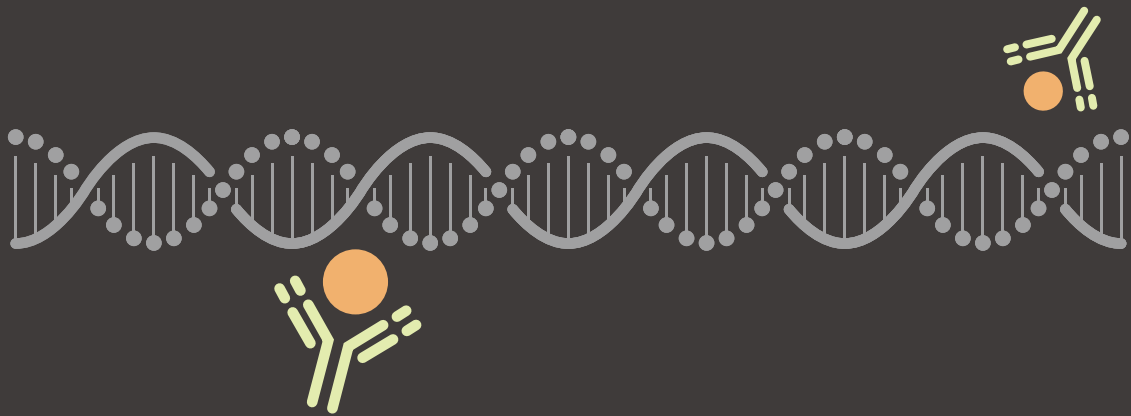


# Chromatin Immunoprecipitation Sequencing (ChIP-Seq)



**Chromatin Immunoprecipitation Sequencing (ChIP-Seq)** provides genome-wide profiling of DNA targets for histone modification, transcription factors, and other DNA-associated proteins. Determining how proteins interact with DNA to regulate gene expression is essential for understanding many biological processes and disease states.

This method combines the selectivity of chromatin immunoprecipitation (ChIP) to recover specific protein-DNA complexes. The application of next-generation sequencing (NGS) to ChIP has revealed insights into gene regulation events that play a role in various diseases and biological pathways, such as development and cancer progression.

## Our Key Features & Advantages



### Cost Effective

Rapid and efficient genome-wide profiling of multiple samples, using only 1/100 of the amount of DNA required for ChIP-seq.



### Unsurpassed Data Quality

We guarantee that  $\geq 80\%$  of bases have a sequencing quality score  $\geq Q30$ , exceeding Illumina's official guarantee of  $\geq 75\%$ .



### Comprehensive Analysis

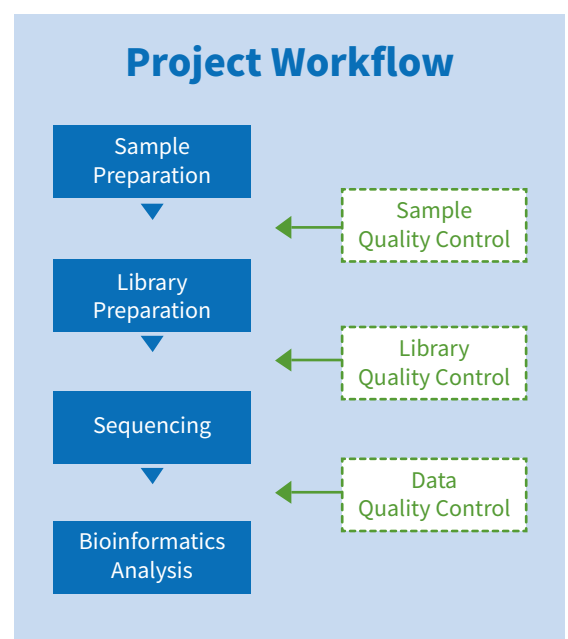
Expert bioinformatics analyses utilizing industry-standard MACS2 software and latest programs for motif prediction, peak annotation, functional analysis, and data visualization.



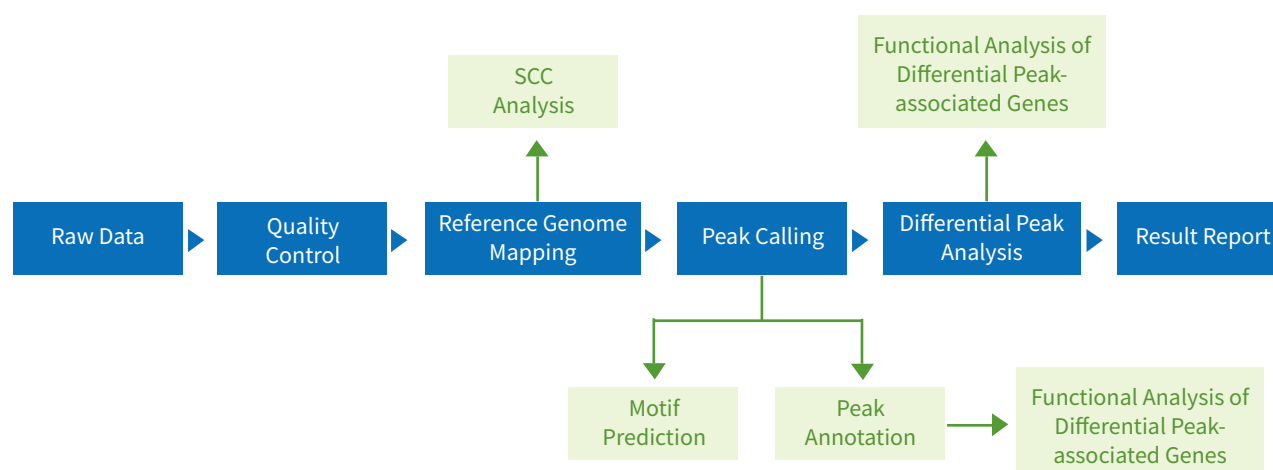
### Extensive Experience

Over 2000 projects successfully completed.

## Project Workflow



## Standard Analysis Pipeline



## Sample Requirements

Library Type	Sample Type	Amount	Volume	Concentration	Purity NanoDrop
ChIP-Seq Library	ChIP-Seq DNA	≥ 50 ng	≥ 20 µL	≥ 2 ng/µL	OD260/280=1.8~2.0 No degradation, no contamination

## Publications

Listed below are some recent publications that were supported by Novogene solutions.

Journal	IF	Title
Biomedicine & Pharmacotherapy	4.55	Drosophila Histone Demethylase KDM5 Regulates Social Behavior through Immune Control and Gut Microbiota Maintenance (2020)
Plant Cell Reports	3.825	ZmMYC2 exhibits diverse functions and enhances JA signaling in transgenic Arabidopsis (2020)
Cancer Research	9.13	SET Domain-Containing Protein 4 Epigenetically Controls Breast Cancer Stem Cell Quiescence (2019)
Cancer Research	9.13	E6 protein expressed by high-risk HPV activates super-enhancers of the EGFR and c-MET oncogenes by destabilizing the histone (2018)

For Research Use Only. Exclusive for clients in AMEA (Asia Pacific, Middle-East & Africa).

**NovogeneAIT Genomics Singapore Pte. Ltd.**  
(Joint Venture & Sequencing Centre)

**Novogene International Pte. Ltd.**  
25 Pandan Crescent #05-15 TIC Tech Centre, Singapore 128477

T: +65-8823-3182  
e: [marketing\\_amea@novogeneait.sg](mailto:marketing_amea@novogeneait.sg)

[en.novogene.com](http://en.novogene.com)