

Floragenex Genomic DNA Sample Requirements

1. Check quantity and quality of your samples

Samples from each individual to be sequenced must contain at least 3 μ g of high molecular weight (>50kb) DNA at a concentration >30ng/ μ L.

To help assure that your samples will be ready to process as soon as they arrive at our facility, we ask that you visualize your samples on an agarose gel to check for degradation and contaminating nucleic acids (e.g. RNA, bacterial DNA, plastid DNA).

A note on Quantitation methods

Because DNA quantitation determined using spectrophotometry (e.g. OD260) can vary between labs and is sensitive to DNA purity, we recommend that DNA concentration be assessed by fluorometry if possible, e.g. using the Qubit Quant iT Assay system (Invitrogen).

Recommended DNA Extraction Method: Qiagen DNeasy Blood & Tissue and DNeasy Plant kits

We have observed that genomic DNAs prepared using these kits routinely generate high quality RAD libraries and sequence data. Clean, quality DNA sample inputs are critical to the success of the RAD procedure; please consider this if you plan to use a different type of kit or homemade protocol.

2. Sample Normalization

RAD sequencing on two or more samples requires DNA concentration to be normalized (equivalent) across each sample to be analyzed. Please provide our labs with normalized genomic DNA from each sample to facilitate RAD library processing. **Samples which do not adhere to this standard will not be processed.**

3. Fill out and send sample input and quality documentation

Send an electronic copy of your gel image(s) to lab@floragenex.com for quality approval before shipping your samples.

Fill out one of the sample submission manifests (available for download at <http://www.floragenex.com/forms/>) or in the attached information packet. Be sure to use the correct template form for your project: projects under 24 samples may be documented in list format and sent in individual 1.5 ml tubes, but all other large-scale projects require 96-well format for documentation and shipping. Please provide sample ID, concentration, and volume information for each sample submitted for sequencing. Sample manifests should be sent as attachments via email to lab@floragenex.com with the complete name and institution of the investigator in the subject line.

Please note that your project cannot be started without these pieces of information.