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MiSeq standard operating procedures and best practices

Please note that the MiSeq must be booked in advance at: https://cgi.sfu.ca/~mbbweb/seq/. Please contact Tim Heslip (trh2@sfu.ca) or Duncan Napier (dgnapier@sfu.ca) for access to this calendar.

Sample preparation and sample sheet

1. Obtain the newest version of the User Guide and READ it. The current version is Rev. N and can be obtained from: http://support.illumina.com/sequencing/sequencing_instruments/miseq.html.
2. Get the most recent version of guide for "Preparing Libraries for Sequencing on the MiSeq". The current version is Rev. D and can be obtained from: http://support.illumina.com/downloads/prepare_libraries_for_sequencing_miseq_15039740.html.
3. Prepare a sample sheet using the Illumina Experiment Manager software. The user guide for this software can be obtained here: http://support.illumina.com/sequencing/sequencing_software/experiment_manager.ilmn. If your library requires custom sequencing primers, be sure to specify this.
4. Make aliquots of fresh 1N or 2N NaOH and freeze for future use. Sigma supplies molecular biology grade 1N NaOH.

14. If custom sequencing primers are needed, load these into the appropriate ports on the cartridge. If applicable, ensure that the use of custom primers is correctly indicated in the sample sheet.

Starting a run

15. After thawing in a room temperature water bath, invert thawed kit 10X and then knock on benchtop firmly several times to release bubbles. Visually ensure all chambers in the kit have completely thawedeet.