Lumi Series

LumiRISKTM

A multi-cancer panel provides a comprehensive coverage of 40 genes relate to 11 cancers to assess an individual's risk of developing hereditary cancer. Knowing their risk of cancer early can enable patients to take better preventive action.

Cancer types covered:

Breast Ovarian Endometrial Prostate Colon Lung Pancreatic Gastric Kidney Thyroid Melanoma

Recommended for:

Individuals who wish to be informed of their cancer risk especially those who have a family history of cancer.

Genes Evaluated

APC	ATM	AXIN2	BAP1	BARD1	BMPR1A
BRCA1^	BRCA2^	BRIP1	CDH1	CDK4	CDKN2A
CEBPA	CHEK2	DICER1	EGFR T790M	ERCC2	FANCA
FH	FLCN	HOXB13 G84E	MEN1	MLH1^	MRE11
MSH2^	MSH6	MUTYH	NBN	NF1	PALB2
PMS2	PTEN	RAD50	RAD51C	RAD51D	RET
SMAD4	STK11	TP53	VHL		

LumiTHERATM

Analyzes 16 genes, including those in the Homologous Recombination Repair (HRR) pathway. The panel covers guideline-recommended genes to match actionable results with U.S. FDA-approved targeted therapies.

Cancer types covered:

Breast Ovarian Prostate Pancreas

Recommended for:

Patients who have breast, ovarian, prostate, or pancreatic cancer that may be inherited.

Genes Evaluated

ATM	BARD1	BRCA1^	BRCA2^	BRIP1	CHEK2
MLH1^	MSH2^	MSH6	MUTYH	PALB2	PMS2
PTEN	RAD51C	RAD51D	TP53		

LumiFOCUS™

Cancer-specific panels examine genes associated with specific hereditary cancers.

Recommended for

Individuals who wish to be informed of their cancer risk especially those who have relatives diagnosed with the same type of cancer at a younger age.

LumiFOCUS™ Gynaecological

ATM	BRCA1^	BRCA2^	BRIP1	CDH1	CHEK2	MLH1^	MSH2^	MSH6
NBN	NF1	PALB2	PMS2	PTEN	RAD51C	RAD51D	STK11	TP53

LumiFOCUS™ Breast

ATM	BARD1	BRCA1^	BRCA2^	
CDH1	CHEK2	NF1	PALB2	
PTEN	RAD51C	RAD51D	STK11	TP53

LumiFOCUS™ Colon

APC	AXIN2	BMPR1A	MLH1^
MSH2^	MSH6	MUTYH	PMS2
PTEN	SMAD4	STK11	

LumiFOCUS™ Gastric

BMPR1A	CDH1	MLH1^	MSH2^
MSH6	MUTYH	PMS2	SMAD4
STK11			

LumiFOCUS™ Kidney

BAP1	FH	FLCN	MET
PTEN	SDHA	SDHB	SDHC
SDHD	TSC1	TSC2	VHL

LumiFOCUS™ Pancreas

ATM	BRCA1^	BRCA2^	CDKN2A
MLH1^	MSH2^	MSH6	PALB2
PMS2	STK11	TP53	

LumiFOCUS™ Prostate

ATM	BRCA1^ BRCA2^	CHEK2
FANCA	HOXB13 G84E MLH1^	MSH2^
MSH6	PALB2 PMS2	RAD51D

Technical Specifications of Lumi Series Tests

Technology

Next-generation sequencing analysis of entire coding sequences of the genes listed, including 10bp flanking intronic regions. Optional add-on for MLPA (Multiplex Ligation-dependent Probe Amplification) testing for Large Genomic Rearrangements (LGR) detection in *BRCA1*, *BRCA2*, *EPCAM#*, *MLH1*, and *MSH2*.

Sensitivity

> 99%

Sample requirement

2 Streck tubes of blood (18ml in total)

Turnaround time

3 Weeks

[^]Optional add-on for MLPA (Multiplex Ligation-dependent Probe Amplification) testing for Large Genomic Rearrangements (LGR) detection. #EPCAM Deletion testing only (for MSH2 silencing).