

## Molecular Genetics Hereditary Cancer Test Requisition

Molecular Genetics Laboratory Kingston Health Sciences Centre  
76 Stuart Street, Douglas 4 Rm8-415  
Kingston ON K7L 2V7  
PHONE: 613-549-6666 x 64892 FAX: 613-548-1356  
In house delivery tube station: # 31

### Place Patient Addressograph HERE

Patient Name: \_\_\_\_\_

Date of Birth (YYYY/MM/DD): \_\_\_\_\_

Health Card Number: \_\_\_\_\_

Patient Sex: M / F / U                      Version Code

Patient Address: \_\_\_\_\_

**KHSC Familial Oncology #:** \_\_\_\_\_

**Please complete and submit the first page accompanied by a labelled specimen, for testing to proceed**

### Specimen Requirements

Collection Centre:	Collected By:
Collection Date: (YYYY/MM/DD)	Specimen Type: <input type="checkbox"/> Blood 3-6mL – EDTA Vacutainer
Collection Time:	<input type="checkbox"/> Other (please specify):
<b>Issue Report To: Authorizing Health Care Provider</b>	
Name:	Phone Number:
Institution Address:	Fax Number:
CPSO#:	OHIP Billing:
cc Report to:	Authorizing Signature:

### CLINICAL HISTORY

Eligibility Criteria: as per Ontario Health testing criteria, assessment and referral from genetics clinic, or oncology initiated (mainstreaming) requests are needed

### HEREDITARY CANCER PANEL TESTING

**Please select the panel code(s) of the most applicable indication to proceed with panel testing**

**See the following pages for a list of genes included on each panel**

(HCCP)

					Single Gene Syndromes (Select Gene Name)				
<input type="checkbox"/> HCP-AB	<input type="checkbox"/> HCP-F	<input type="checkbox"/> HCP-K	<input type="checkbox"/> HCP-P	<input type="checkbox"/> HCP-U	<input type="checkbox"/> AIP	<input type="checkbox"/> BAP1	<input type="checkbox"/> FLCN	<input type="checkbox"/> PTEN	<input type="checkbox"/> SMARCA4
<input type="checkbox"/> HCP-AD	<input type="checkbox"/> HCP-G	<input type="checkbox"/> HCP-L	<input type="checkbox"/> HCP-Q	<input type="checkbox"/> HCP-V	<input type="checkbox"/> AXIN2	<input type="checkbox"/> DICER1	<input type="checkbox"/> NBN	<input type="checkbox"/> RB1	<input type="checkbox"/> STK11
<input type="checkbox"/> HCP-C	<input type="checkbox"/> HCP-H	<input type="checkbox"/> HCP-M	<input type="checkbox"/> HCP-R	<input type="checkbox"/> HCP-W		<input type="checkbox"/> EGFR	<input type="checkbox"/> NF1	<input type="checkbox"/> RET	<input type="checkbox"/> TP53
<input type="checkbox"/> HCP-D	<input type="checkbox"/> HCP-I	<input type="checkbox"/> HCP-N	<input type="checkbox"/> HCP-S	<input type="checkbox"/> HCP-Y		<input type="checkbox"/> FH	<input type="checkbox"/> PRKAR1A	<input type="checkbox"/> RNF43	<input type="checkbox"/> VHL
<input type="checkbox"/> HCP-E	<input type="checkbox"/> HCP-J	<input type="checkbox"/> HCP-O	<input type="checkbox"/> HCP-T	<input type="checkbox"/> HCP-ASHJ					

### HEREDITARY CANCER FAMILIAL VARIANT TESTING

**Please indicate familial variant details below, in addition to the name/DOB of the index case (if available)**

(FAMSEQ)

Gene Name:	Coding change c.	Protein change p.	Index Case:
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Please leave blank

For LAB Use Only

## Hereditary Cancer Syndrome Panel Information

Cancer Syndrome/Disease Site		Gene List
AB	Hereditary Breast/Ovarian & Prostate Cancer Panel	ATM, BARD1, BRCA1, BRCA2, BRIP1, CDH1, CHEK2, EPCAM, HOXB13, MLH1, MSH2, MSH6, PALB2, PMS2, PTEN, RAD51C, RAD51D, STK11, TP53
AD	Comprehensive Breast/Ovarian and GI Panel	APC, ATM, BARD1, BMPR1A, BRCA1, BRCA2, BRIP1, CDH1, CDKN2A, CHEK2, CTNNA1, EPCAM, GALNT12, GREM1, HOXB13, MLH1, MSH2, MSH3, MSH6, MUTYH, NTHL1, PALB2, PMS2, POLD1, POLE, PTEN, RNF43, RPS20, RAD51C, RAD51D, SDHB, SDHD, SMAD4, STK11, TP53
C	Hereditary Endometrial Cancer Panel	BRCA1, BRCA2, EPCAM, MLH1, MSH2, MSH6, PMS2, POLD1, POLE, PTEN
D	Hereditary GI Panel (Panels E, F, G, H)	APC, ATM, BMPR1A, BRCA1, BRCA2, CDH1, CDKN2A, CHEK2, CTNNA1, EPCAM, GALNT12, GREM1, MLH1, MSH2, MSH3, MSH6, MUTYH, NTHL1, PALB2, PMS2, POLD1, POLE, PTEN, RNF43, RPS20, SDHB, SDHD, SMAD4, STK11, TP53
E	Lynch Syndrome Panel	EPCAM, MLH1, MSH2, MSH6, PMS2
F	Gastric Cancer Panel	APC, ATM, BRCA1, BRCA2, CDH1, CTNNA1, EPCAM, MLH1, MSH2, MSH6, PALB2, PMS2, SDHB, SDHD, SMAD4, STK11, TP53
G	Pancreatic Cancer Panel (Adenocarcinoma)	ATM, BRCA1, BRCA2, CDKN2A, EPCAM, MLH1, MSH2, MSH6, PALB2, PMS2, STK11, TP53
H	Polyposis Cancer Panel	APC, BMPR1A, EPCAM, GALNT12, GREM1, MLH1, MSH2, MSH3, MSH6, MUTYH, NTHL1, PMS2, POLD1, POLE, PTEN, RNF43, RPS20, SMAD4, STK11, TP53
I	Familial Gastrointestinal Stromal Panel	KIT, PDGFRA, SDHA, SDHAF2, SDHB, SDHC, SDHD
J	Familial Melanoma Panel	BAP1, BRCA2, CDK4, CDKN2A, MITF, POT1, PTEN
K	Familial Renal Cancer Panel	BAP1, FH, FLCN, MET, MITF, PTEN, SDHA, SDHAF2, SDHB, SDHC, SDHD, TP53, TSC1, TSC2, VHL
L	Pheochromocytoma and Paraganglioma Panel	FH, MAX, MEN1, NF1, RET, SDHA, SDHAF2, SDHB, SDHC, SDHD, TMEM127, VHL
M	CNS Panel	APC, EPCAM, LZTR1, MLH1, MSH2, MSH6, NF1, NF2, PMS2, POLE, POT1, PTCH1, PTEN, SMARCB1, SMARCE1, SUFU, TP53, TSC1, TSC2, VHL
N	Soft Tissue Carcinoma Panel	APC, ATM, BRCA1, BRCA2, CHEK2, EPCAM, MLH1, MSH2, MSH6, NF1, PMS2, TP53
O	Familial Adenomatous Polyposis Panel	APC, indicate +/-MUTYH
P	Dysplastic Nevus Syndrome	CDK4, CDKN2A
Q	Hereditary Hyperparathyroidism	CDC73, MEN1
R	MEN1 Syndrome	MEN1, CDKN1B
S	Nevoid Basal Cell Carcinoma Syndrome/ Gorlin Syndrome	PTCH1, SUFU
T	Rare Polyposis Genes	GALNT12, RPS20
U	Rhabdoid Predisposition Syndrome	SMARCA4, SMARCB1
V	Schwannomatosis	NF2, LZTR1, SMARCB1
W	Tuberous Sclerosis	TSC1, TSC2
Y	General Comprehensive Panel (Entire Gene List)	AIP, APC, ATM, AXIN2, BAP1, BARD1, BMPR1A, BRCA1, BRCA2, BRIP1, CDC73, CDH1, CDK4, CDKN1B, CDKN2A, CHEK2, CTNNA1, DICER1, EGFR, EGLN1, EPCAM, EXT1, EXT2, FH, FLCN, GALNT12, GREM1, HOXB13, KIT, LZTR1, MAX, MEN1, MET, MITF, MLH1, MLH3, MSH2, MSH3, MSH6, MUTYH, NBN, NF1, NF2, NTHL1, PALB2, PDGFRA, PMS2, POLD1, POLE, POT1, PRKAR1A, PTCH1, PTEN, RAD51C, RAD51D, RB1, RECQL, RET, RNF43, RPS20, SDHA, SDHAF2, SDHB, SDHC, SDHD, SMAD4, SMARCA4, SMARCB1, SMARCE1, STK11, SUFU, TMEM127, TP53, TSC1, TSC2, VHL

*NOTE: As appropriate, genes may be interrogated comprehensively, or for specific variants only. Comprehensive analysis includes examination of all coding nucleotides including 20 bases upstream and downstream of exon boundaries, as well as investigation of large scale rearrangements and/or copy number changes. Additional specific regions outside of these areas may be examined if there are known pathogenic variants.*

## Hereditary Cancer Syndrome Panel Information

### Ashkenazi Jewish Panel (HCP-ASHJ)

Offered as a panel which interrogates specific targeted variants as indicated below

Targeted Gene	Variant to Examine	Alternate Name	Targeted Gene	Variant to Examine	Alternate Name
APC NM_000038.6	c.3920T>A (p.Ile1307Lys)	APC I1307K	GREM1 NM_013372.6	CNV analysis	
BRCA1 NM_007294.3	c.68_69del (p.Glu23Valfs*17)	185delAG	MSH2 NM_000251.2	c.1906G>C (p.Ala636Pro)	A636P
BRCA1 NM_007294.3	c.5266dup (p.Gln1756Profs*74)	5382insC	MSH6 NM_000179.2	c.3959_3962delCAAG (p.Ala1320Glufs*6)	
BRCA2 NM_000059.3	c.5946del (p.Ser1982Argfs*22)	617delT	MSH6 NM_000179.2	c.3984_3987dupGTCA (p.Leu1330Valfs*12)	
CHEK2 NM_007194.3	c.1283C>T (p.Ser428Phe)	c.620C>T NM_001257387			

### Singe Gene Syndrome Targets

Targeted Gene	Cancer Syndrome/Disease Site	Targeted Gene	Cancer Syndrome/Disease Site
AIP	Familial Isolated Pituitary Adenoma	PRKAR1A	Carney Complex
AXIN2	AXIN2-related Attenuated Familial Adenomatous Polyposis	PTEN	PTEN Hamartoma Tumour Syndrome
BAP1	BAP1 Tumour Predisposition Syndrome	RB1	Retinoblastoma
DICER1	DICER-associated Syndrome	RET	Multiple Endocrine Neoplasia Type 2
EGFR	Hereditary Lung Cancer	RNF43	Sessile Serrated Polyposis Cancer Syndrome
FH	Hereditary Leiomyomatosis and Renal Cell Cancer	SMARCA4	Small Cell Carcinoma of the Ovary, Hypercalcemic Type (SCCOHT)
FLCN	Birt-Hogg-Dube Syndrome	STK11	Peutz-Jeghers Syndrome
NBN	Nijmegen Breakage Syndrome	TP53	Li-Fraumeni Syndrome
NF1	Neurofibromatosis, type 1	VHL	Von Hippel-Lindau Syndrome