

# Specimen Handling Instructions for UNC Hospitals Cytogenetic Specimens

## General Instructions:

- Use **sterile technique**; close all containers tightly.
- Living cells are needed for karyotyping. **DO NOT FREEZE OR ADD FIXATIVE TO ANY SAMPLE.**
- **Label all containers** with patient name, hospital number, date collected.
- Specimen should be **received** in the Cytogenetics Lab **within 24 hours of collection.**
- **ALWAYS CALL** the Cytogenetics Lab at **984-974-1790** to let us know that the specimen is coming. If the lab is closed leave a message that includes your name and phone/pager #, the patient's name & type of sample.

Specimen	Collection	Tubes	Storage Instructions
Amniotic Fluid (Blood for MCC Required) <sup>c</sup>	Collect 18-25 cc <sup>b</sup> for karyotype & FISH; at least 25cc if direct CMA also requested. Label tubes to indicate 1st through 3rd tube drawn.	Sterile, plastic polypropylene screw-cap centrifuge tube (15 ml Falcon preferred)	Do not centrifuge for any reason. Keep at <b>room temperature</b> . If storing overnight, <b>refrigerate</b> . Kits provided upon request.
CVS (Blood for MCC Required) <sup>c</sup>	At least 20-30 mg <sup>b</sup> (~ 10 villi with adequate branching, budding & vascularization) for karyotype only; at least 30-35 mg if direct CMA is also requested.	Sterile, plastic polypropylene screw-cap centrifuge tube (15 ml Falcon preferred)	Immerse the villi in the medium to keep tissue moist. Keep at <b>room temperature</b> .
Tissue (villi from abortus, skin biopsy, etc.) (Blood for MCC/Positive Control required) <sup>c</sup>	3-10 mm <sup>3</sup> <sup>b</sup> for karyotype.  For products of conception samples send a 5-10 mm <sup>2</sup> piece of chorion with <b>visible villi</b> attached.	Sterile screw-cap container containing sterile medium <sup>a</sup> .	Immerse the tissue in the medium to keep specimen moist. Keep at <b>refrigeration temperature</b> . <b>DO NOT FREEZE. OR PLACE IN FORMILIN.</b>
Blood for cytogenetics	5-10 cc. whole blood (adults) <sup>b</sup> 2-5 cc whole blood (infants)	Green-top heparinized vacutainer tube. <b>Must be sodium heparin.</b>	If post-mortem, obtain by cardiac puncture within 1 hour. <b>Keep at room temperature.</b>
Bone Marrow	1.5 – 2 cc	Sterile, polypropylene screw cap tube containing sterile medium preferred. Sodium heparin tube alternative.	<b>Keep at room temperature.</b>
Bone Marrow Core Biopsy; Lymph Node or Solid Tumor	Non necrotic sample with high concentration of tumor cells preferred	Sterile, polypropylene screw cap tube containing sterile medium <sup>a</sup> .	<b>Keep at room temperature</b>
Microarray Analysis	>1 cc of whole blood (EDTA) 3-10 cc of whole blood (NaHep)	1 green-top NaHep and 1 lavender-top EDTA vacutainer. If sample is limited please send only NaHep tube.	<b>Keep at room temperature</b>

<sup>a</sup>Tubes containing sterile medium can be obtained from the hospital Core Lab or from the Cytogenetics Lab upon request

<sup>b</sup> If additional testing is to be done, a larger sample may be required. Call the laboratory for consultation.

<sup>c</sup> 1 EDTA Tube of maternal peripheral blood is needed for Maternal Cell Contamination (MCC) Studies, LAB6039 should be ordered. For Skin Punches, this blood is needed for positive controls studies.

## Delivery Instructions:

Please package the specimen carefully to protect it from breakage and insulate it from temperature extremes.

Samples should be transported to the Cytogenetics Laboratory by courier.

- **Within the UNC Medical Center** send sample to the **Core Lab**.
- **Outside the Research Triangle area** **Federal Express** is our "courier of choice" (800-463-3339).
- **Within the Research Triangle area: Workdays** (Mon-Fri/ 8:00AM-5:00PM) **call the Cytogenetics Lab @ 984-974-1790** to dispatch courier. For **Weekends/Holidays** leave a message including your location and contact information and the Cytogenetics lab will dispatch a courier. On-call Technologist pager (919) 347-0631.

**Always call the Cytogenetics Lab to let us know a sample is being sent (984-974-1790).** Leave a message if laboratory is closed.

## Delivery Addresses:

### For weekday delivery

Cytogenetics Laboratory  
UNC Hospitals  
Room 1071, 1<sup>st</sup> Floor Memorial Hospital  
101 Manning Drive  
Chapel Hill, NC 27514

### For delivery on weekend or holiday

Core Lab Receiving Window  
Room 1075 First Floor East Wing  
UNC Hospitals  
Chapel Hill, NC 27514

**\* Write on the outside of package: "For Cytogenetics." Call 984-974-1790 & Leave Message.**