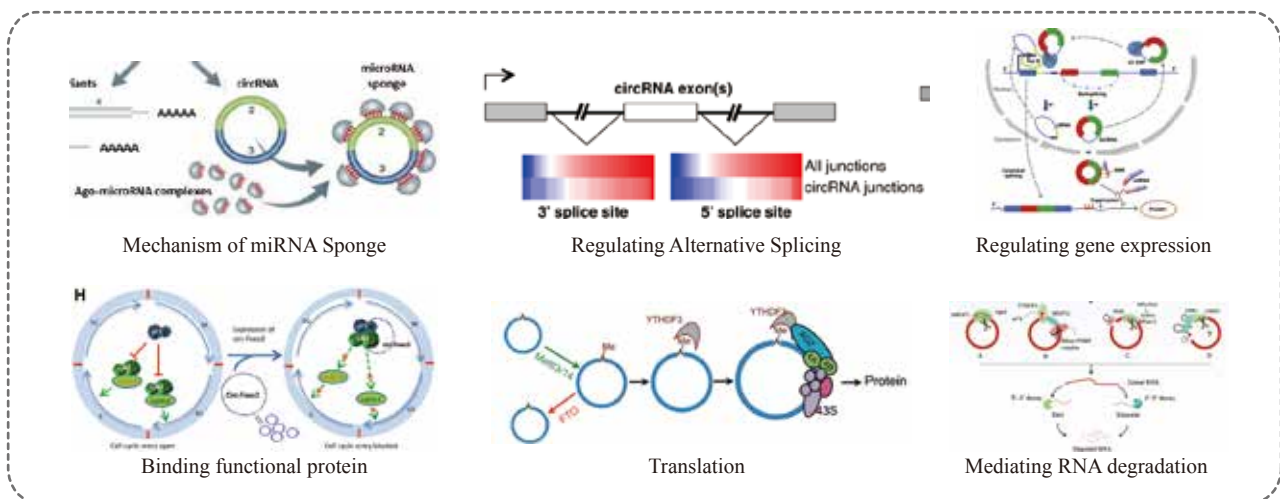


CircRNA Sequencing

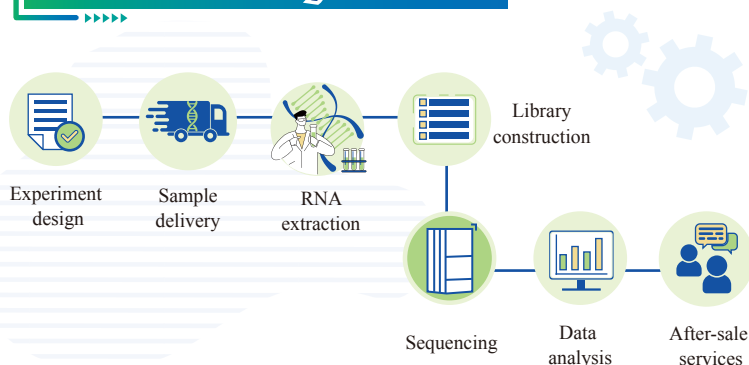
Product Introduction

CircRNAs (Circular RNAs) are one class of non-coding RNA molecules that are short of 5' end cap and 3' end poly(A) tail. CircRNAs perform circular structure by the covalent bond which is status against RNA exonuclease digestion. circRNA plays an important role in the growth and development of organisms and their resistance to the external environment.

Application



Service Workflow



Bioinformation list

- Identification and annotation of known circRNA;
- Novel circRNA prediction;
- CircRNA hosts;
- CircRNA expression and distribution
- Prediction on circRNA targeted miRNAs;
- CircRNA differential expression analysis;
- DE-circRNA host gene classification, enrichment and annotation.

Service Advantages

- 1 Identification and statistics on known circRNA and novel circRNA prediction.
- 2 To explore the correlation between circRNA and mRNA expression regulation, study the regulatory system of circRNA-miRNA-mRNA.
- 3 In our circRNA sequencing projects, ribosomal RNA (rRNA) depletion directional library becomes more popular compared to linear RNA depletion, in that this strategy saves information on other RNA molecules, including mRNA, lncRNA, etc. joint analysis on these datasets.
- 4 BMKCloud-based result delivery: Customized data mining is available on the platform.
- 5 After-sale services: After-sale services are valid for 3 months upon project completion, including project follow-up, trouble-shooting, results Q&A, etc.

Service Specifications

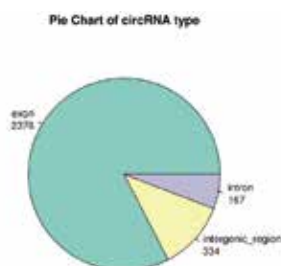
Library	Platform	Recommended data	Data QC	Time
rRNA depletion	Illumina PE150	16 Gb	Q30≥85%	30 days

Sample Requirements

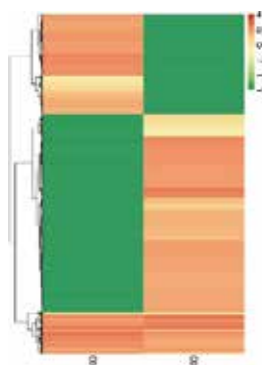
Amount	Purity	Integrity
Conc. ≥100 ng/μL; Volume ≥ 10 μL; Total ≥ 0.5 μg	OD260/280=1.7-2.5 OD260/230=0.5-2.5 Limited or no protein or DNA contamination shown on gel.	For plants: RIN≥6.5; For animals: RIN≥7.0; 5.0≥28S/18S≥1.0; limited or no baseline elevation

Demo Results

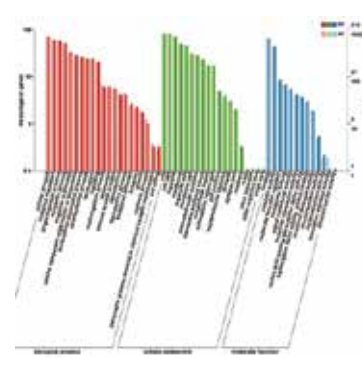
1. Distribution of circRNA host



2. Hierarchical clustering of differentially expressed circRNAs



3. GO classification of DE-circRNA host genes



Featured Publications

Year	Journal	Paper	Article	DOI
2023	International Immunopharmacology	Comprehensive evaluation of circRNAs in cirrhotic cardiomyopathy before and after liver transplantation	Disease treatment	10.1016/j.intimp.2022.109495
2023	Research Square	CPSF3 modulates the balance of circular and linear transcripts in hepatocellular carcinoma	Disease treatment	10.21203/rs.3.rs-2418311/v1
2023	Phytopathology Research	Xoo-responsive transcriptome reveals the role of the circular RNA133 in disease resistance by regulating expression of OsARAB in rice	Disease resistance	10.1186/s42483-023-00188-8



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