

Guidelines for Submitting Samples

Investigators can submit samples in the form of isolated genomic DNA, total RNA, ChIP-DNA, or other form of samples including BACs, amplicons, MBDCap-DNAs, RIP-RNAs for sequencing. Submitted samples will be analyzed by appropriate quality control measures (Qubit, Bioanalyzer, or gel electrophoresis) to assess the quantity and quality of the sample. You will be notified if there are any issues regarding quality and quantity of the sample. Samples that pass quality control steps are then put through a series of steps to create a sequencing library using the appropriate sample prep kit.

In order for us to provide you high quality data, please review the following information for details on how to submit samples to GCCRI Genome Sequencing Facility.

The sample submission form must accompany all submitted samples Sample Submission Form. It is essential that you fill out all the information. Please note: Sample_Name field entry in the sample submission form cannot contain illegal characters not allowed by file systems. Allowed characters are alphanumeric characters and underscores. Examples of common characters not allowed are the **space character** and the following: ? () [] / \ = + < > ; ; "

Please label each sample individually and carefully to make sure we can recognize all your samples.

Generally, samples can be submitted in three different forms: genomic DNA, total RNA and CHIP-DNA. For sequencing application and the starting material, see the table below.

Sequencing Application	Sample Type	Quantity*	Suggested Concentration (ng/ul)	Sample Quality
DNA-Seq (small genome< 5Mb)	gDNA	10-50 ng	0.1-10	A260/A280 > 1.8, A260/A230 > 1.5
DNA-Seq (genome>5Mb)	gDNA	10-1000 ng	1-100 ng/μl	A260/A280 > 1.8, A260/A230 > 1.5
RNA-Seq	Total RNA	100-2000 ng	5-200 ng/μl	A260/A280 > 1.8, RIN >8
SmRNA-Seq	Total RNA	50-1000 ng	1-100 ng/μl	A260/A280 > 1.8, RIN >8
ChIP-Seq	ChIP-Enriched DNA	0.1-50 ng	0.05-10 ng/μl	Bioanalyzer trace file or agarose gel pic
Mate-Pair	gDNA	1-10 μg	10-200 ng/μl	A260/A280 > 1.8, A260/A230 > 1.5
Exome Enrichment	gDNA	50-1000ng	5-200 ng/μl	A260/A280 > 1.8, A260/A230 > 1.5

*We strongly recommend using fluorometric-based methods for accurate quantification, such as Qubit or PicoGreen assays, to measure the concentration. If you don't have access to the equipment mentioned above and have only a

nanodrop reading, we suggest you plan to give us double or triple amount of starting materials. In general, concentrations measured by nanodrop are higher than the actual concentration. Please mark the equipment you used for quantification.

These amounts are guidelines only. For specifics, please contact **Zhao Lai, Ph.D.** Director of Genome Sequencing Facility.

Contact

Zhao Lai, Ph.D.

email: laiz@uthscsa.edu

phone: 210-562-9246

fax: 210-562-9135

Users on campus can drop off the samples (DNA form samples should be on ice and RNA form samples should be on dry ice). GCCRI building address:

Attn: Dawn Garcia
Room 2.120
8403 Floyd Curl Drive, San Antonio, Texas 78229
Phone 210 562-2222

Outside users will need to ship their samples with enough dry ice by FedEx overnight shipping.

Our shipping address:

Attn: Dawn Garcia
Greehey Children's Cancer Research Institute Room 2.120
University of Texas Health Science Center at San Antonio
8210 Floyd Curl Drive
San Antonio, Texas 78229
Phone 210 562-2222