

Shipping Protocol

Please follow these guidelines to ensure your samples arrive safely, securely and without incident.

SHIPPED PLATES AND TUBES THAT FAIL TO MEET OUR STANDARDS WILL NOT BE ACCEPTED AND DISCARDED.

Do not substitute plates as our process is highly automated.

Shipping PCR plates

If shipping DNA please send at least 20 uL of DNA, with concentration above 1 ng/uL. Please provide an electronic copy of the plate map using this [template](#).

If you have any questions, please contact the lab at msmblcore@umich.edu.

Recommended supplies:

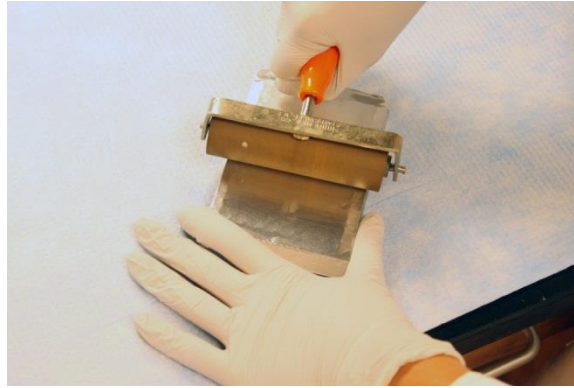
Item	Company	Catalog Number
Aluminum foil, sterile	VWR	89049-034
Full skirted PCR plate(twin.tec)	Eppendorf	951020401

BEST PRACTISE: Do not use cheap seals as this is the least expensive part of sequencing your samples. Cheap seals are insufficient and will bubble during shipping resulting in contamination and evaporation of samples. Investing in good foil seals will save a lot of money and hassle.

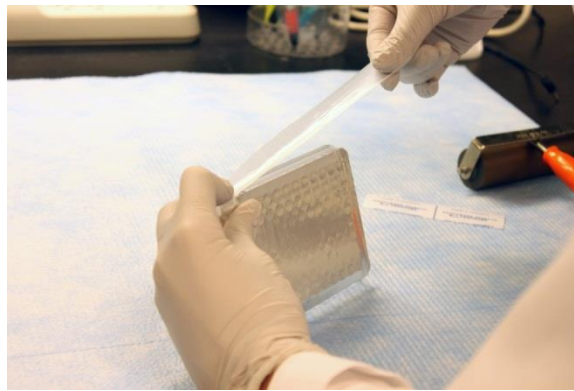
Step 1: Label plates well. Place cold sterile foil on PCR plate. Please use the recommended labware listed in the table above. Using other PCR seals such as sealing tape or seals that require heat are insufficient for transport. Caution non-skirted 96 PCR plates crack easily during transport, use full skirted plates.



Step 2: Use a roller and press firmly to secure foil to plate. The outline of each well should be visible and the edges should be sealed.



Step 3: Secure the outer edges of the plate by wrapping parafilm around the perimeter of the plate.



Step 4: Wrap plate with kimwipes to absorb any spillage or condensation from the plate during transport.



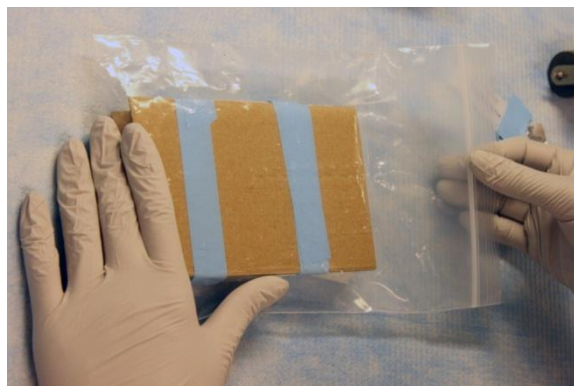
Step 5: Cut two pieces of cardboard the approximate size of the plate. Place the plate between the two pieces. This will help prevent damage during transport. Plates must be sandwiched between two pieces of cardboard prior to transport, not doing this may result in damage to the plates or seals.



Step 6: Use tape to secure the plate between the cardboard. 2



Step 7: Each plate must be secured in its own cardboard sandwich and sealed in individual bags.



Plates should be shipped with ice packs or on dry ice depending on transit time and outdoor temperatures. Please fill empty space within the Styrofoam shipping container with packing material to prevent contents from shifting during transport. International shipping should be done through a courier service. Please refer to federal regulations regarding the shipping of biological specimens on ice or dry ice.

Shipping microcentrifuge tubes

If shipping DNA please send at least 15 uL of DNA, with concentration above 1 ng/uL.

Step 1: Label microcentrifuge and conical tubes clearly with sample information.



Step 2: Seal each microcentrifuge tube with parafilm.



Step 3: Fill conical with samples and pack with kim wipes to ensure tubes do not shift during transit.



Step 4: Use parafilm to secure lid of the conical tube.



Step 5: Place conical in a clean plastic bag.



Tubes should be shipped with ice packs or on dry ice depending on transit time and outdoor temperatures. Please fill empty space within the Styrofoam shipping container with packing material to prevent contents from shifting during transport. International shipping should be done through a courier service. Please refer to federal regulations regarding the shipping of biological specimens on ice or dry ice.