

For Life Science Research:

## lncRNA Sequencing Solutions

Long non-coding RNAs (lncRNAs) are defined as  $\geq 200$  nucleotide long RNAs, which regulate gene expression at epigenetic, transcriptional and post transcriptional levels through binding to DNA, RNA or protein. In this post-genomic era, lncRNAs are gaining increasing attention in areas of medical and agricultural research.

### Novogene is well positioned to be your competent NGS partner



#### Directional Library

We offer directional library after rRNA removal, adding information on the originating strand of transcripts.



#### Comprehensive Integrated Analysis

Comprehensive integrated analysis of lncRNA and mRNA with one library construction



#### Reliable & Faster Turnaround Time

Our large assembly of NGS systems and the strategic locations of our laboratories in Asia can provide faster turnaround time.



#### Extensive Experience

We have extensive records of sequencing projects that have been published in journals.



#### Unsurpassed Data Quality

Our informatics expertise and sequence processing capacity are capable to manage and deliver superior data quality that exceed Illumina's official benchmark and any other NGS providers.

### Project Workflow

Total RNA  
Extraction

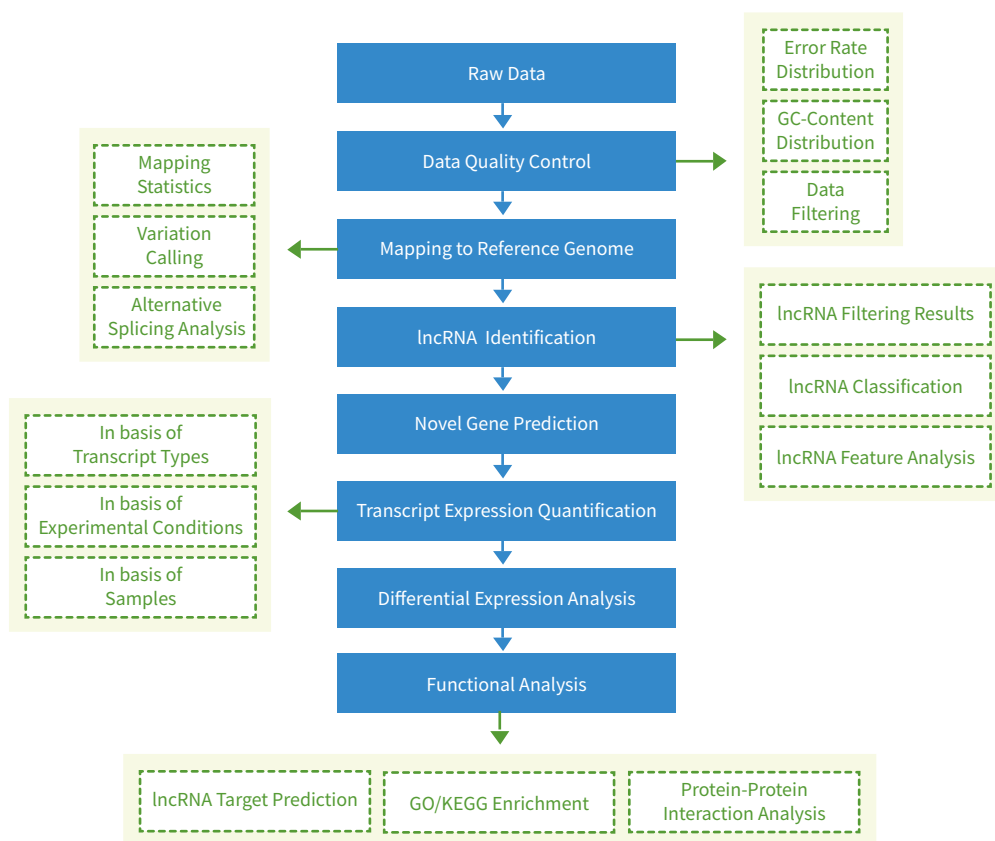
Sample Quality  
Control

Library  
Preparation

Sequencing by  
Synthesis

Bioinformatics  
Analysis

## Standard Analysis Pipeline



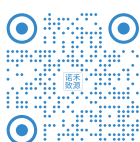
## Sample Requirements

Library Type	Sample Type	Amount	Volume	Concentration	RIN	Purity (Nanodrop/Agarose Gel)
250-300bp insert directional cDNA library with rRNA removal	Total RNA	≥ 2 µg	≥ 20 µL	≥ 50 µL	Animal ≥ 6.5 Plant/Fungi ≥ 6, with the smooth baseline	No degradation, no contamination

## Selected Publications

Novogene has successfully sequenced and analyzed the lncRNAs from almost 70 species including cattle, mice, rabbits, chickens, butterflies, bees, nematodes, sea buckthorn, banana, and cotton etc. More and more scientists are using our service to advance their lncRNA research on human, pig, sheep as well as a lot of other species, and their work have been published in Nature Structural & Molecular Biology and other top journals.

Journals	IF	Titles
Molecular Cancer	10.68	A novel IFN $\alpha$ -induced long non-coding RNA negatively regulates immunosuppression by interrupting H3K27 acetylation in head and neck squamous cell carcinoma (2020.01)
Nature Genetics	25.46	Analysis of the androgen receptor-regulated lncRNA landscape identifies a role for ARLNC1 in prostate cancer progression (2018.06)



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

**Novogene International Pte. Ltd.**

25 Pandan Crescent #05-15 TIC Centre, Singapore 128477

T. +65-8823-3182

E. marketing\_amea@novogeneait.sg

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