

### Client Information (required)

Client Name		
Client Account No.		
Client Phone	Client Order No.	
Address		
City	State	Zip Code

### Submitting Provider/Provider Name Information (required)

Submitting/Referring Provider (Last, First)
<b>Fill in only if Call Back is required.</b> Phone ( ) _____ - _____ Fax* ( ) _____ - _____
Provider's National I.D. (NPI)

\*Fax number given must be from a fax machine that complies with applicable HIPAA regulation.

### Pathologist's Name (required)

Submitting/Referring Pathologist (Last, First)
Phone ( ) _____ - _____ Fax* ( ) _____ - _____

\*Fax number given must be from a fax machine that complies with applicable HIPAA regulation.

#### New York State Patients: Informed Consent for Genetic Testing

"I hereby confirm that informed consent has been signed by an individual legally authorized to do so and is on file with this office or the individual's provider's office."

Signature \_\_\_\_\_

**Note:** It is the client's responsibility to maintain documentation of the order.

<b>MCL Internal Use Only</b>
------------------------------

**Ship specimens to:**  
Mayo Clinic Laboratories  
3050 Superior Drive NW  
Rochester, MN 55901

**Customer Service: 855-516-8404**

Visit [www.MayoClinicLabs.com](http://www.MayoClinicLabs.com) for the most up-to-date test and shipping information.

### Patient Information (required)

Patient ID (Medical Record No.)	
Patient Name (Last, First, Middle)	
Gender <input type="checkbox"/> Male <input type="checkbox"/> Female	Birth Date (Month DD, YYYY)
Collection Date (Month DD, YYYY)	Time <input type="checkbox"/> a.m. <input type="checkbox"/> p.m.

### Specimens Provided (required)

<input type="checkbox"/> Blood <input type="checkbox"/> Bone Marrow <input type="checkbox"/> Fixed Cells <input type="checkbox"/> Cultured Cells <input type="checkbox"/> DNA <input type="checkbox"/> Lymph Node <input type="checkbox"/> Spleen	<input type="checkbox"/> Paraffin block No. sent: _____ Indicate source: <input type="checkbox"/> Slides No. sent: _____	<input type="checkbox"/> Tissue No. sent: _____ <input type="checkbox"/> Frozen <input type="checkbox"/> Fixed Formalin <input type="checkbox"/> Wet Tissue <input type="checkbox"/> Other Fixative type: _____ <input type="checkbox"/> Other Anatomic site: _____
---	--	---

CBC results:  
 HB \_\_\_\_\_ RBC \_\_\_\_\_ WBC \_\_\_\_\_  
 HCT \_\_\_\_\_ MCV \_\_\_\_\_ PLT \_\_\_\_\_

#### If ordering HER2 testing:

Was specimen fixed in 10% neutral buffered formalin within 1 hour from surgical collection time?  
 Yes  No

Has specimen been fixed in 10% neutral buffered formalin for 6 to 72 hours?  
 Yes  No

### Pathology/Clinical Diagnosis (required)

(Include a brief history, pertinent laboratory results, suspected diagnosis, and reason for referral.)

---

ICD-10 Diagnosis Code

#### Billing Information

- An itemized invoice will be sent each month.
- Payment terms are net 30 days.

Call the Business Office with billing related questions:  
 800-447-6424 (US and Canada)  
 507-266-5490 (outside the US)

## Patient Information (required)

Patient ID <i>(Medical Record No.)</i>	Client Account No.
Patient Name <i>(Last, First, Middle)</i>	Client Order No.
Birth Date <i>(Month DD, YYYY)</i>	

## FEATURED ONCOLOGY TESTING

### PD-L1 Immunohistochemical stains

- SP263 PD-L1 (SP263), Semi-Quantitative Immunohistochemistry, Manual
- SP142 PD-L1 (SP142), Semi-Quantitative Immunohistochemistry, Manual
- 22C3 PD-L1 (22C3), Semi-Quantitative Immunohistochemistry, Manual

### Microsatellite Instability (MSI)/Mismatch Repair

- MSI Microsatellite Instability (MSI), Tumor
- IHC Mismatch Repair (MMR) Protein Immunohistochemistry Only, Tumor

### NTRK Fusion Testing

- NTRK NTRK Gene Fusion Panel, Tumor
- TRK Tropomyosin Receptor Kinase (TRK) Immunostain, Technical Component Only

### Next-Generation Sequencing (NGS) Panels

- GISTP GIST-Targeted Gene Panel by Next-Generation Sequencing, Tumor
- LNGPR Lung Cancer-Targeted Gene Panel with Rearrangement, Tumor (mutations and rearrangements)
- MELP Melanoma Targeted Gene Panel by Next-Generation Sequencing, Tumor
- NONCP Neuro-Oncology Expanded Panel with Rearrangement, Tumor
- RASFP RAS/RAF Targeted Gene Panel by Next-Generation Sequencing, Tumor
- CAPN Solid Tumor Targeted Cancer Gene Panel by Next-Generation Sequencing

### Chromosomal Microarray

- CMAPT Chromosomal Microarray, Tumor, Formalin-Fixed Paraffin-Embedded
- CMAT Chromosomal Microarray, Tumor, Fresh or Frozen using Affymetrix Cytoscan HD

### Cell-Free DNA (cfDNA) Testing

- BRAFB Cell-Free DNA BRAF V600 Test, Blood
- EGFRD Cell-Free DNA EGFR Exon 18, 19, 20, 21, Mutation Analysis, Blood
- T790M Cell-Free DNA EGFR T790M Mutation Analysis, Blood
- KRASD Cell-Free DNA KRAS 12, 13, 61, 146, Blood

## PATHOLOGY

- PATHC Pathology Consultation  
Appropriate stains and ancillary testing may be performed in order to render an accurate diagnosis

## MATE PAIR SEQUENCING

- MTRTI MatePair, Targeted Rearrangements, Oncology

## PATHOLOGY: TARGETED TUMOR TESTING

### Bone and Soft Tissue

- FOXOF Alveolar Rhabdomyosarcoma (ARMS), 13q14 (FOXO1 or FKHR) Rearrangement, FISH, Tissue
- ETV6F ETV6 (12p13.2) Rearrangement, FISH, Tissue
- ARMS Alveolar Rhabdomyosarcoma by Reverse Transcriptase PCR (RT-PCR)
- TFE3F Alveolar Soft Part Sarcoma (ASPS)/Renal Cell Carcinoma (RCC), Xp11.23 (TFE3), FISH, Tissue
- MASF Angiosarcoma, MYC (8q24) Amplification, FISH, Tissue
- CTNNB Beta-Catenin (CTNNB1) Mutation Analysis, Tumor
- DSRCT Desmoplastic Small Round-Cell Tumor by Reverse Transcriptase PCR (RT-PCR)
- ESTUF Endometrial Stromal Tumors (EST), 7p15 (JAZF1), 6p21.32 (PHF1), 17p13.3 (YWHAE) Rearrangement, FISH, Tissue
- EWSF Ewing Sarcoma (EWS), 22q12 (EWSR1) Rearrangement, FISH, Tissue

- EWS Ewing Sarcoma, by Reverse Transcriptase PCR (RT-PCR)
- IMTF Inflammatory Myofibroblastic Tumors (IMT), 2p23 (ALK) Rearrangement, FISH, Tissue
- KIT8 KIT Exon 8, Mutation Analysis
- KIT9 KIT Exon 9, Mutation Analysis
- KIT11 KIT Exon 11, Mutation Analysis
- KIT13 KIT Exon 13, Mutation Analysis
- KIT17 KIT Exon 17, Mutation Analysis
- FUSF Low-Grade Fibromyxoid Sarcoma (LGFMS), 16p11.2 (FUS or TLS) Rearrangement, FISH, Tissue
- MDM2F MDM2 (12q15) Amplification, Well-Differentiated Liposarcoma/Atypical Lipomatous Tumor, FISH, Tissue
- DDITF Myxoid/Round Cell Liposarcoma, 12q13 (DDIT3 or CHOP) Rearrangement, FISH, Tissue
- MYCNF Neuroblastoma, 2p24 (MYCN) Amplification, FISH
- PDG12 PDGFRA Exon 12, Mutation Analysis
- PDG14 PDGFRA Exon 14, Mutation Analysis
- PDG18 PDGFRA Exon 18, Mutation Analysis
- PDGF PDGFB (22q13), Dermatofibrosarcoma Protuberans/Giant Cell Fibroblastoma, FISH, Tissue
- SS18F Synovial Sarcoma (SS), 18q11.2 (SS18 or SYT) Rearrangement, FISH, Tissue
- SYT Synovial Sarcoma by Reverse Transcriptase PCR (RT-PCR)
- USPF USP6 (17p13), Aneurysmal Bone Cyst and Nodular Fasciitis, FISH, Tissue

## Breast

- MASF Angiosarcoma, MYC (8q24) Amplification, FISH, Tissue
- CTCBC Circulating Tumor Cells (CTC) for Breast Cancer by CellSearch, Blood
- FGF1F FGFR1 (8p11.2) Amplification, FISH, Tissue
- H2BR HER2 Amplification Associated with Breast Cancer, FISH, Tissue
- ESR1 Estrogen Receptor 1 (ESR1) Mutation Analysis, Tumor
- ETV6F ETV6 (12p13.2) Rearrangement, FISH, Tissue

### Immunohistochemical assays interpreted with digital image analysis

- ERPR Estrogen/Progesterone Receptor, Semi-Quantitative, Manual
- Ki67B Ki-67(MIB-1), Breast, Quantitative, Automated
- HERBA Breast, Quantitative, Automated with HER2 FISH reflex
- HERBN HER2, Breast, Quantitative, Automated, No Reflex
- HERDM HER2, Breast, DCIS, Quantitative, Manual with HER2 FISH Reflex
- HERDN HER2, Breast, DCIS, Quantitative, Manual No Reflex

## Patient Information (required)

Patient ID <i>(Medical Record No.)</i>	Client Account No.
Patient Name <i>(Last, First, Middle)</i>	Client Order No.
Birth Date <i>(Month DD, YYYY)</i>	

**Gastrointestinal**

BILAO Biliary Tract Malignancy, FISH

BRAFT BRAF Mutation Analysis (V600E), Tumor

CTCCC Circulating Tumor Cells (CTC) for Colorectal Cancer by CellSearch, Blood

EGFR2 EGFR Gene, Mutation Analysis, 29 Mutation Panel, Tumor

PRKAF Fibrolamellar Carcinoma, 19p13.1 (PRKACA) Rearrangement, FISH, Tissue

FGFR2 FGFR2 (10q26.1) Rearrangement, FISH, Tissue

GISTP GIST-Targeted Gene Panel by Next-Generation Sequencing, Tumor

H2GE HER2 Amplification Associated with Gastroesophageal Cancer, FISH, Tissue

H2MT HER2 Amplification, Miscellaneous Tumor, FISH, Tissue

HERGM HER2, Gastric/Esophageal, Semi-Quantitative Immunohistochemistry, Manual

HERGN HER2, Gastric/Esophageal, Semi-Quantitative Immunohistochemistry, Manual, No Reflex

KINET Ki-67(MIB-1), Gastrointestinal/Pancreatic Neuroendocrine Tumors, Quantitative Immunohistochemistry, Automated

KIT8 KIT Exon 8, Mutation Analysis

KIT9 KIT Exon 9, Mutation Analysis

KIT11 KIT Exon 11, Mutation Analysis

KIT13 KIT Exon 13, Mutation Analysis

KIT17 KIT Exon 17, Mutation Analysis

KRASC KRAS Mutation Analysis, 7 Mutation Panel, Colorectal

METF MET (7q31), FISH, Tissue

ML1HM MLH1 Hypermethylation Analysis, Tumor

BRMLH MLH1 Hypermethylation and BRAF Mutation Analysis, Tumor

IHC Mismatch Repair (MMR) Protein Immunohistochemistry Only, Tumor

MSI Microsatellite Instability (MSI), Tumor

RASFP RAS/RAF Targeted Gene Panel by Next-Generation Sequencing, Tumor

**Genitourinary**

TFE3F Alveolar Soft Part Sarcoma (ASPS)/Renal Cell Carcinoma (RCC), Xp11.23 (TFE3), FISH, Tissue

CTCPC Circulating Tumor Cells (CTC) for Prostate Cancer by CellSearch, Blood

GCTF Germ Cell Tumor (GCT), Isochromosome 12p, FISH, Tissue

H2UR HER2 Amplification Associated with Urothelial Carcinoma, FISH, Tissue

FUROC UroVysion for Detection of Bladder Cancer, Urine

NUT1F NUTM1 (15q14) Rearrangement, FISH, Tissue

PROF Prostate Tumor, FISH, Tissue

TFEFB Renal Cell Carcinoma, 6p21.1 (TFEB) Rearrangement, FISH, Tissue

**Gynecology**

**Endometrial/Uterine Carcinoma**

ESTUF Endometrial Stromal Tumors (EST), 7p15 (JAZF1), 6p21.32 (PHF1), 17p13.3 (YWHAE) Rearrangement, FISH, Tissue

ML1HM MLH1 Hypermethylation Analysis, Tumor

**Ovarian Carcinoma**

XL2 FOXL2 Mutation Analysis, Tumor

**Gestational/Trophoblastic Disease/ Molar Pregnancy**

POCF Products of Conception (POC) Aneuploidy Detection, FISH, Paraffin-Embedded Tissue

**Lower Anal-Genital Tract Carcinoma**

HPV6E Human Papillomavirus (HPV) High-Risk E6/E7, RNA In Situ Hybridization

HPVHL Human Papillomavirus (HPV) High/Low Risk, DNA In Situ Hybridization

HPVHR Human Papillomavirus (HPV), High-Risk, DNA In Situ Hybridization

HPVLR Human Papillomavirus (HPV), Low-Risk, DNA In Situ Hybridization

**Head and Neck**

FGF1F FGFR1 (8p11.2) Amplification, FISH, Tissue

HPVHL Human Papillomavirus (HPV) High/Low Risk, DNA In Situ Hybridization

HPVHR Human Papillomavirus (HPV), High-Risk, DNA In Situ Hybridization

HPVLR Human Papillomavirus (HPV), Low-Risk, DNA In Situ Hybridization

MAMLF MAML2 (11q21) Rearrangement, Mucoepidermoid Carcinoma (MEC), FISH, Tissue

SGTF MYB (6q23) Rearrangement, FISH, Tissue

**Melanoma**

BRAFB Cell-Free DNA BRAF V600 Test, Blood

BRAFC BRAF Mutation Analysis (V600), Melanoma

KIT11 KIT Exon 11, Mutation Analysis

KIT13 KIT Exon 13, Mutation Analysis

KIT17 KIT Exon 17, Mutation Analysis

MELF Melanoma, FISH, Tissue

MELP Melanoma Targeted Gene Panel by Next-Generation Sequencing, Tumor

UMM3F Uveal Melanoma, Chromosome 3 Monosomy, FISH, Tissue

**Neuro-oncology**

GLIOF 1p/19q Deletion in Gliomas, FISH, Tissue

BRAFT BRAF Mutation Analysis (V600E), Tumor

CMAPT Chromosomal Microarray, Tumor, Formalin-Fixed Paraffin-Embedded

GCTF Germ Cell Tumor (GCT), Isochromosome 12p, FISH, Tissue

IDH12 IDH12 Isocitrate Dehydrogenase 1 and 2 (IDH1/IDH2) Mutation Analysis, Tumor

MEDF Medulloblastoma, FISH, Tissue

MGMT MGMT Promoter Methylation, Tumor

NONCP Neuro-Oncology Expanded Panel with Rearrangement, Tumor

TERT TERT Promoter Analysis, Tumor

**Pulmonary**

BRAFT BRAF Mutation Analysis (V600E), Tumor

EGFR2 EGFR Gene, Mutation Analysis, 29 Mutation Panel, Tumor

FALKC ALK on Cytology Specimens, FISH

FGF1F FGFR1 (8p11.2) Amplification, FISH, Tissue

KRASO KRAS Mutation Analysis, 7 Mutation Panel, Other (Non-Colorectal)

LCAF Lung Cancer, ALK (2p23) Rearrangement, FISH, Tissue

EGFR Lung Cancer, EGFR with ALK Reflex, Tumor

LNGPR Lung Cancer-Targeted Gene Panel with Rearrangement, Tumor (mutations and rearrangements)

LUNGPT Lung Cancer-Targeted Gene Panel, Tumor (mutations only)

LUNGR Lung Cancer Rearrangement Testing, Tumor (rearrangements only)

RETF Lung Cancer, RET (10q11) Rearrangement, FISH, Tissue

ROS1F Lung Cancer, ROS1 (6q22) Rearrangement, FISH, Tissue

METF MET (7q31), FISH, Tissue

**ONCOLOGY: MOLECULAR DIAGNOSTIC TESTING**

**Gastrointestinal**

APCZ APC Gene, Full Gene Analysis

LYNCH Lynch Syndrome Panel

MLH1Z MLH1 Gene, Full Gene Analysis

MSH2Z MSH2 Gene, Full Gene Analysis

MSH6Z MSH6 Gene, Full Gene Analysis

MYHZ MUTYH Analysis, Full Gene Analysis

PMS2Z PMS2 Gene, Full Gene Analysis

U1A1V UDP-Glucuronosyl Transferase 1A1 TA Repeat Genotype, UGT1A1

UGTFG UDP-Glucuronosyl Transferase 1A1 (UGT1A1), Full Gene Sequencing

## Patient Information (required)

Patient ID <i>(Medical Record No.)</i>	Client Account No.
Patient Name <i>(Last, First, Middle)</i>	Client Order No.
Birth Date <i>(Month DD, YYYY)</i>	

### Inherited Endocrine

- RETZ RET Proto-Oncogene, Full Gene Analysis
- SDHP SDHB, SDHC, SDHD Gene Panel
- VHLZ VHL Gene, Full Gene Analysis

### PRIMARY BODY FLUID TESTS

Tests for disease monitoring or aiding in the diagnosis

#### Bone and Soft Tissue

- FGF23 Fibroblast Growth Factor 23 (FGF23), Plasma

#### Breast

- C2729 Breast Carcinoma-Associated Antigen (CA 27.29), Serum
- CA153 Cancer Antigen 15-3 (CA 15-3), Serum

#### Endocrine

##### Thyroid Cancer

- CATLN Calcitonin, Fine-Needle Aspiration Biopsy (FNAB)-Needle Wash, Lymph Node
- CATN Calcitonin, Serum
- CEA Carcinoembryonic Antigen (CEA), Serum
- TGMS Thyroglobulin Mass Spectrometry, Serum
- HTGFN Thyroglobulin, Tumor Marker, Fine-Needle Aspiration (FNA)-Needle Wash, Lymph Node
- HTGR Thyroglobulin, Tumor Marker Reflex to LC-MS/MS or Immunoassay
- HTG2 Thyroglobulin, Tumor Marker, Serum

##### Neuroendocrine Tumors

- CGAK Chromogranin A, Serum
- GAST Gastrin, Serum
- GLP Glucagon, Plasma
- NSE Neuron-Specific Enolase (NSE), Serum
- HPP Pancreatic Polypeptide, Plasma
- VIP Vasoactive Intestinal Polypeptide (VIP), Plasma

##### Pituitary Tumors

- ACTH Adrenocorticotropic Hormone (ACTH), Plasma
- APGH Alpha-Subunit Pituitary Tumor Marker, Serum
- FSH Follicle-Stimulating Hormone (FSH), Serum
- HGH Growth Hormone, Serum
- LH Luteinizing Hormone (LH), Serum
- MCRPL Macroprolactin, Serum
- NSE Neuron-Specific Enolase (NSE), Serum
- PLPMA Prolactin, Pituitary Macroadenoma, Serum
- PRL Prolactin, Serum

##### Biogenic Amines

- CATU Catecholamine Fractionation, Free, 24 Hour, Urine
- CATP Catecholamine Fractionation, Free, Plasma
- HVA Homovanillic Acid (HVA), 24 Hour, Urine

- HVAR Homovanillic Acid (HVA), Random, Urine
- HIAA 5-Hydroxyindoleacetic Acid (5-HIAA), 24 Hour, Urine
- METAF Metanephrines, Fractionated, 24 Hour, Urine
- PMET Metanephrines, Fractionated, Free, Plasma
- METAR Metanephrines, Fractionated, Random, Urine
- SERU Serotonin, 24 Hour, Urine
- SERWB Serotonin, Blood
- VH Vanillylmandelic Acid (VMA) and Homovanillic Acid (HVA), Random, Urine
- VMA Vanillylmandelic Acid (VMA), 24 Hour, Urine
- VMAR Vanillylmandelic Acid (VMA), Random, Urine

#### Gastrointestinal

- L3AFP Alpha-Fetoprotein (AFP) L3% and Total, Hepatocellular Carcinoma Tumor Marker, Serum
- AFPPT Alpha-Fetoprotein (AFP), Peritoneal Fluid
- AFP Alpha-Fetoprotein (AFP) Tumor Marker, Serum
- AMLPC Amylase, Pancreatic Cyst
- 199PC Carbohydrate Antigen 19-9 (CA 19-9), Pancreatic Cyst Fluid
- 199PT Carbohydrate Antigen 19-9 (CA 19-9), Peritoneal Fluid
- CA19 Carbohydrate Antigen 19-9 (CA 19-9), Serum
- CEAPC Carcinoembryonic Antigen (CEA), Pancreatic Cyst Fluid
- CEAPT Carcinoembryonic Antigen (CEA), Peritoneal Fluid
- CEA Carcinoembryonic Antigen (CEA), Serum
- CGAK Chromogranin A, Serum
- DCP Des-Gamma-Carboxy Prothrombin (DCP), Serum
- FOBT Fecal Occult Blood, Colorectal Cancer Screen, Qualitative, Immunochemical
- GAST Gastrin, Serum
- GLP Glucagon, Plasma
- HIAA 5-Hydroxyindoleacetic Acid (5-HIAA), 24 Hour, Urine
- NSE Neuron-Specific Enolase (NSE), Serum
- HPP Pancreatic Polypeptide, Plasma
- SERU Serotonin, 24 Hour, Urine
- SERWB Serotonin, Blood
- VIP Vasoactive Intestinal Polypeptide (VIP), Plasma

#### Genitourinary

- AFPSP Alpha-Fetoprotein (AFP), Spinal Fluid
- AFP Alpha-Fetoprotein (AFP) Tumor Marker, Serum
- BHCG Beta-Human Chorionic Gonadotropin, Quantitative, Serum

- BHSF Beta-Human Chorionic Gonadotropin, Quantitative, Spinal Fluid
- CEASF Carcinoembryonic Antigen (CEA), Spinal Fluid
- PSA Prostate-Specific Antigen (PSA) Diagnostic, Serum
- SPSA Prostate-Specific Antigen (PSA) Screen, Serum
- PHI11 Prostate Health Index (phi), Serum
- PSAFT Prostate-Specific Antigen (PSA), Total and Free, Serum

#### Gynecology

- BHCG Beta-Human Chorionic Gonadotropin, Quantitative, Serum
- CA25 Cancer Antigen 125 (CA 125), Serum
- HE4 Human Epididymis Protein 4, Serum
- INHA Inhibin A, Tumor Marker, Serum
- INHAB Inhibin A and B, Tumor Marker, Serum
- INHB Inhibin B, Serum
- ROMA Ovarian Malignancy Risk Algorithm

#### Pulmonary

- PF199 Carbohydrate Antigen 19-9 (CA 19-9), Pleural Fluid
- PFCEA Carcinoembryonic Antigen (CEA), Pleural Fluid
- NSE Neuron-Specific Enolase (NSE), Serum

### ADDITIONAL TESTS

(INDICATE TEST CODE AND NAME)