

Circular RNA Sequencing

Circular RNAs (circRNAs) are a novel class of abundant, stable and ubiquitous RNAs. circRNAs are distinguished from mRNAs in that they lack poly (A) tails and 5' caps, and are resistant to exonuclease treatment. circRNAs can serve as miRNA or RNA-binding protein 'sponges', sequestering miRNAs and preventing their interactions with target mRNAs, as a result, controlling transcriptional events.

Applications



Competing endogenous RNA (ceRNA) investigation



Regulatory mechanisms of innate immune responses



Research of pathological targets and biomarkers



Peptide expression

Our Features & Advantages



Two Options for Library Construction

The (rRNA-) library retained both circular RNA and linear RNA sequences, and the analysis results were more comprehensive. The (RNase R+) library only retained circular RNA, and the analysis results were more accurate.



Extensive Experience

Our clients have published 165 lncRNA/circRNA articles, including 25 high-quality articles (IF > 10).



Specialist Team

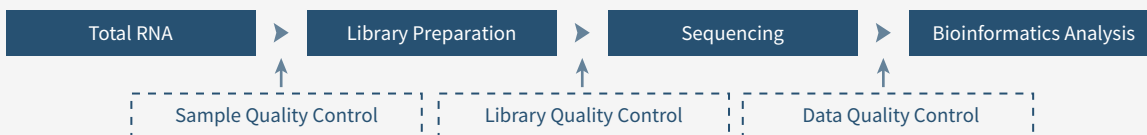
We have experienced experts to assist you with experimental design and data interpretation.



Reliable & Fast Turnaround Time

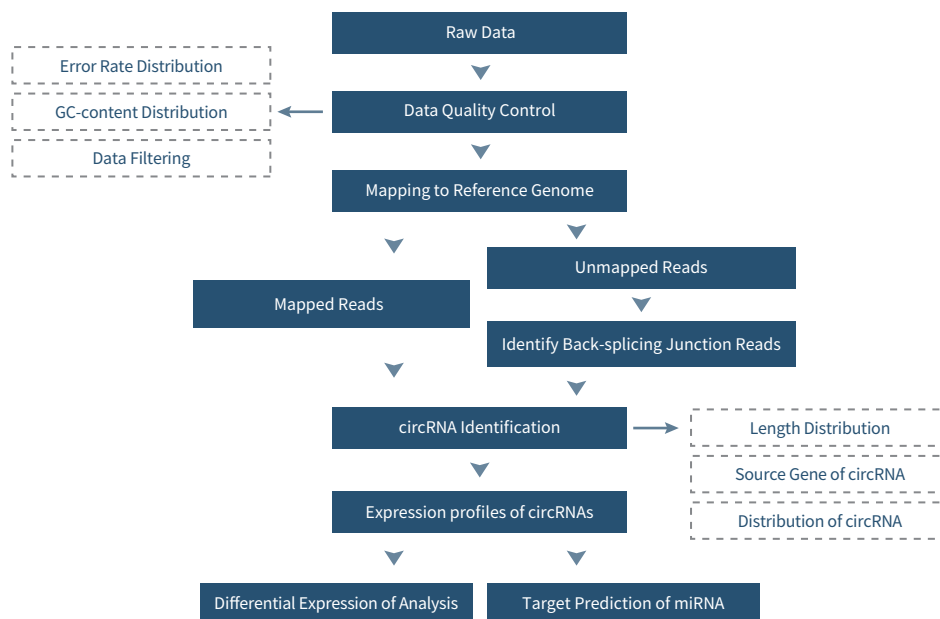
A dedicated project manager will be provided and the results will be given to you within 20 business days after sample quality verification.

Project Workflow



Sequencing Strategy: illumina Novaseq platform, PE150bp, 12 Gb (for rRNA- library) or 6 Gb (for RNase R+ library) raw data/sample

Bioinformatics Analysis Pipeline



Sample Requirements

Library Preparation	Sample Type	Amount	RIN	Purity
Ribosomal RNA Removal 250~300 bp Insert cDNA Library (rRNA-)	Total RNA	≥2 µg	≥7.0	260/280>1.8, 260/230>1.0
Ribosomal RNA and Linear RNA Removal 250~300 bp Insert cDNA Library (RNase R+)	Total RNA	≥2 µg	≥7.0	260/280>1.8, 260/230>1.0

Recent Publications

Journal	IF	Title	Year
Experimental and Molecular Medicine	12.8	Cdyl2-60aa encoded by CircCDYL2 accelerates cardiomyocyte death by blocking APAF1 ubiquitination in rats	2023
Redox Biology	11.4	CircRNA Galnt16 sponges miR-335 to ameliorate stress-induced hypertension through upregulating Lig3 in rostral ventrolateral medulla	2023
Molecular Cancer	37.3	Circular RNA circFIRRE drives osteosarcoma progression and metastasis through tumorigenic-angiogenic coupling	2022

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