

GENXMAP



Library Preparation Services

- ✓ Optimized process for each sample type
- ✓ Fast and reproducible library preparation

Library Preparation

A high-quality library preparation is essential for obtaining reliable, informative, and cost-effective sequencing data, with high coverage and depth, and low error and bias rates. This is particularly important for applications that require high sensitivity and specificity, such as variant detection, gene expression profiling, and epigenetic analysis.

GENXMAP adapted, developed and optimized procedures for high quality library preparation from DNA or RNA for large range of applications.

Available library preparation for the following application:

- Whole Genome Sequencing
- Whole Exome Sequencing
- Whole Transcriptome Sequencing
- mRNA Sequencing
- Small RNA Sequencing (miRNA, siRNA)
- Single Cell DNA Sequencing
- Single Cell RNA Sequencing

REPRODUCIBLE

- ❖ Library Preparation & QC process

HIGH YIELD GARANTEED

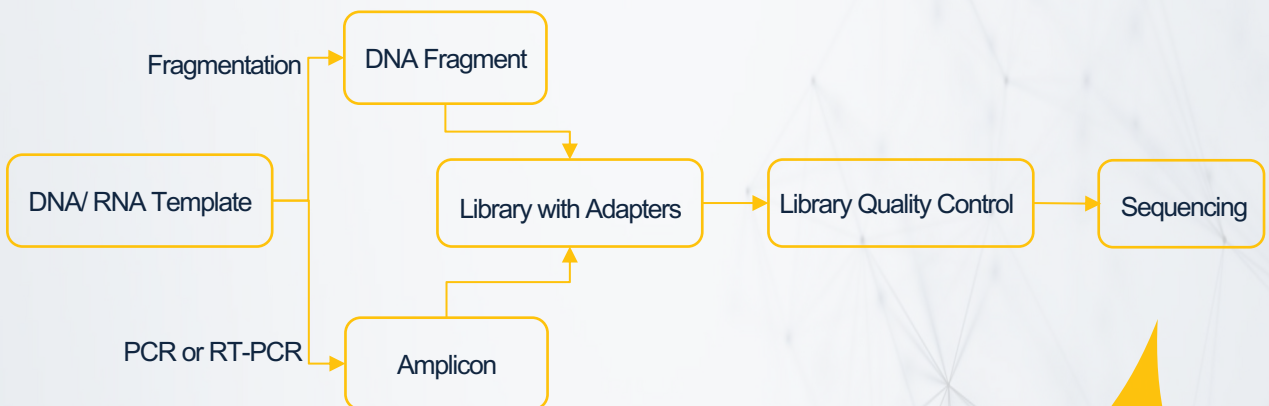
- ❖ Best method chosen based on starting material quality and quantity*

Quantification and qualification controls:

- ✓ Nanodrop
- ✓ Qubit assays
- ✓ Agarose gel
- ✓ PCR and qPCR
- ✓ Capillary Fragment analyser

> **Customized libraries**
on different platforms

The typical schema of our library preparation workflow



- ❖ Library kits optimized for sample quantity and quality
- ❖ Library Clean-Up solutions
- ❖ Library Size-Selection solutions

Optimized
process

Library Preparation

The quality and quantity of the prepared library is highly dependent to the provided DNA or RNA. Here is an example of what GENXMAP proposes for the minimal needed concentration and available technologies.

Library type *	Starting material	Application	Minimal concentration	Platforms
➤ DNA (standard)	DNA	❖ WGS	100 ng - 1 µg	✓ Illumina ✓ PacBio ✓ Oxford Nanopore
➤ Low Input DNA	DNA	❖ WGS ❖ WES	10 - 100 ng	✓ Illumina
➤ FFPE DNA	DNA	❖ WGS ❖ WES	20 - 400 ng	✓ Illumina
➤ Cell-free DNA	DNA	❖ WGS ❖ WES	10 - 50 ng	✓ Illumina
➤ ChIP-Seq	DNA	❖ Chromatin Immunoprecipitation	20 - 400 ng	✓ Illumina
➤ Single Stranded DNA	DNA	❖ WGS	100 ng - 1 µg	✓ Illumina
➤ Custom Amplicon sequencing	DNA	❖ Metagenomics ❖ 16srRNA sequencing	100 ng	✓ Illumina
➤ PCR-free DNA	DNA	❖ Target Sequencing ❖ WGS ❖ WES	100 ng - 1 µg	✓ Illumina
➤ Bulk RNA sequencing	RNA	❖ WTS	20 - 100 ng	✓ Illumina
➤ mRNA	RNA	❖ mRNA Sequencing	25 ng - 1ug	✓ Illumina
➤ FFPE RNA + RNA enrichment	RNA	❖ WTS	20 ng	✓ Illumina
➤ Single Cell RNA/DNA	DNA RNA	❖ Customized Single Cell Library preparation		

* For any specific Library type, please contact us



Contact us

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