

APPENDIX – Cytogenetics

Cytogenetics				
Chromosome Analysis and Fluorescent in situ hybridization (FISH)				
Specimen Type	Collection tube	Volume required	Transport	TAT
Prenatal studies				
Amniotic fluid	Sterile Amniocentesis tube	20 mL (10.0 mL minimum) (FISH aneuploidy testing – additional 5cc)	Room temperature	Ave. 7-14 days FISH: 24-48 hrs
Peripheral blood for congenital studies				
Peripheral blood	Sodium heparin (green top) tube	10ml – adults 2ml – infants	Room temperature	7-14 days
Hematology/Oncology				
Bone marrow	Sodium heparin (green top tube)	2-3 ml	Room temperature	6-14 days
Peripheral blood (blast count >5%)	Sodium heparin (green top tube)	5ml (3 mL minimum)	Room temperature	6-14 days
Lymph node or Tumor	Tissue Transport Medium (TTM)		Room temperature	6-14 days
Products of conception/Skin biopsy				
Skin biopsy	Tissue Transport Medium (TTM)	Clean skin with alcohol - 3mm ³ skin biopsy	Room temperature	14-21 days
Products of conception	Tissue Transport Medium (TTM)	Preferred tissue types include: placenta, skin	Room temperature	14-21 days
Fluorescent in situ hybridization (FISH)				
If ordered as part of chromosome analysis, no additional sample is required. If ordered as a stand-alone test, sample requirements are the same as above. Prenatal aneuploidy screening (amniotic fluid) – 5ml of amniotic fluid Paraffin embedded sections: 3-4 slides with sample cut 4-5um thick and placed on positively charged slides. Area to be scored must be scribed by a pathologist				

CGH Microarray				
Specimen Type	Collection tube	Volume required	Transport	TAT
Peripheral blood	EDTA (lavender tube) and/or Sodium Heparin (green tube)	5-10 ml	Room temperature	7-10 days

Required information: The following information must be provided on all request forms. (This is required by the College of American Pathologists and the American College of Medical Genetics):

- Patient's Name
- Date of birth
- Sex
- Specimen collection date
- Specimen source
- Clinical indication
- Requesting physician
- If patient is pregnant, LMP is required