Step-By-Step Instructions for Shipping Samples to Diagnostic Immunology at OLS

Updated 2/24/2026

The shipping protocol is required by CLIA regulations and manufacturer's instructions. When providers are compliant with the protocol requirements it will reduce the number of samples being rejected. If packed correctly and shipped via FedEX Priority overnight express, your specimens will arrive at OLS at 2-8 ° C.

You will receive a shipping system from OLS for all your specimens. Each shipping system's contents will allow for safely packaged patient samples to arrive at OLS in a timely manner. You may only ship twenty specimens in each shipping system. If there are more than twenty specimens at any time, please pack multiple shipping systems. If there are less than twenty specimens, please send the samples promptly. **DO NOT HOLD SAMPLES**. Use the perforated sheets of bubble wrap to fill in any gaps between the samples and the frozen "RE-FREEZ-R-BRIX" in the shipping system. Ship samples via FedEx priority overnight express delivery as soon as possible. DO NOT ship samples by ground.

Materials

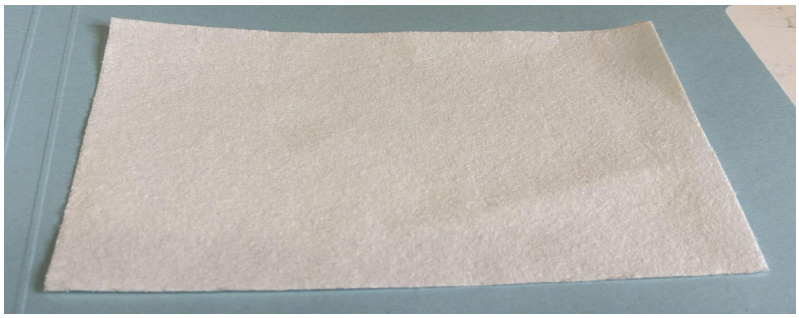
Cardboard overpack box, STP-309 Styrofoam shipping system inside the overpack box with lid.

Do Not Damage or Discard the Cardboard Overpack. This must be reused when sending specimens back to OLS. Do not rip tape from the cardboard box. Use a short blade to cut tape when opening the box. The boxes must be reused many times and ripping tape from the box causes permanent damage. OLS will refurbish overpacks on an as-needed basis.

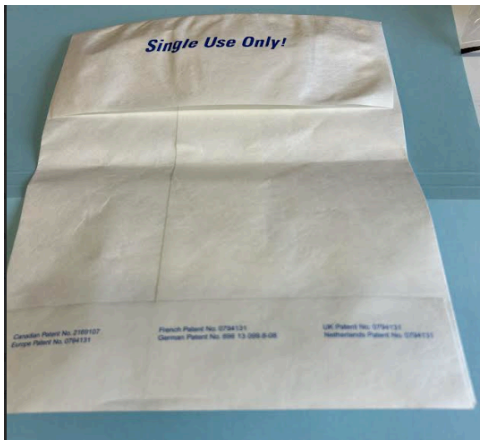
Clear large plastic biohazard bag, self-sealing

Please note that the bundle of small, individual bags will only be provided if they are in stock. Standard ziploc baggies can be used in their absence.

Absorbent material



Tyvek pressure-rated bag, self sealing



Sticky bubble wrap, folded with sticky side in

Perforated bubble wrap

Note: Sticky bubble wrap will be provided when in stock otherwise two sheets of perforated bubble wrap will be supplied.

“RE-FREEZ-R BRIX,” must be placed in a freezer and <u>frozen at least 24 hours before use</u>. It is best to place it in the freezer overnight before use.

SpotSee Device:

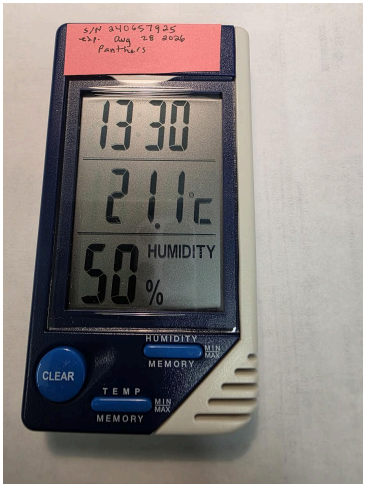
Must be stored properly (dark, 15-25 °C, 35-55% Relative Humidity), pre-conditioned in a refrigerator (3 °C for 30 minutes), and activated as a final step before packing and shipping.

SpotSee Storage:

After receiving the devices they must be stored in a dark environment between 15 °C - 25 °C (59 - 77 °F) at relative humidity of 35% - 55%.

The following device is typical of what we use at OLS to monitor temperature and humidity in our storage areas:

Front



Back

Note that these temperature and humidity monitors can be reset to “zero out” the maximum high and minimum low temperature and humidity so that weekend and holiday monitoring is possible.

SpotSee Shipping:
Before arming the SpotSee device it must be pre-conditioned. This requires that the device be placed in an environment at least 5 °C below the warm threshold temperature for a minimum of 30 minutes. For our shipping system this requires the SpotSee be stored at 3 °C for at least thirty minutes prior to arming it and placing it with the specimens in the shipping device.

SpotSee Placement:
The devices are extremely sensitive to temperature so they should not be armed until they have been pre-conditioned and are in place within the shipping system. Ensure that specimens are cooled to 2-8°C after centrifugation and that the Re-Freez-r Brix are frozen before packing the shipping system. **Be sure that activating the SpotSee is the last thing done before closing and sealing the tyvek bag and then the container**.

Instructions for Packing

Upon collection, blood specimens should be inverted 5 times and sit in an upright or slanted position for at least 30 minutes to allow clotting. All blood specimens must be centrifuged for 10 minutes at 3,300 RPM within 2 hours of collection. Specimens should then be refrigerated at 2-8 °C until shipping. All “RE-FREEZ-R-BRIX” must be frozen before they can be used to ship specimens to OLS. **Do not use an alternate brand of ice packs.** The RE-FREEZ-R-BRIX have been validated to keep your specimens at the correct temperature during shipping. Using other ice packs may result in your samples being rejected.

Open the cardboard overpack box and remove the shipping system lid and all other materials except the styrofoam shipping system. Do not ship more than twenty (20) specimens in a shipping system, use multiple shipping systems if needed.

Organize specimens by patient. Each patient should have their own small, clear bag with all their specimens sealed inside. Standard ziploc bags may be used if small bags are not available. Place each patient's samples into a clear bag. Remove excess air from the clear plastic bags.

Carefully unfold the bubble wrap and place on a firm, level surface. Place the small clear bags with samples inside on the bubble wrap. Be sure **there are twenty or less specimens** on the bubble wrap. Place wrapped specimen tubes in the larger, clear, sealable, plastic biohazard bag and place the absorbent material with the samples in the biohazard bag. Make sure that there are twenty or fewer specimens in the bag. Remove excess air from the clear plastic biohazard bag, pull away the strip at the top of the biohazard bag and firmly seal the bag.

Place two frozen “RE-FREEZ-R BRIX” in the shipping system in an upright position on the short sides of the shipping system. **Use of a different brand of ice packs may result in samples being rejected. Please use only the pre-frozen RE-FREEZ-R BRIX that have been provided by OLS.** Make sure the ice packs do not obstruct the styrofoam lid from sitting snugly on the top of the cooler.

Place the sealed clear plastic biohazard bag in the Tyvek bag. Fold over excess material of the clear plastic biohazard bag and slide it inside the Tyvek bag.

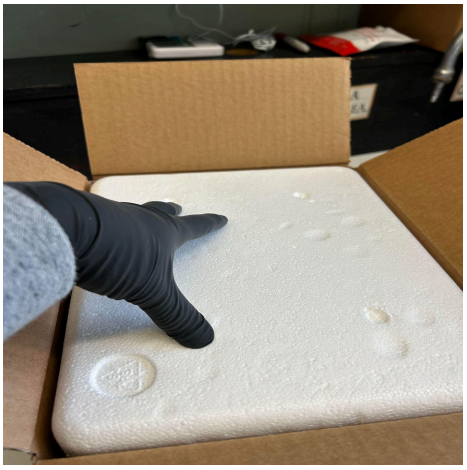
Push the clear biohazard bag to the bottom of the Tyvek bag.

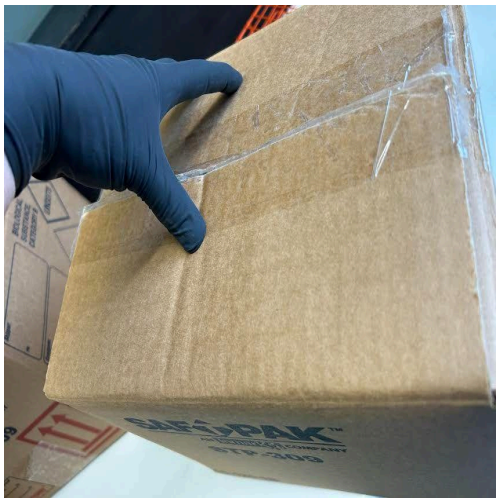
Place a pre-conditioned SpotSee inside the Tyvek bag. Activate the SpotSee. Remove excess air, then remove the strip at the top of the Tyvek bag and seal it.

Use the perforated bubble wrap sheet to wrap around the Tyvek bag and fill the empty space between the “BRIX” and the Tyvek envelope. Place the sealed Tyvek bag between the two frozen “BRIX” in the shipping system. Be sure that the “up” ↑ arrows on the box are pointed up. You may use paper towels to fill any gaps between the samples and the “BRIX”.

Place the styrofoam lid **firmly** on the shipping system to ensure that complete contact is being made with the shipping system on all sides. There should be no upward force pushing on the styrofoam lid. Place Diagnostic Immunology Specimen Submission forms **on top of the cooler portion of the overpack** and close the outer flaps firmly over the documents.

Adequately seal the box and place appropriate shipping labels on the cardboard overpack.





NOTE: The system should be closed and sealed as quickly as possible after the SpotSee device is activated. If the SpotSee is activated and allowed to sit at room temperature it will register as being out of range. In order for specimens to be accepted by OLS the system should be closed and sealed immediately after the SpotSee is activated. **If a packaged shipping system is awaiting pickup place the entire package back into a refrigerator (2-8C) until ready for pickup/transit.**