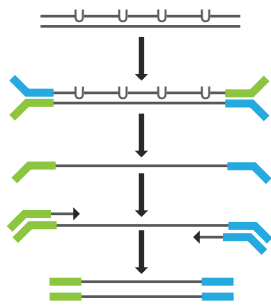


LncRNA Sequencing

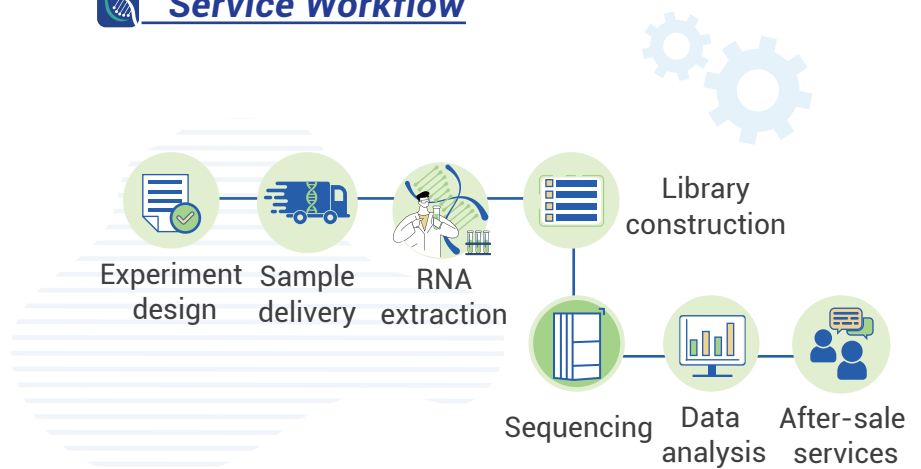
LncRNA (Long Non-Coding RNA) is a critical component of non-coding RNA, exceeding 200 nucleotides in length. It plays a crucial role in cellular activities. BMKGENE's advanced LncRNA sequencing and analysis technology can help with an in-depth understanding of cell differentiation, organism development, and human diseases. BMKGENE has a wealth of experience, completed the sequencing of the more than 23,000 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 23,000 samples processed covering diverse species and sample types.

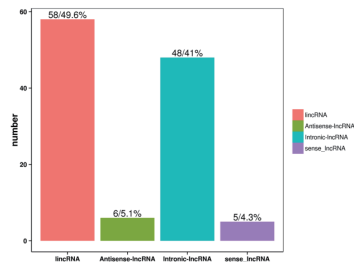
Service Specifications

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

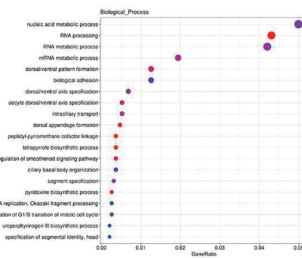
Sample Requirements

Amount	Purity	Integrity
Conc. ≥ 80 ng/μL; Total ≥ 0.8 μg	OD260/280=1.7-2.5 OD260/230=0.5-2.5 Limited or no protein or DNA contamination shown on gel.	RIN ≥ 6.0; 5.0 ≥ 28S/18S ≥ 1.0; limited or no baseline elevation

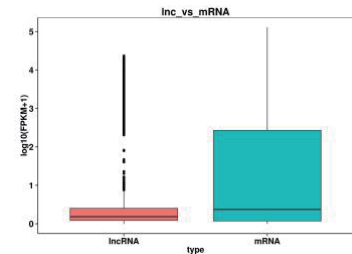
Demo Results



1. lncRNA classification



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



3. mRNA vs lncRNA

Featured Publications

Year	Journal	Article	Applications	DOI
2024	Plant Biotechnology Journal	CcNFYB3-CcMATE35 and lncRNA CcLTCS-CcCS modules jointly regulate the efflux and synthesis of citrate to enhance aluminium tolerance in pigeon pea	Crop production	10.1111/pbi.14179
2024	International Journal Of Molecular Sciences	Integrated metabolome, transcriptome and long non-coding RNA analysis reveals potential molecular mechanisms of sweet cherry fruit ripening	Fruit ripening	10.3390/ijms25189860
2023	Biomaterials	The nanoformula of zoledronic acid and calcium carbonate targets osteoclasts and reverses osteoporosis	Disease treatment	10.1016/j.biomaterials.2023.122059



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Global Locations

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