Instructions for Collecting, Handling & Shipping for General Samples (Blood, Extracted DNA, Buccal Swabs)

Specimen Identification: Please put full name and date of birth on each specimen as it is drawn. Unlabeled specimens will not be processed.

Test Orders: A completed order form must accompany all specimens. Include a separate test order form for each person being tested or specimen type, including the signed consent form for patient, parent or guardian.

Shipment of Specimens: Specimens should be received in the Children’s Hospital Colorado Molecular Genetics Laboratory within 72 hours of collection if possible – maximum 5 days. Our laboratory is closed on Saturdays and Sundays, and on major holidays. Store at ambient room temperature or refrigerate until you send; do not freeze. Ideally, specimens should be collected and shipped (via FedEx or UPS) early in the week to avoid a weekend delivery. Local couriers may be used to deliver specimens within the Denver metropolitan area.

Specimen shipping address:

Children’s Hospital Colorado
Attn: Clinical Laboratory – Molecular Genetics Laboratory
13123 E 16th Ave, Rm. B0200
Aurora, CO 80045

Peripheral Whole Blood: 5 ml (adult), 2-5 ml (pediatric), minimum of 1 ml (newborns). We prefer EDTA (lavender/purple top) vacutainer tubes, but we can also accept blue, yellow or green top tubes if necessary. We cannot accept red top tubes (clotted blood) for DNA testing. Transfusions of whole blood prior to peripheral blood collection may result in an inconclusive interpretation.

Extracted DNA: We accept extracted DNA for any test; send approximately 10–20 μg. From overseas, we recommend sending extracted DNA. Keep some DNA as a backup if possible, in case a sample is damaged in transit. From Canada, send either whole blood or DNA.

Buccal Swabs: MasterAmp brand Buccal Swabs are preferred optimal DNA extraction, although others are accepted. Please provide at least 3 buccal brush samples collected as per the provided instructions. These are available on request through our laboratory. Quantity of DNA extraction from buccal swabs tends to be less than that of peripheral blood. Sufficient quantity of DNA may not be obtained for every test application. Please contact the laboratory director with questions at 720-777-0512 or 720-777-0517.

Saliva Specimens: We do not accept this sample source.

NBS, Newborn Screening Blood Spots: We do not accept this sample source.

Laboratory Approval for Other Sample Types: Please obtain prior approval of a Laboratory Director for specimen volumes less than the minimum, specimens collected out of the preferred time frames, or analysis of other specimen types.

Missing Paperwork Policy: For test order forms with missing or incomplete answers (e.g., absent or unsigned consent forms or inadequate billing information), our policy is to extract DNA and wait for paperwork before running the test.