
Reporting Title: Adult ALL (B-cell), FISH**Performing Location:** Rochester**Ordering Guidance:**

This test is only performed on specimens from patients with B-cell acute lymphoblastic leukemia/lymphoma (B-ALL/LBL) who are 31 years of age or older.

This test is intended for instances when the entire B-ALL/LBL fluorescence in situ hybridization (FISH) panel is needed for an adult patient.

This test should NOT be used to screen for residual B-cell acute lymphoblastic leukemia/lymphoma (B-ALL/LBL).

If using FISH to monitor B-ALL patients, it is recommended to use individual (or limited) FISH probe sets.

If limited B-cell ALL FISH probes are preferred, order BALMF / B-Cell Acute Lymphoblastic Leukemia/Lymphoma (ALL), Specified FISH, Varies, and request specific probes for targeted abnormalities.

If the patient clinically relapses, a conventional chromosome study may be useful to identify cytogenetic changes in the neoplastic clone or the possible emergence of a new therapy-related myeloid clone.

If this test is ordered on a patient 30 years of age or younger, this test will be canceled and automatically reordered by the laboratory as BALPF / B-Cell Acute Lymphoblastic Leukemia/Lymphoma (ALL), Pediatric, FISH, Varies.

If this test is ordered and the laboratory is informed that the patient is 30 years of age or younger AND is on a Children's Oncology Group protocol, this test will be canceled and automatically reordered by the laboratory as COGBF / B-Cell Acute Lymphoblastic Leukemia/Lymphoma (ALL), Children's Oncology Group Enrollment Testing, FISH, Varies.

If either or both AMLAF / Acute Myeloid Leukemia (AML), Specified, FISH, Adult, Varies; or TALAF / T-Cell Acute Lymphoblastic Leukemia/Lymphoma (ALL), Adult, FISH, Varies, are ordered concurrently with this test, the laboratory may cancel this test and automatically reorder as BALMF / B-Cell Acute Lymphoblastic Leukemia/Lymphoma (ALL), Specified FISH, Varies with the following FISH probes: ETV6/RUNX1, PBX1/TCF3, 4/10/17, break-apart IGH, break-apart CRLF2, break-apart P2RY8, break-apart ABL2, and IKZF1/cep7. If an abnormality is identified that would result in reflex testing in BALAF, the same reflex testing will be performed in the BALMF. This cancellation is necessary to avoid duplicate testing. Probes for break-apart PDGFRB, break-apart JAK2, CDKN2A/D9Z1, ABL1/BCR, break-apart ABL1, break-apart MLL, TP53/D17Z1 will still be performed as part of the adult T-ALL FISH panel.

If PHLDF / Philadelphia Chromosome-like Acute Lymphoblastic Leukemia (Ph-like ALL), Diagnostic FISH, Varies, is ordered concurrently with this test, PHLDF testing will be canceled. This cancellation is necessary to avoid duplicate testing as PHLDF probes are included within this test when appropriate.

For patients with B-cell lymphoma, order BLPMF / B-Cell Lymphoma, Specified FISH, Varies.

For testing paraffin-embedded tissue samples from patients with B-ALL/LBL, order BLBLF / B-Cell Acute Lymphoblastic Leukemia/Lymphoma, FISH, Tissue. If a paraffin-embedded tissue sample is submitted for this test, it will be canceled and BLBLF will be added and performed as the appropriate test.

Additional Testing Requirements:

At diagnosis, conventional cytogenetic studies (CHRBM / Chromosome Analysis, Hematologic Disorders, Bone Marrow) and this panel should both be performed per National Comprehensive Cancer Network guidelines. If there is limited specimen available, only this test will be performed.

Shipping Instructions:

Advise Express Mail or equivalent if not on courier service.

Necessary Information:

1. A reason for testing and a flow cytometry and/or a bone marrow pathology report should be submitted with each specimen. The laboratory will not reject testing if this information is not provided; however, appropriate testing and/or interpretation may be compromised or delayed in some instances. If not provided, an appropriate indication for testing may be entered by Mayo Clinic Laboratories.
2. If the patient has received a bone marrow transplant from a person of an opposite sex, note this information on the request.

Specimen Requirements:

Submit only 1 of the following specimens:

Preferred

Specimen Type: Bone marrow

Container/Tube:

Preferred: Yellow top (ACD)

Acceptable: Green top (heparin) or lavender top (EDTA)

Specimen Volume: 2 to 3 mL

Collection Instructions:

1. It is preferable to send the first aspirate from the bone marrow collection.
2. Invert several times to mix bone marrow.
3. Send bone marrow specimen in original tube. Do not aliquot.

Acceptable

Specimen Type: Whole blood

Container/Tube:

Preferred: Yellow top (ACD)

Acceptable: Green top (heparin) or lavender top (EDTA)

Specimen Volume: 6 mL

Collection Instructions:

1. Invert several times to mix blood.
2. Send whole blood specimen in original tube. Do not aliquot.

Specimen Minimum Volume:

Whole blood: 2 mL; Bone marrow: 1 mL

Forms:

If not ordering electronically, complete, print, and send a Hematopathology/Cytogenetics Test Request (T726) with the specimen.

Specimen Type	Temperature	Time	Special Container
Varies	Ambient (preferred)		
	Refrigerated		

Ask at Order Entry (AOE) Questions:

Test ID	Question ID	Description	Type	Reportable
BALAF	GC065	Reason for Referral	Plain Text	Yes
BALAF	GC066	Specimen: • Whole blood ACD • Bone marrow ACD • Whole blood Na Hep • Bone marrow Na Hep • Whole blood EDTA • Bone marrow EDTA	Answer List	Yes

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
609538	Result Summary	Alphanumeric		50397-9
609539	Interpretation	Alphanumeric		69965-2
609540	Result Table	Alphanumeric		93356-4
609541	Result	Alphanumeric		62356-1
GC065	Reason for Referral	Alphanumeric		42349-1
GC066	Specimen	Alphanumeric		31208-2
609542	Source	Alphanumeric		31208-2
609543	Method	Alphanumeric		85069-3
609544	Additional Information	Alphanumeric		48767-8
609545	Disclaimer	Alphanumeric		62364-5
609546	Released By	Alphanumeric		18771-6

LOINC and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

CPT Code Information:

88271 x4, 88275 x2, 88291 - FISH Probe, Analysis, Interpretation; 2 probe sets
88271 x2, 88275 - FISH Probe, Analysis; each additional probe set (if appropriate)
88271 - FISH Probe (if appropriate)

Reflex Tests:

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
BALAB	Probe, Each Additional (BALAF)			No	No (Bill Only)
BAL3B	Probe, Tri-color (BAL)			No	No (Bill Only)

Reference Values:

An interpretive report will be provided.