

Specimen Requirements for Cytogenetic Testing

Sample Type	Code	Collection Container(s)	Collection and Processing Instructions	Shipping Instructions and Preferred Sample Condition
Amniotic Fluid	AF	15ml Sterile Conical Centrifuge tube	20-30ml fluid, discarding the first 1-2 ml. Place in 2-3 Specimen tubes.	Preferred gestational age > 15 weeks Must be received in a securely closed, sterile container Ship sample at room temperature for receipt at EGL within 24 hours of collection. Do not refrigerate or freeze.
Cultured Amniocytes	CAF	T25 or T75 flask	At least 1- T25 (or T75) with a confluency of 75-80% Note: Cultures should be < 3 weeks old <i>Accepted for test codes CMPRE and CMPRS only</i>	Send overnight at room temperature. Do not refrigerate or freeze.
Chorionic Villi	CV	Sterile container with EGL transport media If EGL media is not available, other sterile culture media can be used (RPMI, Hanks Solution)	≥ 15-30 mg chorionic villi/placental tissue using sterile technique. Place in sterile tube(s) with transport media. If ordering multiple tests, 30 mg is recommended.	Preferred gestational age > 10-12 weeks Must be received in a securely closed, sterile container Ship sample at room temperature for receipt at EGL within 24 hours of collection. Do not refrigerate or freeze.
Cultured Chorionic Villi	CCV	T25 or T75 flask	At least 1- T25 (or T75) with a confluency of 75-80% Note: Cultures should be < 3 weeks old <i>Accepted for test codes CMPRE and CMPRS only</i>	Send overnight at room temperature. Do not refrigerate or freeze.
Cord Blood	CB	Please speak with a Laboratory Genetic Counselor for these requests	Please speak with a Laboratory Genetic Counselor for these requests	Please speak with a Laboratory Genetic Counselor for these requests
DNA, Isolated	DNA	Microtainer	Isolation using the Chemagen™ Automated Extraction method or Qiagen™ Puregene kit for DNA extraction is recommended	Refrigerate until time of shipment in 100 ng/μL in TE buffer. Ship sample at room temperature with overnight delivery.
Liquid Buccal Swab	LBC	ORAc collect-DX (OCD-100) Assisted saliva collection kit	DNA Genotek ORAc collect-DX kit used according to manufacturer instructions. Please contact EGL for a saliva collection kit for patients that cannot provide a blood sample. Note: Whole blood is the preferred sample.	Please do not refrigerate or freeze saliva sample. Please store and ship at room temperature.

Sample Type	Code	Collection Container(s)	Collection and Processing Instructions	Shipping Instructions and Preferred Sample Condition
Products of Conception	POC	<p>Sterile container with EGL transport media</p> <p>If EGL media is not available, other sterile culture media can be used (RPMI, Hanks Solution)</p>	<p>≥ 15-30 mg chorionic villi/placental tissue using sterile technique. Place in sterile tube(s) with transport media.</p> <p>Tissues fixed in formalin cannot be used. The laboratory cannot legally accept entire fetuses/stillbirths. Must be a part of an individual.</p>	<p>Must be received in securely closed, sterile container with sterile culture media</p> <p>Refrigerate until time of shipment. Ship sample at room temperature for receipt at EGL within 24 hours of collection.</p> <p>If fetal demise occurred more than 48-72 hours prior to retrieval of tissue and delivery to the Lab, fetal tissue is unlikely to grow. In this case, placenta is most likely to grow.</p>
Skin Biopsy	SK	<p>Sterile container with EGL transport media or other sterile culture media (RPMI, Hanks Solution)</p>	<p>Obtain 1-2 cm pieces of tissue from a central location rather than a distal location to enhance cell viability and growth. Place in sterile container with EGL transport media or other sterile culture media. Use sterile dissection (no prep) for internal tissue. Tissue fixed in formalin cannot be used. Refrigerate until time of shipment.</p> <p>In the absence of media, place in a sterile container with a small amount of sterile saline.</p>	<p>Ship sample at room temperature for receipt at EGL within 24 hours of collection. Do not refrigerate or freeze.</p>
Whole Blood (Sodium heparin)	WBG	<p>Sodium Heparin (Green Top)</p> <p>Required for most tests</p>	<p>Infants and Young Children (<2 years of age): 2-3 ml</p> <p>Children > 2 years of age to 10 years old: 3-5 ml</p> <p>Older Children & Adults: 5-10 ml</p> <p>Autopsy: 2-3 ml unclotted cord or cardiac blood</p>	<p>Ship sample at room temperature for receipt at EGL within 24 hours of collection. Do not refrigerate or freeze.</p>
Whole Blood (EDTA)	WBP	<p>EDTA (Purple Top)</p> <p>Required for test codes CMSNP, VA, XC020, and XC021 only.</p>	<p>Infants and Young Children (<2 years of age): 2-3 ml</p> <p><i>(Continued on next page)</i></p> <p>Children > 2 years of age to 10 years old: 3-5 ml</p> <p>Older Children & Adults: 5-10 ml</p> <p>Autopsy: 2-3 ml unclotted cord or cardiac blood</p>	<p>Ship sample at room temperature for receipt at EGL within 24 hours of collection. Do not refrigerate or freeze.</p>