

Cytogenetics, Flow Cytometry and FISH Specimens for Leukemia, Lymphoma and Other Oncology Referrals

General Specimen Requirements

- DO NOT ADD FORMALIN
- Use sterile technique; maintain sterility
- Close tubes tightly.
- □ Keep at ambient room temperature; avoid freezing or exposing the specimen to extreme temperatures. Protect from temperature extremes by adding an ice pack to the shipping carton during hot weather. **Keep the ice pack from coming into direct contact with the specimen**.
- Do not centrifuge or split specimens.
- □ Handle as PRIORITY specimen. It is preferable that specimens be received the same day of collection, and always within 24 hours.
- □ Lymph nodes and other tissue should be delivered to the laboratory for processing on the same day as collection for best results. Flow Studies are best if delivered by 4 p.m.

Information to Submit with Specimen

- Complete a Legacy Laboratory Services requisition.
- □ Include clinical indication or suspected diagnosis.
- □ For blood and bone marrow Flow Studies, include recent CBC with differential (collected within 72hrs).
- □ For bone marrow Flow Studies, always include unstained aspirate and blood smears, minimum of two each, preferably four each.

General Shipping Guidelines

- □ For local delivery: Call Client Services at (503) 413-1234 or Toll Free 1-877-270-5566 to arrange a PRIORITY local courier service.
- □ For long distance shipping: Ship specimens with a priority status for delivery within 24 hours. Use courier service previously arranged by your Legacy Diagnostic Field Representative. Call Client Services Toll Free 1-877-270-5566 to notify us of your transportation method and tracking number.

| | TISSUE Lymph node, tumor biopsy | BLOOD | BONE MARROW | |
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| CYTOGENETIC | S | | | |
| Specimen Requirements | Approx 1.0 cm³ biopsy, covered with sterile saline, Hank's balanced salt solution or transport media (e.g. RPMI). | 2-4 mL blood in preservative free sodium heparin vacutainer tube (dark green top). | Collect 2-4 mL in sterile sodium heparinized syringe. Mix well by inverting and transfer into sterile sodium heparin tube (dark green top). | |
| Comments | | Leukemia workups require a minimum of 5% blasts. | RPMI is recommended if transit time of more than six hours is anticipated. | |
| PATHOLOGY | | | | |
| Specimen Requirements | | | Place bone marrow biopsy and aspirate clot into separate containers with 10% neutral buffered formalin. Note: Do not use B5. | |



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| | TISSUE Lymph node, tumor biopsy | BLOOD | BONE MARROW | | |
| FISH | | | | | |
| Specimen Requirements | Specimens for HER-2/neu FISH: | Specimens for Multiple Myeloma: Collect 2-4 mL of peripheral blood in EDTA (lavender top) or sodium heparin (green top) tube. | Specimens of Multiple Myeloma: | | |
| | Only 10% neutral buffered formalin-fixed, paraffin embedded tissue sections; minimum of two charged slides or paraffin block are acceptable (with an H&E stained slide). | | Collect 2-4 mL of bone marrow in EDTA (lavender top) tube, sodium heparin (green top) tube or RPMI. | | |
| | For all other specimens: | For all other specimens: | For all other specimens: | | |
| | Fresh tissue immersed in RPMI media. Transport at ambient room temperature within 24 hours of collection OR (adults only) 10% neutral buffered formalinfixed, paraffin embedded tissue sections; minimum of two charged slides or paraffin block are acceptable (with an H&E stained slide). | Collect: 2-4 mL blood (for pediatrics) in preservative free sodium heparin vacutainer tube (dark green top). Or (for adults) 2-4 mL of peripheral blood in sodium heparin (green top) or EDTA (lavender top) tube. | Collect 2-4 mL (for adults) of bone marrow in EDTA (lavender top), or 2-4mL (for pediatrics) in sodium heparin (green top) tube or RPMI is recommended if transit time of more than six hours is anticipated. | | |
| | TISSUE Lymph node, tumor biopsy | BLOOD | BONE MARROW | | |
| FLOW CYTOMETRY | | | | | |
| Specimen Requirements | Completely immerse fresh tissue in RPMI tissue culture medium. Arrange for delivery to the lab by 4 p.m. on the same day of collection. | 2-4 mL EDTA (lavender top) anticoagulated blood. | Collect 2-4 mL in sterile sodium heparinized syringe. Mix well by inverting and transfer into an EDTA tube (lavender top) or into RPMI for transport to the laboratory. | | |
| Comments | | | RPMI is recommended if transit time of more than six hours is anticipated. | | |
| FLOW CYTOMETRY Specimen Requirements | | | | | |
| FNA | CSF | BAL | BODY FLUIDS | | |
| FNA in 5 mL RPMI | 1-3 mL CSF in sterile container. Preferred: Centrifuge CSF, decant supernate and resuspend CSF cell pellet in 2 mL RPMI. Transport CSF cell pellet in RPMI at room temp ASAP. | 15.0 mL BAL fluid. Transport at room temp. | 15.0-30.0 mL Body Fluid. Do not send evac bottle. | | |

Specimen rejection: ONLY by Cytogenetics, Flow Cytometry or FISH lab personnel