

## Sample Submission for DNA-Seq projects

(Updated 12/13/2018)

### Sample Requirements:

For technical reasons we can only accept DNA samples that have been extracted using Qiagen kits (DNeasy kit or Magattract Core kit) or equivalent. Unfortunately we can NOT accept DNA extracted using the CTAB method.

At least 5  $\mu$ grams of double stranded DNA isolated using a column or gel purification protocol with a 260/280 ratio of at least 1.8. If sufficient DNA is available, we recommend 10  $\mu$ grams. As mentioned above, for dried samples we recommend starting with 20  $\mu$ grams of total DNA to compensate for sample loss and degradation during drying and re-elution.

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 cm<sup>2</sup>** 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 cm<sup>3</sup>** fresh animal tissue



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

**Note: Please send muscle tissue**

## Maximum Tissue Amounts for BSR-Seq and gBSA

Plant Tissue (1,000 mg)	Animal Tissue (1,000 mg)
	
<p><b>1,000 mg</b> fresh plant tissue. As an example, these millet leaves have a <b>63 cm<sup>2</sup></b> surface area of fresh leaf tissue</p> <p>Fresh ground plant tissue in <b>15 mL</b> conical tube</p>	<p><b>1,000 mg</b> fresh animal tissue  <b>1.2 cm<sup>3</sup></b> fresh animal tissue</p> <p><b>1,000 mg</b> fresh animal tissue in <b>1.5 mL</b> microcentrifuge tube</p>

**Note: Please send muscle tissue**

### Preparing your samples for shipment:

#### Preferred Method:

Please send us your frozen DNA samples in EB buffer with dry ice in a Styrofoam container via overnight express. For samples submitted in 1.5 or 2.2 mL tubes, we strongly suggest either using screw capped tubes or sealing the lids on using parafilm. 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 mailing dried DNA samples instead. When using this method, first precipitate your samples into a pellet



Data2Bio, LLC  
2052 Roy J. Carver Co-Laboratory  
1111 WOI Road  
Ames, IA 50011-1085  
questions@data2bio.com

by adding ethanol, then dry the samples using a speed vacuum. Drying times will vary depending on the original volume of your samples. A significant quantity of DNA is lost during the drying and re-elution process, so if you use the dried DNA method we ask that you provide at least 20 µgrams of DNA per sample.

### **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](mailto: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.