MGC Submission Requirements

10x Genomics Library Prep Sample Requirements

Single Cell

- » Single Cell suspensions should be washed and filtered prior to drop-off according to 10x Single Cell Protocols Cell Preparation Guide provided, if samples are not prepped according these guidelines, the MGC will not guarantee success.
- » Sample submission form must be sent electronically to DMPI-MGC@duke.edu before sample drop-off.
- » Single cell suspensions should be at a concentration near 1x10⁶ -1.5x10⁶ cells/mL.
- » You must inform us if your cells are infectious.
- » We do not accept cells that require BSL >2.
- » Cell viability should be > 80%, if not, we will need explicit instructions to move forward.
- » Submit a service request on CR@D.

Whole Genome/Exome

- » HMW DNA samples should have concentrations </= 20ng/ul.
- » Sample submission form must be sent electronically to DMPI-MGC@duke.edu before sample drop-off.
- » Submit a service request on CR@D.

Sample Requirements for Illumina Microarray Projects

» Skirted PCR plate with heat seal or quality adhesive seal required for submissions with greater than 24

samples.

- » Fill out Illumina Sample Submission Form and submit electronically to DMPI-MGC@duke.edu
- » Send sample manifest with concentration information electronically to DMPI-MGC@duke.edu
- » Submit a service request on CR@D.
- » Methylation arrays require 500ng (@25ng/ul) input, please submit enough sample to accommodate array requirements plus additional volume for quantification and QC assays. If

your samples are not concentrated enough, we will request additional sample. Note it is simpler to submit more DNA than necessary and we can return the remainder.

» Genotyping arrays require 200ng (@50ng/ul) input, please submit enough sample to accommodate array requirements plus additional volume for quantification and QC assays. If your samples are not concentrated enough, we will request additional sample. Note it is simpler to submit more DNA than necessary and we can return the remainder.

<u>Note</u>**If you have not quantitated samples via Qubit or PicoGreen assay, **additional sample** will be required for quantitation purposes.

<u>Note</u>**Spectrophotometry is **not** an accurate quantification method.

- » If you want leftover sample, please arrange pickup after your data is received by emailing DMPI-MGC@duke.edu.
- » Unless you request otherwise, all leftover sample will be discarded two months after the completion of the project.

Tagman Genotyping Sample Requirements

- » Skirted PCR plate with heat seal or quality adhesive seal or Thermo-fisher matrix tubes required for sample submissions.
- » Samples must be at a concentration of 10ng/ul in 10ul.
- » Submit a service request on CR@D.
- » Send electronic manifest with sample information to DMPI-MGC@duke.edu.
- » Unless you request otherwise, all leftover sample will be discarded two months after the completion of the project.