

This document details the requirements for preparation and quantification of DNA submitted for the KCCG HiSeq X sequencing platform via AGRF. Before you send samples to us please ensure you have already completed an online quote request, received a formal quote from us, notified us of your acceptance the quote, provided us with purchase order and received your sample identifiers. If you have not completed these steps, please do so, as this ensures that your samples can be registered by our sample tracking systems.

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1 DNA Preparation and Quantification

Samples should be extracted using Qiagen DNeasy Blood/Tissue Extraction Kits or similar.

1.1 Buffers

DNA should be submitted in one of the following buffers:

Buffer
10mM Tris/1mM EDTA
Qiagen EB
Illumina RSB

1.2 DNA Concentration

DNA quantification must be completed using a fluorometric assay specific to dsDNA (e.g. Picogreen, Qubit BR assay)

Samples must be pure, intact and of high molecular weight.

Samples must meet the following minimum requirements:

Vol. (uL)	Conc. (ng/uL)	A260:280	Total
100	20	>1.8	>1 ug

1.3 Compatibility with Whole Genome Sequencing Methods

- Samples must not be amplified (PCR, WGA, MDA etc.)
- Samples must be free of contaminating nucleic acids
- Samples should not be derived from FFPE material
- Samples should not be modified prior to shipping (e.g. Bisulphite conversion)

1.4 Tube and plate labelling

For submissions of < 24 samples, please submit in 1.5mL microfuge tubes

Please label your tubes with:

1. The sample identifier supplied to you at project activation (ie FRXXXXXXXXXX)
2. Followed by M (male) or F (female)

For submissions of > 24 samples, please submit a 96 well plate with excel file of sample identifiers and sample.

Plates should be labelled Project Code (i.e. CAGRF1234). You can find this on the quote provided to you.

Plates should be labelled on the sides of the plates. Do not label on the top as this gets removed with the lid.

Please do not use 0.2mL or 0.5mL pre PCR tubes.

1.5 Shipping DNA to us

The responsibility for ensuring samples reach AGRF in good condition remains the responsibility of the client. If samples arrive in poor condition we will notify the client of this as soon as the samples arrive. For domestic shipments (within Australia), AGRF recommend the use of a courier and shipping samples on ice. "Cold Packs" can be used instead of ice. Both TNT Express and DHL are commonly used for this. You can ship your samples to your local node. Your local node address can be found on our website [here](#).

2 Let AGRF extract and prepare your samples for you

To avoid the hassle of extracting DNA yourself and let AGRF do this step for you. Our extraction service works with a wide range of DNA sources and prepares DNA to the requirements of our service.

Please contact AGRF for a quote or assistance on your extraction.

PH: (08) 8313 7202.

3 Online Sample Submission

Once your samples are ready please fill out an online sample submission form so that we know they are coming. Details of how to fill out an online sample submission form can be found under the "Resources" section of our website.