

SPECIMEN HANDLING REQUIREMENTS

- Use sterile technique to collect fresh tissue samples
- All samples should be maintained at room temperature; do not refrigerate or freeze
- Close screw top tubes tightly and label all tubes or containers
- Enclose paperwork

If you have questions regarding sample collection or delivery contact the (1) Cytogenetics Laboratory at 804-628-2986 (MCV-CYTO) or (2) Pathology help line (804-828-PATH; which is 804-828-7284). Specimens for cytogenetic testing are accepted by the Department of Pathology 24 hours a day, 7 days a week.

	AMNIOTIC FLUID	CHORIONIC VILLI	PERIPHERAL BLOOD	BONE MARROW, LEUKEMIC BLOOD	TISSUE (POC, SKIN, TUMOR)**
CHROMOSOME ANALYSIS	Two 15 ml screw-top tubes. Discard first 2 ml, then 15-25 ml. Do not centrifuge for any reason.	Laboratory provides screw-top tubes with sterile transport media. Call laboratory to get tubes delivered.	Dark green-top sodium heparin tube. Adults 5-10 ml. Pediatrics 2-5 ml. Newborns 1-2 ml.	Dark green-top sodium heparin tube. Bone marrow 2-3 ml, <u>first draw</u>, <u>spicule-rich</u> specimen. Whole blood 5-10 ml.	Screw-top container with sterile saline or sterile Ringer's solution. Biopsy 3-4 cm in size using sterile technique. Villi are preferred for POC cases.
CHROMOSOME ANALYSIS WITH FISH	Two 15 ml screw-top tubes. Discard 1st 2 ml, then 18-30 ml. Do not centrifuge. <u>Non-bloody</u> fluid required.	Laboratory provides screw-top tubes with sterile transport media. Call laboratory to get tubes delivered.	Dark green-top sodium heparin tube. Adults 5-10 ml. Pediatrics 2-5 ml. Newborns 1-3 ml.	Dark green-top sodium heparin tube. Bone marrow 2-3 ml of <u>first draw</u>, <u>spicule-rich</u> specimen. Whole blood 5-10 ml.	Screw-top container with sterile saline or sterile Ringer's solution. Biopsy 3-4 cm in size using sterile technique. Villi are preferred for POC cases.
CHROMOSOME ANALYSIS & DNA ASSAY (microarray)			One dark green-top sodium heparin tube and one lavender-top tube. Adults 5-10ml each. Peds and Newborns 2-3ml each.	One dark green-top sodium heparin tube and one lavender-top tube. Bone marrow 2-3 ml <u>first draw</u>, <u>spicule-rich</u> specimen. Whole blood 5-10 ml.	Screw-top container with sterile saline or sterile Ringer's solution. Biopsy 3-4 cm in size using sterile technique. Villi are preferred for POC cases**
DNA TESTING ONLY (microarray)			One Lavender-top and one Dark green top (sodium heparin) tube. Adults 10 ml. Pediatrics 2-3 ml Newborns 1-2 ml	One lavender-top tube. Bone marrow 2-3 ml, <u>first draw</u>, <u>spicule-rich</u> specimen. Whole blood 5-10 ml	Screw-top container with sterile saline or sterile Ringer's solution. Biopsy 3-4 cm size. Villi are preferred for POC cases.

****In addition to the above noted viable cells, formalin-fixed paraffin-embedded (FFPE) sections and touch preps are also accepted for studies using fluorescence in situ hybridization techniques. For the FFPE specimens, 4 slides having adjacent sections (typically 5 to 6 microns in width) are needed, along with an H & E stained slide indicating the tissue area of interest. Although not preferred, a paraffin block can be submitted. All tissue in paraffin sections should be fixed using 10% buffered formalin.**

All specimens for cytogenetic analysis should be stored at room temperature.