PACBIO® GUIDELINES FOR DNA SHIPPING AND HANDLING

Typically, freezing DNA samples is recommended. However, individual samples can be shipped at room temperature without compromising results as long as the samples are free of contaminants and the shipping temperature is controlled. If a customer prefers instead to ship samples as a dried pellet at ambient temperature, in solution at ambient temperature, or on dry ice, these are also acceptable. Please note that in many cases, the selection of shipping method depends on the choice of couriers and custom clearance procedures.

If isolating DNA via ethanol precipitation, exposure to extended heat should be minimized. Incubation at 65° C for 1 hr may incur DNA damage resulting in impaired sequencing performance. Air drying of pellets is preferred over heat drying.

Shipment with dry ice can sometimes be a challenge for long transports due to evaporation or shipping regulations. An alternative is to use cold packs (e.g., ice (-4° C) or gel (-20° C)) depending on the number of DNA samples and duration of transport. Samples will remain at a sufficiently low temperature until arrival when an ample quantity of cold packs has been used in a Styrofoam® box, assuming no delays in transport.

If DNA samples are shipped in tubes, these should be capped tightly to prevent accidental spillage or cross contamination. Sealing tops by wrapping Parafilm® wrap as an additional safeguard is recommended. Please ship DNA samples in secondary containment (e.g., a cardboard freezer box) with adequate padding.

Submission of samples in 96-well, fully skirted plates is also acceptable, provided that plates are appropriately sealed and placed in secondary containment (e.g., a cardboard freezer box). Customers should ensure each well is tightly sealed to withstand shipping conditions and avoid accidental spillage or cross contamination.

The following are available for sealing plates for shipping:

Listed third party products are not officially endorsed by PacBio and are only provided as possible options.

- MicroAmp® Clear Adhesive Films (Applied Biosystems, cat# 4306311)
- MicroSeal® 'F' Foil (Bio-Rad, cat# MSF-1001)
- Adhesive foil seal (Beckman Coulter, #BK538619)

Customers should ensure each individual well is sealed prior to shipping. Freeze the sealed plate in a secondary containment (e.g., a cardboard freezer box) at -20° C prior to shipment with dry ice. Do not ship plates without secondary containment as these may crack when placed directly on dry ice.

For shipment, ensure there is enough dry ice at the top, bottom, and sides of container with the plate (e.g., cardboard freezer box). If shipment contains multiple plates, please ensure there is padding between the plates to prevent puncture of seals. Pack plates snugly to minimize shifting or jostling during shipment.

Finally, when using courier companies, please ensure detailed and correct contact information for the receiving lab has been provided, including the phone number of the point of contact. Providing the tracking number and phone number of the courier company to the receiving party is also a good practice to track delays or mishandling of sample delivery.

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