

Leukemia and Lymphoma Immunophenotyping, Technical Only, Tissue

Test ID: LLTOT

Useful for:

Evaluation of tissues for potential involvement by:

- Chronic lymphoproliferative disorders
- Malignant lymphomas
- Acute lymphoblastic leukemia
- Acute myelogenous leukemia

Additional Tests:

Test ID	Reporting Name	Available Separately	Always Performed
FIRST	Flow Cytometry, Cell Surface, First (Bill Only)	No (Bill Only)	Yes
ADD1	Flow Cytometry, Cell Surface, Additional (Bill Only)	No (Bill Only)	Yes

Reflex Tests:

Test ID	Reporting Name	Available Separately	Always Performed
FCINT	Flow Cytometry Interpretation, 2 to 8 Markers (Bill Only)	No (Bill Only)	No
FCIMS	Flow Cytometry Interpretation, 9 to 15 Markers (Bill Only)	No (Bill Only)	No
FCINS	Flow Cytometry Interpretation, 16 or More Markers (Bill Only)	No (Bill Only)	NO

Methods:

Immunophenotyping

Reference Values:

Not applicable

Specimen Requirements:

Specimen Type: Tissue

Supplies: Hank's Solution (T132)

Container/Tube: Sterile container with 15 mL of tissue culture medium (eg, Hank's balanced salt solution, 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.

Specimen Stability Information: Ambient < or =4 days/Refrigerated < or =4 days

Specimen Stability Information:

Specimen Type	Temperature
Tissue	Refrigerated (preferred)
	Ambient

Cautions:

It is well recognized that a negative flow cytometry result does not exclude tissue involvement by hematolymphoid malignancy. This may be attributable to sampling bias, although some malignancies, such as Hodgkin lymphoma, are not detected by this technique.

Viability will be assessed in all tissue specimens. Cases in which the viability is low (<50%) are prone to false-negative results and, therefore, must be interpreted with caution. In cases with viability less than 50%, testing will be attempted but may not be interpretable. Fine-needle aspiration and small biopsy specimens have a higher frequency of low cell counts and poor viability, which may be uninterpretable.

Even when abnormal, in most instances the results of flow cytometry are insufficient for complete subclassification of a hematolymphoid malignancy. Precise subclassification requires correlation with the histopathologic features in paraffin-embedded materials and, in some instances, the results of cytogenetic analyses.

The tissue used for flow cytometry cannot be subsequently submitted for histopathologic evaluation. For this reason, this technique should be avoided in small biopsy specimens.

CPT Code:

88184-Flow cytometry; first cell surface, cytoplasmic or nuclear marker x 1

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)

Day(s) Performed: Monday through Sunday

Report Available: 1 to 4 days

Questions

Contact Connie Penz, Laboratory Resource Coordinator at 800-533-1710.

