Reporting Title: Leukemia/Lymphoma; Tech Only Flow
Performing Location: Rochester

Specimen Requirements:
Specimen must arrive within 48 hours of collection for spinal fluid, 72 hours for serous fluids, and 96 hours for peripheral blood, bone marrow, and tissues.

This test is not appropriate for and cannot support diagnosis of sarcoidosis, hypersensitivity pneumonitis, interstitial lung diseases, or differentiating between pulmonary tuberculosis and sarcoidosis (requests for CD4/CD8 ratios). Specimens sent for these purposes will be rejected.

The following information is required:
1. Pertinent clinical history including reason for referral or clinical indication
2. Clinical or morphologic suspicion
3. Specimen source
4. Date and time of collection

Forms:
1. Hematopathology Patient Information Sheet (Supply T676) in Special Instructions
2. If not ordering electronically, please submit a Hematopathology/Molecular Oncology Request Form (Supply T241) with the specimen.

Submit only 1 of the following specimens:

Specimen Type: Blood
Container/Tube:
Preferred: Yellow top (ACD solution B)
Acceptable: ACD (solution A), heparin, EDTA
Specimen Volume: 10 mL
Collection Instructions:
1. Do not transfer blood to other containers.
2. Include 5- to 10-unstained blood smears, if possible.
3. Label specimen as blood.
Specimen Stability Information: Ambient <96 hours/Refrigerated < or =96 hours

Specimen Type: Bone marrow
Container/Tube:
Preferred: Yellow top (ACD solution B)
Acceptable: ACD (solution A), heparin, EDTA
Specimen Volume: 1-5 mL
Collection Instructions:
1. Submission of bilateral specimens is not required.
2. Include 5- to 10-unstained bone marrow aspirate smears, if possible.
3. Label specimen as bone marrow.
Specimen Stability Information: Ambient <96 hours/Refrigerated < or =96 hours
Additional Information: If cytogenetic tests are also desired when drawing LCMS / Leukemia/Lymphoma Immunophenotyping by Flow Cytometry, an additional specimen should be submitted. It is important that the specimen be obtained, processed, and transported according to instructions for the other required test.

Specimen Type: Tissue
Container/Tube: Sterile container with 15 mL of tissue culture medium (eg, Hank's balanced salt solution [Supply T132], RPMI, or equivalent)
Specimen Volume: 5 mm(3) or larger biopsy
Collection Instructions:
1. Send intact specimen (do not mince).
2. Specimen cannot be fixed.
Additional Information:
1. Date, time of collection, tissue type, and location are required.
2. A pathology/diagnostic report including the client surgical pathology case number, a brief history, reason for referral or clinical suspicion are required before the specimen will be processed.
Specimen Stability Information: Ambient <96 hours/Refrigerated < or =96 hours

Specimen Type: Fluid
Sources: Serous effusions
Container/Tube: Body fluid container
Specimen Volume: 20 mL
Collection Instructions:
1. If possible, the fluids other than spinal fluid should be anticoagulated with heparin (1 U/mL of fluid).
2. The volume of fluid necessary to phenotype the lymphocytes or blasts in serous effusions depends upon the cell count in the specimen. Usually 20 mL of pleural or peritoneal fluid is sufficient. Smaller volumes can be used if there is a high cell count.
3. Label specimen with fluid type.
Specimen Stability Information: Refrigerated <72 hours/Ambient < or =72 hours

Specimen Type: Spinal fluid
Container/Tube: Sterile vial
Specimen Volume: 1-1.5 mL
Collection Instructions:
1. An original cytospin preparation (preferably unstained) must be included with the spinal fluid specimen so correlative morphologic evaluation can occur.
2. The volume of fluid necessary to phenotype the lymphocytes or blasts in spinal fluid depends upon the cell count in the specimen. A cell count should be determined and submitted with the specimen. Usually 1 to 1.5 mL of spinal fluid is sufficient. Smaller volumes can be used if there is a high cell count. If cell count is <10 cells/mcL, a larger volume of spinal fluid may be required. When cell counts drop below 5 cells/mcL, the immunophenotypic analysis may not be successful.
3. Label specimen as spinal fluid.
Specimen Stability Information: Refrigerated <48 hours/Ambient < or =48 hours
Additional Information: Spinal fluid cell and differential counts are required.

Specimen Type	Temperature	Time
Varies	Varies	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
CK071	Flow Cytometry	Alphanumeric		In Process
CK072	Final Diagnosis	Alphanumeric		In Process
CK073	Microscopic Description	Alphanumeric		In Process
CK074	Special Studies	Alphanumeric		N/A

CPT Code Information:

88184-Flow cytometry; first cell surface, cytoplasmic or nuclear marker
88185-Flow cytometry; additional cell surface, cytoplasmic or nuclear marker (each)
Additional CPTs may be added if consultative help is needed with the case, or algorithm dictates Mayo consultant involvement.
88187-Flow cytometry interpretation, 2 to 8 markers (if appropriate)
88188-Flow cytometry interpretation, 9 to 15 markers (if appropriate)
88189-Flow cytometry interpretation, 16 or more markers (if appropriate)

Reflex Tests:

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
88465	Flow Cytometry Interp, 2-8 Markers	1	88187	No	No
88466	Flow Cytometry Interp, 9-15 Markers	1	88188	No	No
88467	Flow Cytometry Interp,16 or greater	1	88189	No	No
VBETA	TCR V-BETA		Profile	No	No

Result Codes for Reflex Tests:

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
88465	88465	Flow Cytometry Interp, 2-8 Markers			N/A
88466	88466	Flow Cytometry Interp, 9-15 Markers			N/A
88467	88467	Flow Cytometry Interp,16 or greater			N/A
VBETA	80028	TCR V-beta			In Process

Reference Values:

Not applicable