

Specimen Handling and Shipping Instructions

Viral Testing

- **Tissue Samples**

For optimal sensitivity, particularly for RNA virus detection, samples preserved in *RNAlater* or frozen samples are preferential. Fixation of samples may result in decreased sensitivity for DNA and RNA viruses and decreased DNA yield. The following methods of preservation are acceptable:

***RNAlater* Solution:** The sample should be cut into slices no more than 0.5cm across, if necessary, and immediately placed in a minimum of ten sample volumes of *RNAlater* solution (Qiagen Cat. #: 76154 or 76163). Samples in *RNAlater* can be stored up to 7 days at 18-25 ° C or up to 4 weeks at 4°C and shipped at room temperature.

Snap Freezing: Tissue samples should be immediately placed into a sterile collection tube and then snap-frozen by placing the tube in liquid nitrogen. Once the sample is completely frozen (10-15 minutes) the sample should be stored at -80°C, on dry ice, or in liquid nitrogen until processed. Alternatively, if liquid nitrogen is not available, the sample can be immediately frozen using a dry ice/alcohol bath.

- **Fluid Samples**

Fluid samples (other than blood) should be stored at -20°C (or colder), or at 4°C if freezing is not available. However, storage at 4°C and shipping on wet ice may decrease the probability of detecting RNA viruses. Blood samples should be stored at 4°C. At least 1ml of fluid is preferable to allow repeat analysis if necessary.

Genetic Testing

- **Blood**

3-5 ml of whole blood samples should be collected in an EDTA (purple top) tube and stored at 4°C until shipped.

- **Cultured cells**

A minimum of 2 confluent T-25 flasks of cultured cells (fibroblast, amniocytes or CVS) are required. Please fill all flasks to capacity with cell culture media.

***It is highly recommended to include a sample from the mother for a maternal cell contamination study for each prenatal test. Maternal sample requirements are the same as genetic testing.*

- **Extracted DNA**

A minimum of 15 micrograms of genomic DNA at a concentration of 50ng/μl or more, preferably in TE solution, is required.

- **Saliva**

Only samples collected in *Oragene DNA Self-Collection Kit* or *Oragene Collection Kit for Young Children* are accepted (www.dnagenotek.com).

Shipping Instructions

All samples should be clearly labeled with the patient's name and date of birth. Individual or multiple patient samples shipped at the same time will be rejected if any ambiguity regarding patient or sample identification exists. All specimens should be appropriately packaged to avoid crushing, breakage, or leakage. For extracted DNA samples, please include volume and concentration.

The requisition form accompanying the sample must be completed sufficiently in order to allow definitive identification of the patient sample and the test(s) requested. The form must be signed by a physician or another authorized person and the billing information completed. Failure to fully complete the forms may delay analysis.

All samples for genetic testing may be shipped at room temperature by overnight express carrier, such as FedEx, UPS or DHL) to arrive Monday through Friday. Frozen tissue and fluid samples for viral testing should be shipped on dry ice overnight by FedEx to arrive Monday through Friday.

Ship To:

Cincinnati Children's Hospital Medical Center
Attn: Heart Institute Diagnostic Laboratory
240 Albert Sabin Way, Room S4.381
Cincinnati, OH 45229-3039

Contact Information:

www.cincinnatichildrens.org/heartdx

Phone 513-803-1751

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