

Sample Submission for RNA-Seq projects

(Updated 12/13/2018)

Sample Requirements:

At least 5 μ grams of total RNA (10 μ grams recommended) with a BioAnalyzer RNA Integrity value (RIN) of at least 8, a rRNA ratio of at least 1.5 and a 260/280 ratio of at least 1.9. For best results we recommend using commercial kits for RNA isolation such as Qiagen's RNeasy line.

Please see pictures below for details about **preferred** and **maximum** tissue amounts required.

Preferred Tissue Amounts for BSR-Seq and gBSA

Plant Tissue (250 mg)



250 mg fresh plant tissue. As an example, this millet leaf has a **18 cm²** surface area of fresh leaf tissue



250 mg fresh plant tissue was ground in liquid nitrogen and is now in a **1.5 mL** microcentrifuge tube. The mass after grinding is **180 mg**. Once the sample is ground in liquid nitrogen, it must remain frozen.

Animal Tissue (550 mg)



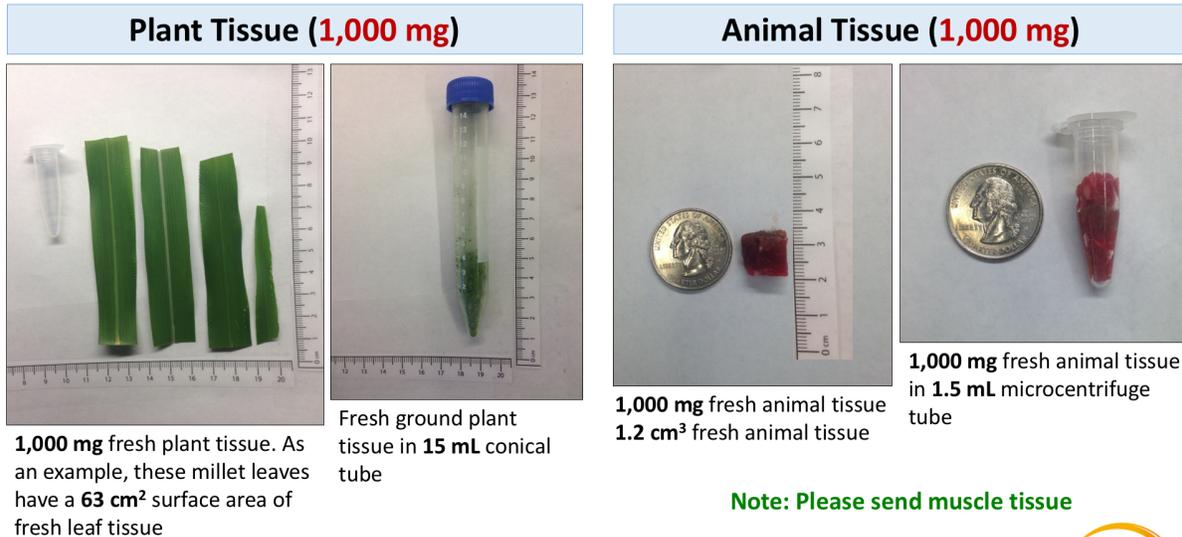
550 mg fresh animal tissue
0.56 cm³ fresh animal tissue

Note: Please send muscle tissue



550 mg fresh animal tissue in **1.5 mL** microcentrifuge tube

Maximum Tissue Amounts for BSR-Seq and gBSA



Note: Please send muscle tissue

Preparing your samples for shipment:

Preferred Method:

Please send us your RNA samples frozen in RNAase-free water, packed with dry ice in a Styrofoam container, and shipped via overnight express. For samples submitted in 1.5 or 2.2 mL tubes, we strongly suggest either using screw-cap tubes or sealing the lids on using parafilm (see attached picture). For samples submitted in 96 or 384-well plates, carefully seal each plate using sealing tape rather than foil and then wrap each plate individually. Use [this template form](#) to create your sample list and include a hard copy print out in the package. Seal the Styrofoam container with packing tape to slow the sublimation of the dry ice.

Alternative Method:

Many of our customers live in countries where overnight service to the United States is unreliable or not available. If you are unsure whether your samples will remain frozen long enough to reach Data2Bio's facility, we recommend instead shipping RNA using Biometrica's RNAsstable reagent (cat#:93220-001). When using this protocol with a speed vacuum, be sure the heat is turned off, as heating samples



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during the drying process can lead to RNA-degradation. If you don't have access to a speed vacuum it is also possible to air dry your samples. Allow at least 16 hours to air dry 10 μ L of liquid and approximately 2 days for larger sample volumes. Shipping using this method requires 5 times more initial RNA than mailing frozen samples.

Shipping:

When you are ready to mail your samples please send the tracking number and a copy of your sample list to: SampleSubmission@data2bio.com

Ship your samples to:

Data2Bio LLC
Attn: Lisa Coffey
2052 Roy J. Carver Co-Laboratory
1111 WOI Road
Ames, IA 50011-1085

It is also important to time the shipment of your samples so they will arrive on a weekday rather than a Saturday, Sunday, or US Holiday. For an updated list of US holidays which may influence package delivery check this website:
<http://www.theholidayschedule.com/post-office-holidays.php>

Additional Notes:

Some projects rely on data provided by the client rather than (or in addition to) data generated by Data2Bio. Client-supplied data are expected to arrive at Data2Bio at project initiation (e.g., when samples are provided). Delays in supplying such data are likely to delay project completion.