

PROCEDURES FOR SHIPPING FROZEN SPECIMENS TO

**KCAS, LLC
12400 SHAWNEE MISSION PARKWAY
SHAWNEE, KANSAS 66216
(913) 248-3053**

1. Each compound has specific collection, handling and storage requirements. Please refer to the protocol for these guidelines.
2. Upon shipping, specimens must be:
 - a. In a sealed plastic vial. Do not completely fill tube as freezing will cause expansion.
 - b. Labeling: Use the label format shown below, typed or written with a waterproof pen on a paper label. Label tubes before collections begins. Firmly attached label with transparent tape, covering label and overlapping tape ends. Label should be placed so sample level is clearly viewable.
 - Project # (or Sponsor and Protocol)
 - Number Subject # (addition of initials optional)
 - Period # Sample Number
 - Sample Time Elapsed Post Dose (i.e., 0.5Hr, 2.0Hr)*
**Not applicable for blinded sample submission*
 - c. Organize samples consecutively (i.e., according to hour, pre-dose, .5,1,2 etc.) by subject. Each subject must be grouped and identified on the outside of the individual bag (i.e., Subject 1, Period 1).
3. Packaging of Samples for shipment (portions paraphrased from IATA Packing Instruction 650)
 - Specimens must be packed in good quality packaging, which must be strong enough to withstand the shocks and loadings normally encountered during transport. Packaging must be constructed and closed to prevent any loss of contents when prepared for transport, which might be caused under normal conditions of transport, by vibration, or by changes in temperature, humidity or pressure.
 - The primary receptacle (tube, jar, bottle, etc.) must be leak proof and must not contain more than 500mL.
 - There must be absorbent material placed between the primary receptacle and the secondary packaging; if many primary receptacles are packed in a single secondary packaging, they must be either individually wrapped or separated so as to prevent contact between them. The absorbent material must be in sufficient quantity to absorb the entire contents of the primary receptacles.
 - The secondary receptacle must be leak proof and must not contain

more than 4 kg. [If the tubes are put into a box, the box must be put into sealable plastic bags as the box is not leak proof and so cannot be considered the secondary receptacle]

- Secondary packaging must be secured in outer packaging with suitable cushioning material and dry ice.
- An itemized list of contents must be enclosed between the secondary and outer package. This list should also include the name, address and telephone number of the contact person if KCAS should have questions or concerns.
- The outer package is the Styrofoam cooler and its cardboard box. Pack enough dry ice with the samples to last for at least 3 days (10-15 lb.) depending on the size of the container. The Styrofoam container should not be taped closed entirely around or sealed airtight. Failure to allow carbon dioxide gas to escape can result in damage to the container or a minor explosion.
- The cooler is put into the cardboard box (it is easier to pack while it remains in the cardboard box). The cardboard box is securely sealed with tape.
- Each package and the “Nature and Quantity of Goods” box of the air waybill must show the text:
BIOLOGICAL SUBSTANCE, CATEGORY 650
- All packages must have a dry ice label with the amount of dry ice in kg listed in addition to the name and address of shipper and consignee.
- A Shippers Declaration of Dangerous Goods is not required.

4. Federal Express shipping is preferred for domestic shipments. World Courier or Marken shipping is preferred for international shipping. Follow all regulations pertaining to shipping biological materials in dry ice (i.e., dry ice label UN1845). Be sure air express is used unless circumstances suggest other reasonable mode of transport.

5. Prior to shipping, telephone or e-mail TMM at (913) 248-3053 or (913) 248-3096, tmm@kcasbio.com to inform her of impending arrival and provide her with the following information: Number of containers shipped, number of samples shipped, matrix, protocol number, carrier and Airbill number.

6. Ship only on Monday through Wednesday and avoid receipt days that are holidays. Ship to:

**TMM
KCAS, LLC
12400 Shawnee Mission Parkway
Shawnee, Kansas 66216
(913) 248-3053**