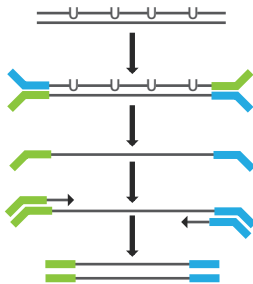


LncRNA Sequencing

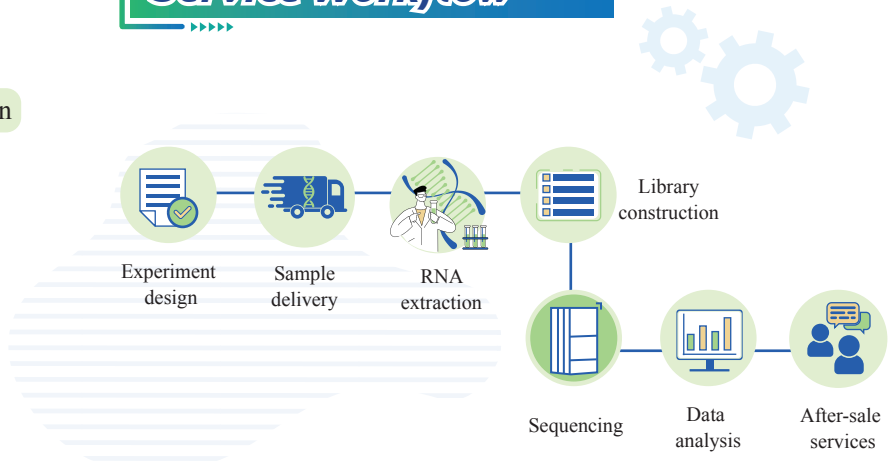
LncRNA (Long Non-Coding RNA) is a critical component of non-coding RNA, exceeding 200 nucleotides in length. It plays a crucial role in cellular activities. BMKGENE's advanced LncRNA sequencing and analysis technology can help with an in-depth understanding of cell differentiation, organism development, and human diseases. BMKGENE has a wealth of experience, completed the sequencing of the more than twenty thousand LncRNA samples.

Technical Features

rRNA depletion and stranded library construction



Service Workflow



Bioinformatics

- ▶ Transcript classification;
- ▶ Combination analysis on lncRNA and mRNA;
- ▶ Gene structure analysis;
- ▶ LncRNA and mRNA expression quantification;
- ▶ Differential expression analysis;
- ▶ Function annotation and enrichment on DEGs and DE-lncRNA;
- ▶ LncRNA target prediction;
- ▶ DE-lncRNA protein-protein interaction;
- ▶ Conservation analysis;
- ▶ Known lncRNA analysis;
- ▶ miRNA precursor analysis;
- ▶ miRNA target prediction.

Service Advantages

- Discovering lncRNA with significant regulatory functions and its relationship with specific biological processes.
- Studying the association between lncRNA and diseases provides new targets and strategies for diagnosing and treating diseases.
- Comprehensive lncRNA analysis consists of lncRNA profiling, target prediction, and joint analysis with mRNA.
- High-quality service guaranteed by optimized experimental SOP with 5 strict quality control points across the entire workflow. After-sale services are valid for 3 months upon project completion.
- Extensive experience in lncRNA sequencing with over 20,000 samples processed covering diverse species and sample types.

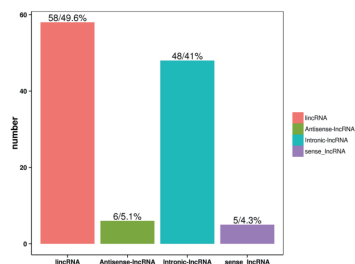
Service Specifications

Library	Read Length	Recommended Data	Data Quality
rRNA depletion	Illumina PE150	10 / 16 Gb	Q30 ≥ 85%

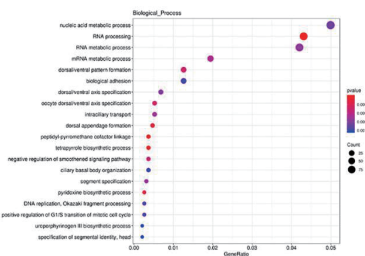
Sample Requirements

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

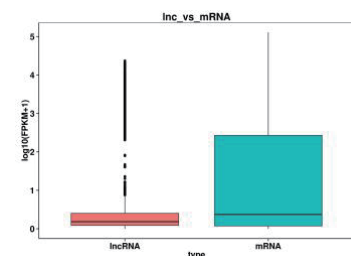
Demo Results



1. lncRNA classification



2. Cis-targeted genes of DE-lncRNA enrichment analysis



3. mRNA vs lncRNA

Featured Publications

Year	Journal	Article	Applications	DOI
2023	Biomaterials	The nanoformula of zoledronic acid and calcium carbonate targets osteoclasts and reverses osteoporosis	Disease treatment	10.1016/j.biomaterials.2023.122059
2022	Cell Proliferation	TGF-β1 regulates the lncRNA transcriptome of ovarian granulosa cells in a transcription activity-dependent manner	Epigenetic regulation	10.1111/cpr.13336
2022	International Journal of Molecular Sciences	Bidirectional lncRNA transfer between Cuscuta Parasites and their host plant	Host-parasite interaction	10.3390/ijms23010561



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