



DOMESTIC CLIENTS

SAMPLE COLLECTION,
STORAGE AND SHIPPING OF
FROZEN SAMPLES

Frozen Shipment Requirements	
Shipment Condition/ Timing	Frozen on Dry ice / Overnight
Sample Type	Plasma
Minimum Volume	0.5ml
Materials Needed	
Collection Vial	EDTA (K2) / Lavender Top Vacutainer tube
Transport Vial	Nalgene Cryoware Cryogenic (Thermo Scientific Catalog #: 5000 0050)
Shipment Materials	Absorbent pad Resealable Biohazard specimen bag Styrofoam cooler Cardboard outer shipping box UN3373 Biological sample label UN 1845 Dry ice label Patient Sample Manifest Shipment manifest envelope

Patient Preparation

Please read all instructions carefully before collecting the specimen.

A. Plasma Collection:

Patients must have fasted 8-10 hours prior to sample collection. Test results will not be accurate if the subject has eaten within 8 hours. Samples from non-fasted subjects will be rejected.

1. Draw blood into the lavender top tube and gently invert 8-10 times to ensure mixing of anticoagulant (EDTA) with blood to prevent clotting.
2. Centrifuge the EDTA tubes at 800-1800g for about 10 minutes to separate out the plasma
Note: Plasma must be separated from the whole blood within 1 hour in order to obtain accurate test results.

B. Plasma Transfer:

Whole blood samples and plasma samples with visible blood will be rejected.

1. Using a disposable pipette, transfer as much of the plasma as possible (minimum of 0.5ml) into the screw top cryogenic vial provided by Metabolon and cap the vial tightly. The plasma should be free of hemolysis or red blood cells.
2. Immediately place the plasma into the freezer ($\leq -20^{\circ}\text{C}$). Store the plasma frozen ($\leq -20^{\circ}\text{C}$) until it is ready for shipment.

C. Specimen Requisition Form

Record 2 patient identifiers (e.g., patient name, date of birth, sample ID, etc.) onto the cryogenic vial from the Patient Sample Manifest.

For each sample, provide the following information on the Specimen Requisition Form

- Client ID Code
- Ordering Physician Name
- Physician Address
- Physician Email
- Name of test(s) requested
- Patient Sample ID
- Patient name (Last name, First Name)
- Patient date of birth
- Patient Sex
- Collection date and time
- Sample Type
- Fasted Status

Shipping and Packing Instructions

1. Ship samples Monday thru Thursday via overnight delivery service. Please contact Metabolon for holiday schedule.
2. Place the labeled cryogenic vial(s) and absorbent pad into a specimen bag. and then place into the Styrofoam cooler.
3. Add ½ quantity of dry ice on bottom of Styrofoam cooler. (Refer to “Minimum Amount of Dry Ice Recommended” to determine quantity needed).

Expected Hours in Shipment	Minimum Amount of Dry Ice Recommended
8-24 hours	5-7 lbs (2.3-3.2 kg)
24-40 hours	8-12 lbs (3.6-5.4 kg)
40-60 hours	13-20 lbs (5.9-9.0 kg)

4. Lay specimen bag(s) flat on top of dry ice. Cover with remaining dry ice and fill any void space with other cushioning material (e.g., bubble wrap).
5. Place the lid on the Styrofoam cooler. Do not fully seal cooler.
6. Place the cooler into Cardboard outer shipping box.
7. Place the patient sample manifest into document envelope and seal. Place the sealed envelope on top of the cooler. Close and seal the Cardboard outer shipping box.
8. Affix the UN 3373 Biological Substance Category B label on one side of the Cardboard box.
9. Affix the UN 1845 Dry Ice Label to alternate side of the Cardboard box and notate “From and To” section along with the Kg content.
10. Affix shipping label to the Cardboard outer shipping box.

Ship to address:

**Attn: Clinical Diagnostic Laboratory
617 Davis Drive, Suite 400
Morrisville, NC 27560**

11. Upon scheduling shipment, send email to CSM@metabolon.com noting client name, ship date, carrier name and tracking number, number of samples shipped.
12. If there are any shipping issues or questions, please contact:
Christine Bailey, Commercial Operations Manager
Email: cbailey@metabolon.com
Phone: (919) 595-2770

References

Cobb J et al. A novel fasting blood test for insulin resistance and prediabetes, J Diabetes Science and Technology, 2013