

## Appendix - Florigenex DNA Requirements for Sequencing Applications:

Overview: The quality and quantity of the DNA sample are critical to the success of this procedure. Any contamination inherent in the starting material will be directly reflected in the quality of the output library. Although RAD sequencing can be applied to DNA samples isolated using standard methods, we have found preparation of genomic DNA using the Qiagen DNeasy Blood & Tissue kits typically generates very high quality sequence data. (Qiagen catalog numbers 69504 and 69506).

### RAD Sequencing Sample Requirements

Each sample must:

- Contain a minimum of 10µg of total genomic DNA
- DNA should be non-degraded and contain no contaminating nucleic acid (e.g. RNA, plastid DNA) or particulate matter
- OD260/280 ratio of 1.8 or above
- Minimum concentration of 20 ng/µl. DNA should be resuspended in dH<sub>2</sub>O, TE or other low ionic strength buffer e.g. EB (Qiagen)

Because DNA quantitation determined using spectrophotometry (e.g. OD260) is variable and depends on DNA purity, Florigenex strongly recommends input DNA concentration and integrity should be assessed by the investigator using agarose gel densitometry with a high molecular weight DNA Ladder (See Figure 1) or by fluorometry, e.g. using the Qubit Quant iTTM PicoGreen® dsDNA Assay Kit (Invitrogen).

Ideally, DNA will have also been verified to ensure the material is derived from the target organism and contains no other contaminating DNA or RNA.

Each investigator is required to send Florigenex a manifest listing an identifier and DNA concentration for each sample to be sequenced. Sample submission forms are available for download at [www.florigenex.com/contactus/forms](http://www.florigenex.com/contactus/forms). Completed sample manifests should be sent as an attachment via electronic mail to [samples@florigenex.com](mailto:samples@florigenex.com) with the complete name and institution of the investigator in the subject line. A hard copy of the manifest should also be included in material shipped to Florigenex.

DNA samples should be sent via express courier (UPS, FedEx, DHL) on cold pack or dry ice to the following address:

Florigenex, Inc.  
1900 Millrace Drive  
Suite 103  
Eugene, OR 97403-2096  
p. 541.343.0747

Samples will be inventoried upon arrival and the investigator notified of successful receipt via email. Thank you for your attention in sample preparation and transport.

Regards,  
The Florigenex Team

Figure 1. High Quality Genomic DNA as Visualized on 1% Agarose Gel

