Human Whole Genome Sequencing - Illumina HiSeq X™ Ten Platform

DNA Preparation and Submission Requirements

Please adhere to the following information regarding the requirements for preparation and quantification of DNA submitted to the Ramaciotti Centre for Genomics for sequencing on the KCCG’s HiSeq™ X Ten sequencing platform.

- This service is exclusively for human whole genome research sequencing.
- Relevant ethics approval is required prior to submission. Relevant approval numbers are requested at the time of submission.
- Fill in an online sample submission form prior to submission. (http://www.ramaciotti.unsw.edu.au)
- Samples must be labeled with a corresponding unique ID; for example SAM_1.
- Samples must be de-identified i.e no patient names.
- Samples should be extracted using Qiagen DNeasy Blood / Tissue Extraction Kits or similar.
- DNA should be submitted in one of the following buffers:
  - 10mM Tris/1mM EDTA (TE)
  - Qiagen EB
  - Illumina RSB

- DNA quantification must be completed using a fluorometric assay specific to dsDNA (e.g. Picogreen, Qubit BR assay).
- 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).
- Samples must be pure, intact and of high molecular weight.
- Please submit samples in tubes (1-24 samples) or in plates (above 24 sample batch).
- Samples must meet the following:

<table>
<thead>
<tr>
<th>Vol. (uL)</th>
<th>Conc. (ng/μL)</th>
<th>A260:280</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 - 100</td>
<td>20 - 40</td>
<td>&gt;1.8</td>
<td>&gt;2 ug</td>
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**IMPORTANT:** Samples that do not conform to the criteria below will not be processed and an administration fee charged as appropriate.
**DNA Shipping Requirements**

- Ensure that the tube(s) or plate of DNA is sealed tightly prior to shipping, and that the labeling match the IDs on the submission form. High quality plate seals can be provided on request.
- DNA samples must be frozen prior to shipment, preferably for >24 hours.
- Samples should be shipped on sufficient dry ice to ensure that samples remain frozen.
- Attach a shipping label with the address below:

  **Attn: The Ramaciotti Centre**  
  Faculty of Science Store  
  Loading Dock - Building C25  
  Via Gate 11 Botany Street  
  University of New South Wales  
  Randwick, NSW 2052  
  Australia  
  +61 2 9385 1658

- We recommend that the stated value is less than $1,000 on any paperwork you provide, so as not to trigger a requirement for a tax invoice.
- If shipping from outside Australia an Australian Quarantine and Inspection Service (AQIS) import permit will be required. Please contact us if this is required.
- We currently recommend World Courier or LabCabs. We strongly advise against using other couriers.
- The Faculty of Science Store is open for delivery of samples Monday to Friday, 8am – 4pm AEST. To avoid extra transit time over a weekend, please plan to ship your samples to arrive accordingly.
- The Ramaciotti Centre is not responsible for samples that are delivered outside these times.
- Courier and tracking number information should be provided to the Ramaciotti Centre for Genomics via nextgenseq@unsw.edu.au

**Turnaround Time**

Standard turnaround time is 6-8 weeks following the date of acceptance to the date of data delivery.

**Contact Us**

If you have any questions on the information contained within this document please contact us:

Email nextgenseq@unsw.edu.au  
Phone +61 2 9385 1658