

Send Specimens To:
PhenoPath Laboratories
 551 North 34th Street, Suite 100
 Seattle, WA 98103-8675
 Phone: (206)374-9000
 Fax: (206)374-9009
 e-mail: lab@phenopath.com

Enclosed please find the **RPMI** you requested. Specimens in **RPMI** must be refrigerated. Please contact PhenoPath Laboratories if you have any questions.

Please make arrangements with PhenoPath Laboratories when **RPMI** is nearing its expiration date or stock is running low. Allow 2 weeks for preparation and delivery.

Instructions for Sending Specimens for Flow Cytometry

RPMI REQUIREMENTS:

- NOTE:** **RPMI** is the same as **RPMI-1640/10% FBS** (fetal bovine serum)
- STORE:** **RPMI** is stored **refrigerated at 2-8° C.**
- SHELF-LIFE:** **2 Months** from the date prepared or until it turns cloudy or becomes **yellow** (refer to exp. date on vial).
- DISPOSAL:** In accordance with all applicable federal, state and local regulations

Submit fresh specimens (examples) in following manner:

Specimen	Anticoagulant or Media to use:	Shipping Temp.	Specimen Viability
Bone Marrow Aspirate	<ul style="list-style-type: none"> • Green-top tube (Heparin) (preferred for Flow) • Lavender-top tube (EDTA) (preferred for PCR) 	on ice packs	Generally 24-48 hrs
Blood (peripheral)	<ul style="list-style-type: none"> • Green-top tube (Heparin) (preferred for Flow) • Lavender-top tube (EDTA) (preferred for PCR) • Red-top (clot) tube – serum (NOT for Flow) 	on ice packs	Generally 24-48 hrs
Unfixed tissue (e.g. lymph nodes, FNA, aspirates, tumor)	<ul style="list-style-type: none"> • RPMI PhenoPath can provide this. 	on ice packs	Generally 24-48 hrs
Cerebrospinal Fluid (CSF)	<ul style="list-style-type: none"> • RPMI use as much RPMI as possible, at least equal in volume to CSF. PhenoPath can provide this. 	on ice packs	Optimally 24 hours or less
Other Body fluids or bronchoalveolar lavages (BAL)	<ul style="list-style-type: none"> • RPMI use as much RPMI as possible, at least equal in volume to fluid. PhenoPath can provide this. 	on ice packs	Generally 24-48 hrs

NOTE: For any case: Do Not Freeze Specimen or Transport Medium (Never Ship on Dry Ice).

1. Label all specimen containers with the patient name and identifying number.
2. Place all specimen containers in **leak proof biohazard bag** with absorbent material. Use **Ice Packs** and a Styrofoam mailer when shipping.
3. Enclose the following in the package:
 - Completed PhenoPath Laboratories requisition form
 - Billing information
 - Clinical information
 - Mailer with specimen enclosed
4. Return to PhenoPath Laboratories via FedEx, courier, or other delivery method of choice.
Please do not use US Mail Service. Free overnight delivery is available.

RE: Saturday Delivery FedEx Billable Stamp

PhenoPath Laboratories can provide FedEx prepaid billable stamps for use with fresh specimens that need to arrive on **Saturday** (instead of Monday). These stamps **MUST** be used to ensure Saturday delivery.

Please use these specific billable stamps only for fresh specimens that are sent on Friday to arrive on Saturday. If you have a specimen to send to PhenoPath Laboratories Monday thru Thursday, or on Friday for Monday delivery, please use the standard prepaid FedEx billable stamp (also supplied by PhenoPath Laboratories). Please let client services know if you are in need of additional billable stamps of either kind.

NOTE: Detailed Specimen Requirements on next page.

SPECIMEN REQUIREMENTS:

Flow Cytometry (for Leukemia/Lymphoma Diagnosis)

Please include all relevant clinical data, including previous diagnoses, on a PhenoPath requisition form, along with copies of any current or previous flow cytometry or cytogenetic reports.

- **Peripheral blood:** In general, 5 to 10 ml of anticoagulated peripheral blood is adequate, although for patients with marked peripheral leukopenia of less than 1000 white blood cells per μL , 10 to 20 ml should be considered. For flow cytometry alone, sodium heparin anticoagulation (green top tube) is preferred, but EDTA anticoagulation (lavender top tube) is also acceptable. When both flow cytometry and PCR studies are desired, separate heparin and EDTA-anticoagulated tubes, respectively, are preferred. **Specimens should be sent with (previously frozen) cold packs.**
- **Bone marrow aspirate:** 1 to 2 ml of anticoagulated bone marrow aspirate is adequate for high quality, cellular specimens with little hemodilution by peripheral blood. For flow cytometry alone, sodium heparin anticoagulation is preferred, but EDTA anticoagulation is also acceptable. When both flow cytometry and PCR studies are desired from a single specimen, EDTA anticoagulation is preferred. **Specimens should be sent with (previously frozen) cold packs.**

- **Bone marrow biopsy:** In patients with inaspirable bone marrow and insufficient neoplastic cells in the peripheral blood to enable a definitive diagnosis, it may be possible to obtain sufficient cells for flow cytometry from a bone marrow core biopsy submitted unfixed in tissue culture medium (RPMI-1640 with 10% fetal bovine serum [FBS]), which is supplied in plastic specimen vials by PhenoPath Laboratories. **Specimens should be sent with (previously frozen) cold packs**, and will be processed in the laboratory to maximize the release of cells from the bone core.
- **Tissues:** With the exception of fine needle aspirations, all tissues for flow cytometry, whether small needle core biopsies or relatively large portions of excisional biopsies or tumor resections, should be finely minced to maximize exfoliation of cells into the medium, and then transported in plastic vials containing **RPMI-1640/10% FBS**, which are supplied by PhenoPath. The tissue fragments should be completely submerged in the medium. **Specimens should be sent with (previously frozen) cold packs**, but **under no circumstances should the cells be allowed to freeze**, since this will destroy cell membranes.
- **Cerebrospinal fluid (CSF):** No less than 1 mL of non-traumatically-obtained CSF should be reserved for flow cytometry. Due to the relative absence of nutrients in CSF, specimens to be sent for flow cytometry should be combined with an equal or greater volume of **RPMI-1640/10% FBS** as soon as possible after the specimen is obtained. Containers should be closed tightly to prevent leakage, and **sent with (previously frozen) cold packs**.
- Note that the addition of **RPMI-1640/10% FBS** precludes determination of the absolute leukocyte count in vivo in this aliquot of CSF.
- **Other body fluids, including bronchoalveolar lavage (BAL) fluids:** For flow cytometry immunophenotyping, such fluids should be combined with an equal or greater volume of **RPMI-1640/10% FBS** prior to being **sent with (previously frozen) cold packs**.

NOTE:

Custom Flow Cytometry Panels: Customized antibody panels for clinical or research use can be designed in consultation with the laboratory director.