

STARTING MATERIAL FOR ILLUMINA DNA-SEQ:

Minimum: 100ng of high molecular weight genomic DNA in 50ul buffer.

Preferred: 2ug of high molecular weight genomic DNA in 100ul buffer. More is always better.

Sample Submission Guidelines

For small numbers of samples (1-16):

Genomic DNA should be assayed on a gel to ensure that the sample is high molecular weight (greater than 10kb in length) and the gel image should be provided to the CGB upon submission of the sample. The genomic DNA sample should also have been subjected to Nanodrop spectrophotometry to determine sample concentration and purity. 260/280 and 260/230 ratios should be close to 2. Nanodrop data concerning sample concentration and purity should be provided to the CGB upon submission of the sample. The genomic DNA sample should be resuspended in an appropriate buffer such as water, TE buffer, or Qiagen EB buffer. The identity of the buffer and the buffer volume should be provided to the CGB upon submission of the sample

For large numbers of samples (17 and more):

The CGB will provide an appropriate 96 well plate for sample submission. The client will array genomic DNA samples in the plate and will be responsible for filling out a sample submission form that will be provided by the CGB. At least 20% of the genomic DNA samples should be run out on a gel to ensure that the genomic DNA samples are high molecular weight (greater than 10kb in length). At least 20% of the samples should also be to Nanodrop spectrophotometry to determine sample concentration and purity. 260/280 and 260/230 ratios should be close to 2. Gel image(s) and Nanodrop data are to be provided to the CGB upon submission of the samples. The identity of the buffer and the buffer volumes should also be provided to the CGB upon submission of the samples.

CGB Quality Control of DNA Samples

The CGB will conduct fluorometric assays (PicoGreen) to verify sample concentration for each sample. If the samples are not sufficiently concentrated we may ask the client to submit additional/replacement samples. If this is not possible due to limited starting material, we may attempt to concentrate them further using the Eppendorf VacFuge. If the samples are low molecular weight, the client will be asked to provide additional/replacement samples. The CGB reserves the right to reject any sample that does not meet internal QC.

STARTING MATERIAL FOR ILLUMINA RNA-SEQ:

Minimum: 1ug of total RNA in 50ul buffer.

Preferred: 4ug of total RNA in 100ul buffer. More is always better.

Client may also supply pre-isolated mRNA or Ribominus/RiboZero treated RNA. In both cases, 200ng of mRNA is required, although more is always better. The sample will be concentrated to a volume of 5ul using the Eppendorf VacFuge.

Sample Submission Guidelines

For small numbers of samples (1-16):

The RNA sample should also have been subjected to Nanodrop spectrophotometry to determine sample concentration and purity. 260/280 and 260/230 ratios should be close to 2. Nanodrop data concerning sample concentration and purity should be provided to the CGB upon submission of the sample. The total RNA sample should be resuspended in an appropriate buffer such as RNase-free water. The identity of the buffer and the buffer volume should be provided to the CGB upon submission of the sample

For large numbers of samples (17 and more):

The CGB will provide an appropriate 96 well plate for sample submission. The client will array total RNA samples in the plate and will be responsible for filling out a sample submission form that will be provided by the CGB. At least 20% of the samples should also be to Nanodrop spectrophotometry to determine sample concentration and purity. 260/280 and 260/230 ratios should be close to 2. Nanodrop data are to be provided to the CGB upon submission of the samples. The identity of the buffer and the buffer volumes should also be provided to the CGB upon submission of the samples.

CGB Quality Control of DNA Samples

The CGB will conduct fluorometric assays (RiboGreen) to verify sample concentration for each sample. The CGB will also conduct RNA integrity assays (Bioanalyzer or TapeStation) to determine the integrity of the RNA and determine the RIN value of the samples. If the samples are not sufficiently concentrated we may ask the client to submit additional/replacement samples. If this is not possible due to limited starting material, we may attempt to concentrate them further using the Eppendorf VacFuge. If the samples have low RIN values (are degraded), the CGB will ask the client to supply replacement samples if possible. The CGB reserves the right to reject any sample that does not meet internal QC.

STARTING MATERIAL FOR ILLUMINA CHIP-SEQ:

Minimum: 5ng of ChIP DNA in 20ul buffer.

Preferred: 10ng of ChIP DNA in 20ul buffer. More is always better.

Sample Submission Guidelines

For small numbers of samples (1-16):

The ChIP DNA sample should also have been subjected to Nanodrop spectrophotometry if possible to determine sample concentration and purity. 260/280 and 260/230 ratios should be close to 2. Nanodrop data concerning sample concentration and purity should be provided to the CGB upon submission of the sample. The ChIP DNA sample should be resuspended in an appropriate buffer such as water, TE buffer, or Qiagen EB buffer. The identity of the buffer and the buffer volume should be provided to the CGB upon submission of the sample

For large numbers of samples (17 and more):

The CGB will provide an appropriate 96 well plate for sample submission. The client will array genomic DNA samples in the plate and will be responsible for filling out a sample submission form that will be provided by the CGB. At least 20% of the samples should also be to Nanodrop spectrophotometry if possible to determine sample concentration and purity. 260/280 and 260/230 ratios should be close to 2. Nanodrop data are to be provided to the CGB upon submission of the samples. The identity of the buffer and the buffer volumes should also be provided to the CGB upon submission of the samples.

CGB Quality Control of DNA Samples

The CGB will conduct fluorometric assays (PicoGreen) to verify sample concentration for each sample, as well as run an Agilent assay (Bioanalyzer or TapeStation) to determine ChIP DNA size. If the samples are not sufficiently concentrated we may ask the client to submit replacement samples. If this is not possible due to limited starting material, we may attempt to concentrate them further using the Eppendorf VacFuge. CGB reserves the right to reject any sample that does not meet internal QC.