

MML Internal Use Only

Client Information (required)

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

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.

Submitting Physician/ Physician Name Information (required)

Submitting/Referring Physician (Last, First)	Fill in only if Call Back is required. Phone () _____ - _____ Fax * () _____ - _____
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**Fax number given must be from a fax machine that complies with applicable HIPAA regulation.*

Reason for Referral (required; include pathology case number, if appropriate)

	ICD-10 Diagnosis Code
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Note: it is the client's responsibility to maintain documentation of the order.

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: Test requests without a signature will not be performed.)

Specimens Provided

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

Pathologist's Name	Direct Phone Number	Fax Number
Pathology/Clinical Diagnosis (Please include a brief history, pertinent laboratory results, suspected diagnosis, and reason for referral.)		CBC results: HB _____ MCV _____ HCT _____ VBC _____ RBC _____ PLT _____

Ship specimens to:

Mayo Medical Laboratories
3050 Superior Drive NW
Rochester, MN 55901

Billing Information

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

Customer Service: 855-516-8404

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

Visit www.MayoMedicalLaboratories.com for the most up-to-date test and shipping information.

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Hematopathology Consultation †

70012	Pathology Consultation*
70016	Hematopathology Consultation, Wet Tissue*

Hematologic Disorders Hold Testing

HOLDC	Hematologic Disorders, Chromosome Hold, Bone Marrow or Peripheral Blood
HOLDF	Hematologic Disorders, Fluorescence In Situ Hybridization (FISH) Hold, Bone Marrow or Peripheral Blood
HLLFH	Hematologic Disorders, Leukemia/Lymphoma; Flow Hold Varies*
EXHBM	Hematologic Disorders, DNA/RNA Extract and Hold, Bone Marrow
EXHB	Hematologic Disorders, DNA/RNA Extract and Hold, Blood

Flow Cytometry

LCMS	Leukemia/Lymphoma Immunophenotyping by Flow Cytometry*
LLPT	Leukemia/Lymphoma Immunophenotyping by Flow Cytometry, Tissue
LLTOF	Leukemia and Lymphoma Phenotyping, Technical Only
MYEFL	Myelodysplastic Syndrome by Flow Cytometry, Bone Marrow
PLINK	PNH, PI-Linked Antigen, Blood
TAE	Therapeutic Antibody by Flow Cytometry
Indicate antibody:	
<input type="checkbox"/> CD20 <input type="checkbox"/> CD49d <input type="checkbox"/> CD52	

Chromosome Analysis

CHRBM	Chromosome Analysis, Hematologic Disorders, Bone Marrow
CHRHB	Chromosome Analysis, Hematologic Disorders, Blood
CHRLN	Chromosome Analysis, Lymphoid Tissue
CHRFB	Chromosome Analysis, Body Fluid
BLOOM	Chromosome Analysis, Sister Chromatid Exchange (SCE) for Bloom Syndrome, Blood
CRAT	Chromosome Analysis, Rearrangement in Ataxia Telangiectasia, Blood

Next Generation Sequencing

NGSHM	OncoHeme Next Generation Sequencing (NGS) for Hematologic Cancer
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Chromosomal Microarray

CMAH	Chromosomal Microarray, Hematologic Disorders
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ACUTE MYELOID LEUKEMIA (AML)/MYELODYSPLASTIC SYNDROME (MDS)

Acute Myeloid Leukemia (AML)

PMLR	PML/RARA Quantitative, PCR
CEBPA	CEBPA Mutations, Gene Sequencing
FFTAS	FLT3 ITD and TKD Mutation Assay
NPM1	Nucleophosmin (NPM1) Mutation Analysis

AMLF Acute Myeloid Leukemia (AML), FISH

Probe Loci	Chromosome Abnormalities
RUNX1T1/RUNX1	t(8;21)(q22;q22)
reflex: MECOM/RUNX1	t(3;21)(q26.2;q22)
PML/RARA	t(15;17)(q24.1;q21.2)
MYH11/CBFB	inv(16)(p13q22) or t(16;16)
DEK/NUP214	t(6;9)(p23;q34)
KAT6A/CREBBP	t(8;16)(p11.2;p13.3)
MLL BAP	11q23 rearrangement
reflex: AFF1/MLL	t(4;11)(q21;q23)
reflex: MLLT4/MLL	t(6;11)(q27;q23)
reflex: MLLT3/MLL	t(9;11)(p22;q23)
reflex: MLLT10/MLL	t(10;11)(p13;q23)
reflex: MLL/CREBBP	t(11;16)(q23;p13.3)
reflex: MLL/MLLT1	t(11;19)(q23;p13.3)
reflex: MLL/ELL	t(11;19)(q23;p13.1)
BCR/ABL1	t(9;22)(q34;q11.2)
MLF1/NPM1	t(3;5)(q25;q34)
RBM15/MKL1	t(1;22)(p13.3;q13.1)
RPN1/MECOM	inv(3)(q21.3q26.2) or t(3;3)
reflex: PRDM16/RPN1	t(1;3)(p36.3;q21.3)
reflex: MECOM/RUNX1	t(3;21)(q26.2;q22)
D5S630/EGR1	-5/5q deletion
D7Z1/D7S486	-7/7q deletion
D8Z2/MYC	+8
D13S319/LAMP1	13q deletion
TP53/D17Z1	-17/17p deletion
D20S108/20qter	20q deletion/ider(20q)
Perform entire panel	

Myelodysplasia (MDS)

MYEFL	Myelodysplastic Syndrome by Flow Cytometry, Bone Marrow
PLINK	PNH, PI-Linked Antigen, Blood

MDSF Myelodysplastic Syndrome (MDS), FISH

Probe Loci	Chromosome Abnormalities
RPN1/MECOM	inv(3) or t(3;3)
reflex: MECOM/RUNX1	t(3;21)(q26.2;q22)
reflex: PRDM16/RPN1	t(1;3)(p36.3;q21.3)
D5S630/EGR1	-5/5q deletion
D7Z1/D7S486	-7/7q deletion
D8Z2/MYC	+8
D13S319/LAMP1	13q deletion
TP53/D17Z1	-17/17p deletion
D20S108/20qter	20q deletion/ider(20q)
MLL BAP	11q23 rearrangement
reflex: AFF1/MLL	t(4;11)(q21;q23)
reflex: MLLT4/MLL	t(6;11)(q27;q23)
reflex: MLLT3/MLL	t(9;11)(p22;q23)
reflex: MLLT10/MLL	t(10;11)(p13;q23)
reflex: MLL/CREBBP	t(11;16)(q23;p13.3)
reflex: MLL/MLLT1	t(11;19)(q23;p13.3)
reflex: MLL/ELL	t(11;19)(q23;p13.1)
Perform entire panel	

MSTF Myeloid Sarcoma, FISH, Tissue

Probe Loci	Chromosome Abnormalities
RUNX1T1/RUNX1	t(8;21)(q22;q22)
BCR/ABL1	t(9;22)(q34;q11.2)
MLL BAP	11q23 rearrangement
PML/RARA	t(15;17)(q24.1;q21.2)
MYH11/CBFB	inv(16)(p13q22) or t(16;16)

IMRGF Imatinib Mesylate Responsive Genes, FISH

Probe Loci	Chromosome Abnormalities
ABL2 BAP	1q25 rearrangement
FIP1L1/CHIC2/PDGFRB	4q12 deletion/rearrangement
PDGFRB BAP	5q33 rearrangement
ABL1 BAP	9q34 rearrangement
Perform entire panel	

MYELOPROLIFERATIVE NEOPLASM (MPN)

BCR/ABL testing

BADX	BCR/ABL, mRNA Detection, RT-PCR, Qual, Diagnostic Assay*
BCRAB	BCR/ABL, p210, mRNA RT-PCR, Quant, Monitoring Chronic Myelogenous Leukemia (CML)
BA190	BCR/ABL, p190, mRNA Detection, RT-PCR, Quant, Monitoring Assay
BAKDM	BCR/ABL, Tyrosine Kinase Inhibitor Resistance, Kinase Domain Mutation Screen
922F	BCR/ABL1 Translocation (9;22), FISH

JAK2-CALR-MPL-JAK2V617F testing

MPNR	Myeloproliferative Neoplasm (MPN), JAK2 V617F with reflex to CALR and MPL
JAK2B	JAK2 V617F Mutation Detection, Blood*
JAK2M	JAK2 V617F Mutation Detection, Bone Marrow*
JAK2V	JAK2 V617F Mutation Detection, Varies
CALR	CALR Mutation Analysis, Myeloproliferative Neoplasm (MPN)*
MPLB	MPL Exon 10 Mutation Detection, Blood*
MPLM	MPL Exon 10 Mutation Detection, Bone Marrow*
MPLVA	MPL Exon 10 Mutation Detection, Varies
JAKXB	JAK2 Exon 12 and Other Non-V617F Mutation Detection, Blood*
JAKXM	JAK2 Exon 12 and Other Non-V617F Mutation Detection, BM*

CHICF CHIC2 (4q12) Deletion (FIP1L1 and PDGFRB Fusion), FISH

512F	PDGFRB/TEL Translocation (5;12) for Chronic Myelomonocytic Leukemia (CMML), FISH
FGFRF	FGFR1 (8p11.2) Rearrangement, FISH

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IMRGF	Imatinib Mesylate Responsive Genes, FISH
<i>Probe Loci</i>	<i>Chromosome Abnormalities</i>
ABL2 BAP	1q25 rearrangement
FIP1L1/CHIC2/PDGFR	4q12 deletion/rearrangement
PDGFRB BAP	5q33 rearrangement
ABL1 BAP	9q34 rearrangement
Perform entire panel	
KIT Mutation testing	
KITB	KIT Asp816Val Mutation Analysis, Blood
KITBM	KIT Asp816Val Mutation Analysis, Qualitative PCR, Bone Marrow
KITAS	KIT Asp816Val Mutation Analysis, Qualitative PCR

TCGR	T-Cell Receptor Gene Rearrangement, PCR, Blood
TCGBM	T-Cell Receptor Gene Rearrangement, PCR, Bone Marrow*
TCGRV	T-Cell Receptor Gene Rearrangement, PCR, Varies

MUR	Lysozyme (Muramidase), Plasma
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LYMPHOID DISORDERS

B-Cell	
ALLM	B-ALL Monitoring, MRD Detection, Bone Marrow
BCGR	Immunoglobulin Gene Rearrangement, Blood
BCGBM	Immunoglobulin Gene Rearrangement, Bone Marrow
BCGRV	Immunoglobulin Gene Rearrangement, Varies
MYD88	MYD88, L265P, Somatic Gene Mutation, DNA Allele-Specific PCR
VISCS	Viscosity, Serum

BALLF	B-Cell Acute Lymphoblastic Leukemia (B-ALL), FISH
<i>Probe Loci</i>	<i>Chromosome Abnormalities</i>
PBX1/TCF3	t(1;19)(q23;p13.3)
ETV6/RUNX1	t(12;21)(p13;q22)
BCR/ABL1	t(9;22)(q34;q11.2)
MLL BAP	11q23 rearrangement
reflex: AFF1/MLL	t(4;11)(q21;q23)
reflex: MLLT4/MLL	t(6;11)(q27;q23)
reflex: MLLT3/MLL	t(9;11)(p22;q23)
reflex: MLLT10/MLL	t(10;11)(p13;q23)
reflex: MLL/MLLT1	t(11;19)(q23;p13.3)
reflex: MLL/ELL	t(11;19)(q23;p13.1)
CDKN2A/D9Z1	-9/9p deletion or +9
D4Z1/D10Z1/D17Z1	+4,+10,+17, hyper-or hypodiploidy
TP53/D17Z1	-17/17p deletion
IGH BAP	14q32 rearrangement
reflex: CRLF2/IGH	t(X;14) or t(Y;14)
Perform entire panel	

BLPF	B-Cell Lymphoma, FISH, Blood or Bone Marrow
BLYMF	B-Cell Lymphoma, FISH, Tissue
<i>Probe Loci</i>	<i>Chromosome Abnormalities</i>
Burkitt (pediatric)	
MYC BAP	8q24.1 rearrangement
IGK/MYC	t(2;8)(p12;q24.1)
MYC/IGH	t(8;14)(q24.1;q32)
MYC/IGL	t(8;22)(q24.1;q11.2)
BCL6 BAP	3q27 rearrangement
BCL2 BAP	18q21 rearrangement
Perform entire panel	
Diffuse large B-cell, Burkitt-like "double-hit"	
MYC BAP	8q24.1 rearrangement
IGK/MYC	Reflex: t(2;8)(p12;q24.1)
MYC/IGH	Reflex: t(8;14)(q24.1;q32)
MYC/IGL	Reflex: t(8;22)(q24.1;q11.2)
BCL6 BAP	Reflex: 3q27 rearrangement
BCL2 BAP	Reflex: 18q21 rearrangement
Perform entire panel	
Follicular	
BCL2 BAP	18q21 rearrangement
BCL6 BAP	3q27 rearrangement
Perform entire panel	
Mantle cell	
CCND1/IGH	t(11;14)(q13;q32)
CCND1 BAP	Reflex: 11q13 rearrangement
TP53/D17Z1	Blastoid subtype only: deletion of 17p
MYC BAP	Blastoid subtype only: 8q24.1 rearrangement
Perform entire panel	
Mucosa-associated lymphoid tissue (MALT)	
MALT1 BAP	18q21 rearrangement
Splenic marginal zone	
D7Z1/7q32	Deletion of 7q
TP53/D17Z1	Deletion of 17p
Perform entire panel	

CLL	
CLLM	CLL Monitoring, MRD Detection, Blood
PCLLM	CLL Monitoring, MRD Detection, Bone Marrow
BCLL	IGH for B-Cell Chronic Lymphocytic Leukemia (B-CLL), Somatic Hypermutation Analysis
ZAP70	ZAP-70, Chronic Lymphocytic Leukemia (CLL) Prognosis
P53CA	Hematologic Neoplasms, TP53 Somatic Mutation, DNA Sequencing Exons 4-9

CLLF	Chronic Lymphocytic Leukemia (CLL), FISH
SLLF	Small Lymphocytic Lymphoma, FISH, Tissue
<i>Probe Loci</i>	<i>Chromosome Abnormalities</i>
D6Z1/MYB	-6/6q deletion
D11Z1/ATM	-11/11q deletion
D12Z3/MDM2	+12
D13S319/LAMP1	-13/13q deletion
TP53/D17Z1	-17/17p deletion
CCND1/IGH	t(11;14)(q13;q32)
reflex: IGH/BCL2	t(14;18)(q32;q21)
reflex: IGH/BCL3	t(14;19)(q32;q13)
Perform entire panel	

IRF4F	Cutaneous Anaplastic Large Cell Lymphoma, 6p25.3 (DUSP22 or IRF4) Rearrangement, FISH, Tissue
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T-Cell	
TCGR	T-Cell Receptor Gene Rearrangement, PCR, Blood
TCGBM	T-Cell Receptor Gene Rearrangement, PCR, Bone Marrow*
TCGRV	T-Cell Receptor Gene Rearrangement, PCR, Varies

TP63F	Peripheral T-Cell Lymphoma (PTCL), TP63 (3q28) Rearrangement, FISH, Tissue
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TALLF	T-Cell Acute Lymphoblastic Leukemia (T-ALL), FISH
<i>Probe Loci</i>	<i>Chromosome Abnormalities</i>
BCR/ABL1	t(9;22) and ABL1 amplification
MLL BAP	11q23 rearrangement
reflex: AFF1/MLL	t(4;11)(q21;q23)
reflex: MLLT4/MLL	t(6;11)(q27;q23)
reflex: MLLT3/MLL	t(9;11)(p22;q23)
reflex: MLLT10/MLL	t(10;11)(p13;q23)
reflex: MLL/MLLT1	t(11;19)(q23;p13.3)
reflex: MLL/ELL	t(11;19)(q23;p13.1)
CDKN2A/D9Z1	-9/9p deletion or +9
STIL/TAL1	1p32 rearrangement
TLX3/BCL11B	t(5;14)(q35;q32)
TRB BAP	7q34 rearrangement
reflex: MYB/TRB	t(6;7)(q23;q34)
reflex: TRB/TLX1	t(7;10)(q34;q24)
reflex: TRB/LMO1	t(7;11)(q34;p15)
reflex: TRB/LMO2	t(7;11)(q34;p13)
MLLT10/PICALM	t(10;11)(p12;q14)
TRAD BAP	14q11.2 rearrangement
reflex: MYC/TRAD	t(8;14)(q24.1;q11.2)
reflex: TLX1/TRAD	t(10;14)(q24;q11.2)
reflex: LMO1/TRAD	t(11;14)(p15;q11.2)
reflex: LMO2/TRAD	t(11;14)(p13;q11.2)
Perform entire panel	

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TLPF	T-Cell Lymphoma, FISH, Blood or Bone Marrow
TLYMF	T-Cell Lymphoma, FISH, Tissue
<i>Probe Loci</i>	<i>Chromosome Abnormalities</i>
TCL1A BAP	14q32 rearrangement
D7Z1/D7S486 and D8Z2/MYC	-7/iso(7q) and +8
ALK BAP (tissue only)	2p23 rearrangement

Myeloma	
MSMAR	Mayo Stratification for Myeloma and Risk-Adapted Therapy Report
PBLI	Plasma Cell Assessment, Blood
PCPRO	Plasma Cell DNA Content and Proliferation, Bone Marrow

NKCP	Natural Killer (NK) Cytotoxicity Profile
BMTF	XX/XY in Opposite Sex Bone Marrow Transplantation, FISH

ADDITIONAL TESTS (Indicate Test ID and Name)

MYELOMA, AMYLOIDOSIS & DYSPROTEINEMIA

Amyloid	
FABP	Amyloid Beta-Protein
82091	Amyloid Protein Identification, Paraffin, LC-MS/MS
ATTRZ	TTR Gene, Full Gene Analysis
FMTT	Familial Mutation, Targeted Testing
TTRX	Amyloidosis, Transthyretin-Associated Familial, Reflex, Blood
8973	Congo Red Stain
9273	Subcutaneous Fat Aspirate

PCPDF	Plasma Cell Proliferative Disorder (PCPD), FISH
MFCF	Myeloma, FISH, Fixed Cells (fixed cell pellet only)
PLASF	Plasma Cell Proliferative Disorder, FISH, Tissue
Perform entire panel	
<i>Probe Loci</i>	<i>Chromosome Abnormalities</i>
CCND1/IGH	t(11;14)(q13;q32)/+11
IGH BAP	14q32 rearrangement
reflex: IGH/MAF	t(14;16)(q32;q23)
reflex: IGH/MAFB	t(14;20)(q32;q12)
reflex: FGFR3/IGH	t(4;14)(p16.3;q32)
reflex: CCND3/IGH	t(6;14)(p21;q32)
RB1/LAMP1	-13/13q deletion
D3Z1/D7Z1	+3 and +7
D9Z1/D15Z4	+9 and +15
TP53/D17Z1	-17/17p deletion/+17
TP73/CKS1B	1q21 gain
MYC BAP	8q24 rearrangement

BONE MARROW TRANSPLANT

ALLM	B-ALL Monitoring, MRD Detection, Bone Marrow
CHEP	Chimerism-Recipient Engraftment (Post)
CHRGB	Chimerism-Recipient Germline (Pre)
CLLM	CLL Monitoring, MRD Detection, Blood
PCLLM	CLL Monitoring, MRD Detection, Bone Marrow
DIS1	HLA Class I Molecular Typing Disease Association
DIS2	HLA Class II Molecular Typing Disease Association

BAP= break apart probes

*Algorithms are available online for these tests. Visit www.MayoMedicalLaboratories.com

† It is essential that the pathology/diagnostic report, brief history, and physician name and number are provided.

Patient information sheets are recommended-refer to the test catalog at www.mayomedicallaboratories.com