- Colorectal Cancer Germline NGS Panel
- Endometrial/Uterine Cancer Germline NGS Panel
- Hereditary Breast and Ovarian Cancer, Comprehensive Cancer Germline NGS Panel
- Hereditary Breast and Ovarian Cancer, High-Moderate Risk Cancer Germline NGS Panel
- Melanoma Cancer Germline NGS Panel
- Neurofibromatosis Cancer Germline NGS Panel
- Pancreatic Cancer Germline NGS Panel
- Paraganglioma Cancer Germline NGS Panel
- Prostate Cancer Germline NGS Panel
- Renal Cancer Germline NGS Panel
- Stomach Cancer Germline NGS Panel

Test Usage

The entire coding sequences (exons plus 20 bp upstream and 20 bp downstream of each coding exon) of the targeted genes are captured, sequenced, and aligned to the human reference genome. A minimum coverage of 20X for all coding exons is achieved. Copy number variation is assessed by coverage depth within the targeted regions compared to a normalized set of controls. Reported variants within the targeted region include pathogenic variants, variants of uncertain significance (VUS) and copy number variants (CNV) that are of potential clinical significance. In addition to NGS, Sanger sequencing is used to amplify and sequence CHEK2 and PMS2 to avoid known pseudogene regions; Alu insertion analysis for BRCA1 and BRCA2; Boland inversion analysis for MSH2. All reported variants of potential clinical significance will be confirmed by a different technology or platform.

**Patients will be sequenced for all 64 genes, but will only be analyzed for the gene panel requested by the ordering provider.*

A list of all cancer-specific targeted gene panels can be found at: mlabs.umich.edu

MICHIGAN MEDICINE
UNIVERSITY OF MICHIGAN
LABORATORIES

mlabs.umich.edu
800.862.7284

MLabs Comprehensive Cancer Germline NGS Panel includes 64 genes:

ALK	DICER1	NBN	SDHA
APC	EPCAM	NF1	SDHAF2
ATM	FANCC	NF2	SDHB
AXIN2	FH	PALB2	SDHC
BAP1	FLCN	PHOX2B	SDHD
BARD1	GPC3	PMS1	SMAD4
BMPR1A	GREM1	PMS2	SPRED1
BRCA1	HOXB13	POLD1	STK11
BRCA2	MAX	POLE	SUFU
BRIP1	MEN1	PRKAR1A	TMEM127
CDC73	MET	PTCH1	TP53
CDH1	MITF	PTEN	TSC1
CDK4	MLH1	RAD51C	TSC2
CDKN1C	MSH2	RAD51D	VHL
CDKN2A	MSH6	RB1	WT1
CHEK2	MUTYH	RET	XRCC2

Submit a specimen:

MLabs provides detailed information regarding collection and transportation of specimens for testing. All specimens should be accompanied by a completed MLabs Molecular Diagnostic requisition found at mlabs.umich.edu.

For questions or additional details regarding collection, transport, and testing procedures, please contact client services at 800.862.7284.

When courier service is not available, specimens can be sent by express mail to:

Michigan Medicine Laboratories (MLabs)
N-LNC Specimen Processing
2800 Plymouth Rd, Bldg 35
Ann Arbor, MI 48109-2800

Flexible billing arrangements: We offer both client and third-party billing options; we will bill either the patient's insurance carrier or the referring institution.

Expertise Delivered Professionally