# The Sequencing Center

## Sample Submission Guidelines

Version 1.7
May 5, 2020

# Sample Submission Instructions

| Sample Type | Min. Volume | Recommended Container Type | Special Requirements |
|---|---|---|---|
| **Buccal Swab** | Not Applicable | 1 buccal swab in sealed tube | We recommend using commercial kits (ie. Isohelix DNA Buccal Swabs & Kits) |
| **Whole Blood** | 500uL - 1mL | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | Collection tubes should not contain: EDTA, Heparin, anti-coagulants |
| **Cell Pellet** | Not applicable | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | Cell concentration = 5*10^6 cells/mL |
| **DNA (Bacteria)** | ≥ 50uL | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | DNA concentration ≥ 10ng/uL |
| **DNA (Bacteriophage/Phage)** | ≥ 50uL | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | DNA concentration ≥ 10ng/uL |
| **DNA (HLA)** | ≥ 60uL | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | DNA concentration ≥ 30ng/uL |
| **DNA (Microbiome)** | ≥ 50uL | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | DNA concentration ≥ 10ng/uL |
| **DNA (Plasmid)** | ≥ 50uL | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | DNA concentration ≥ 10ng/uL |
| **DNA (Virus)** | ≥ 50uL | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | DNA concentration ≥ 10ng/uL |
| **Nasal Swab** | Not applicable | 1 nasal swab in sealed tube | None |
| **PBMC (Peripheral Blood Mononuclear Cell)** | 200uL | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | Cell concentration = 5*10^6 cells/mL |
| **Saliva** | 1mL | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | We recommend using commercial kits (ie. Isohelix GeneFiX Saliva DNA Collection) |
| **Tissue** | 1g | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | None |
| **Virus (blood plasma or blood serum)** | 200uL | 1.5-mL microcentrifuge tubes or 2-mL screw cap tubes. | None |

## Important Notes:

Please contact our lab manager dcasey@thesequencingcenter.com if your samples are below minimum volume or concentration values. We may still be able to work with them if notified ahead of time.

Recommended DNA concentrations are measured using fluorometric methods. If you must use a spectrophotometer for quantitation please provide samples that exceed the minimum concentration as these will likely register lower when we perform our fluorometric quality check.

# Shipping Instructions Checklist

## Shipping Address

**The Sequencing Center**
**1020 Luke Street**
**Suite D**
**Fort Collins, CO 80524**
**USA**

## Packaging Guidelines for Primary Sample Container (vials)

Label each sample container with a unique sample id either by affixing a sticker or writing in permanent marker.

Wrap the lid of each sample tube with parafilm.

Place sample tubes in a hard protective container so that tubes will not move during transit.

## Packaging Guidelines for Secondary Container

Include a packing list in the secondary container including the following info:

- List of the sample ids that identify each sample container (i.e. labels on each vial/tube)
- Approximate amount of liquid (mL) in each vial/tube
- Email a digital copy of the packing list to dcasey@thesequencingcenter.com

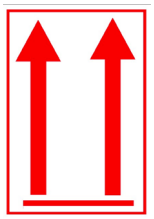
Use a leak proof styrofoam container. Tape the lid securely to prevent it opening.

If shipping a sample with dry ice please see our Guidelines for Shipping Refrigerated Samples section.

## Packaging Guidelines for Outer Container

Use a durable outer container (i.e. cardboard shipping box) to protect the inner containers. We discourage using flat shipping envelopes designed for shipping paper documents.

If sample orientation is important, please affix a universally recognized “double up arrows” sticker.



If possible, ship samples by overnight express, or no longer than 2-3 day express to prevent sample degradation. Avoid weekend and holiday deliveries.

## Guidelines for Shipping Refrigerated Samples

Due to continuing changes in state and federal regulations, clients should always check with their shipping department to ensure regulatory compliance.

1. Place samples in a Styrofoam cooler with cold packs/blue ice or dry ice. **Do not** use wet ice to ship your samples.

2. Place enough cushioning material (e.g. paper towels) around your samples to prevent damage from movement within the Styrofoam cooler.

3. Place the Styrofoam cooler inside a cardboard box to ensure acceptance by carrier.
   a. A new outer box without any other labels or excess tape works best. If you must re-use a box, then make sure to either remove or black out any other pre-existing labels on the shipping box.

4. Packages shipped with dry ice must permit the release of carbon dioxide gas. If you are submitting samples with dry ice, the outer cardboard box must have the following:

   a. A Miscellaneous Dangerous goods #9 hazard label fixed to the outside of package.

   b. A label indicating “Carbon Dioxide, solid UN1845” on the outside of the package.

   c. A label with the net weight of dry ice on the outside of the package.

   d. An air waybill with the following information:
      i. Classification (i.e. Carbon Dioxide, solid,9,UN1845)
      ii. The number of packages
      iii. The net quantity of dry ice per package


## Questions? Contact us!

Getting quality results starts with quality samples and we’re here to help.
Email us at info@thesequencingcenter.com