



INTERNATIONAL 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 (recommended Thermo Scientific Catalog #: 5000 0050)
Shipment Materials Needed	Absorbent pad Resealable Biohazard specimen bag Styrofoam cooler Cardboard outer shipping box Biological sample label UN3373 Dry ice label UN 1845 Patient Sample Manifest Shipment manifest envelope Commercial Invoice

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 a screw top cryogenic vial 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. Patient Sample Manifest

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 Patient Sample Manifest.

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

Shipping and Packing Instructions

1. Ship samples Monday-Wednesday via carrier with international priority delivery service. Please contact Metabolon for holiday schedule.
2. Place the labeled sample(s) into a biohazard specimen bag with absorbent pad and seal bag.
3. Place ½ quantity of dry ice per “Minimum Amount of Dry Ice Recommendation” on bottom of Styrofoam cooler. Place sealed specimen bag on bottom layer and add remaining dry ice on top of specimen bag. Fill any void space with other cushioning material (e.g., bubble wrap, paper towels).

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. Place the lid on the Styrofoam cooler. Do not seal the cooler.
5. Place the sample manifest into an envelope and seal. Place the sealed envelope on top of the cooler.
6. Close and seal Cardboard outer shipping box.
7. Affix the UN 3373 Biological Substance Category B label on one side of the Cardboard box.
8. 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.
9. Apply shipping label to the Cardboard outer shipping box. Ship to address:

Metabolon, Inc.
Attn: Clinical Lab Sample Receiving
617 Davis Drive, Suite 400
Morrisville, NC 27560

10. Complete a commercial invoice in triplicate. Insert copies behind airway bill in plastic pouch affixed to exterior of box.
11. In order to ensure proper sample tracking, please send notification email to CSM@metabolon.com providing shipping details (i.e. ship date, carrier name and tracking number, number of samples shipped).

For shipping issues or questions, please contact:

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