



Streamlining NGS Data Management & Analysis

# Reads to Discovery

RNA-Seq Analysis

RNA-Seq

DNA-Seq

ChIP-Seq

Small  
RNA-Seq

Methyl-Seq

MeDIP-Seq

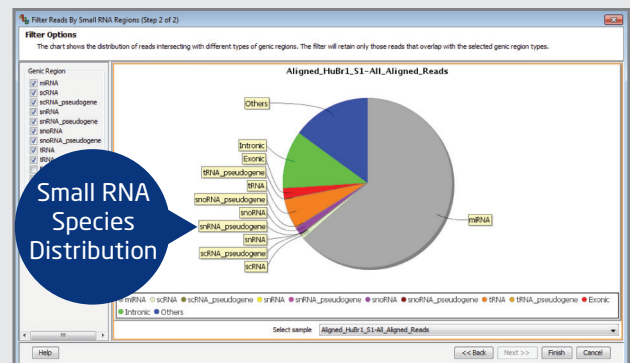
[www.strand-ngs.com](http://www.strand-ngs.com)

Analyze | Visualize | Annotate | Discover

**strand**   
New Generation Healthcare

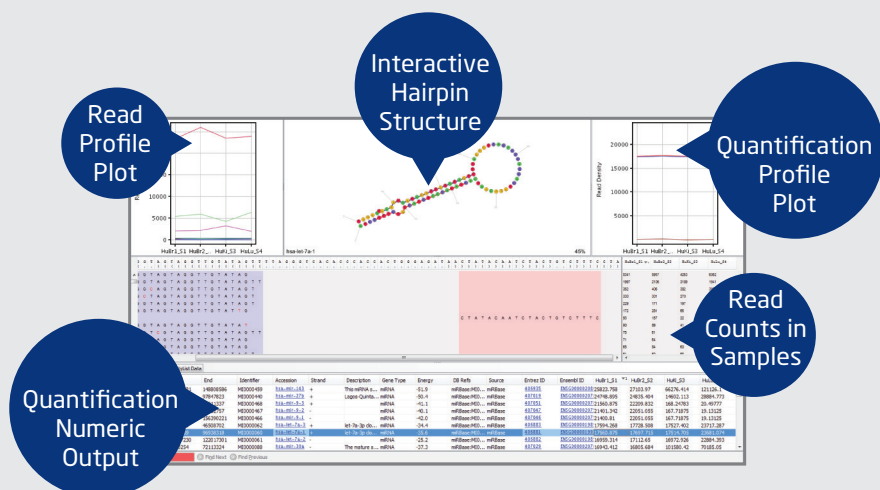
## Alignment, QC and Filtering

- Read alignment with Strand NGS aligner.
- Option for trimming adapters, low quality bases and screening reads against standard screening databases
- Read distribution across genic regions and small RNA species.



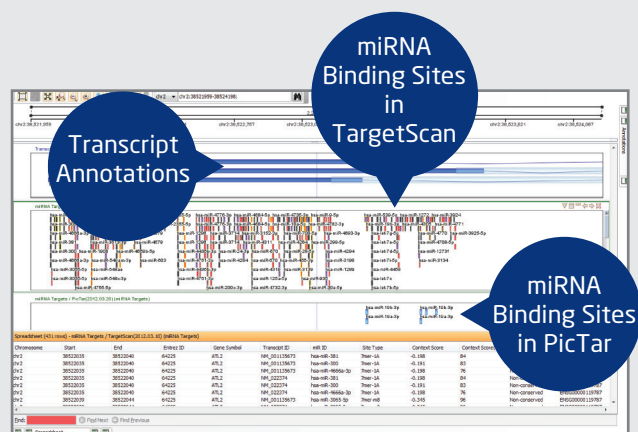
## Quantification & Normalization

- Expression values for known genes, novel genes, mature miRNAs.
- Ability to pick reads aligning exactly with the 5' end of mature miRNAs.
- Take into account padding and multiply mapping reads.
- DESeq, TMM, Quantile, and Sample Count based methods for normalization.
- Small RNA Gene View to visualize quantification results.



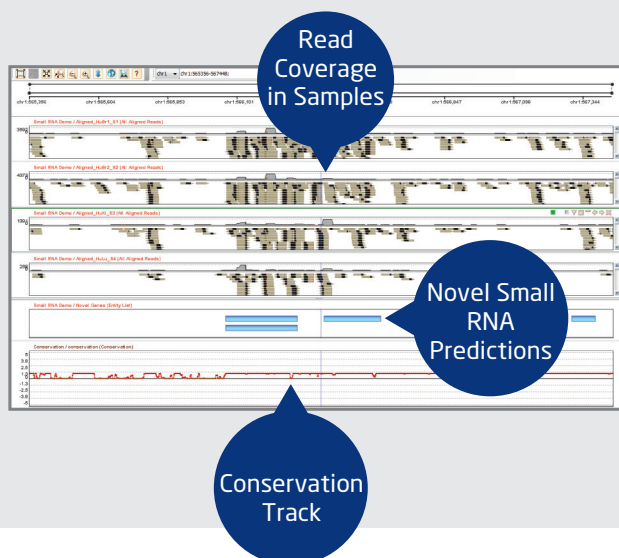
## miRNA Target Analysis

- TargetScan, PicTar, TarBase, microRNA.org, and PITA databases for target prediction analysis.
- Identify targets common to multiple databases.
- Perform downstream analyses (GO, GSA, GSEA, Pathway Analysis) on target set of mRNA genes.



## Novel small RNA Discovery

- Predict type of novel gene as one of miRNA, snoRNA, scRNA or tRNA.
- Identify high-confidence predictions with Confidence values and Conservation scores.
- Find annotation discrepancies of known genes from the read coverage patterns.

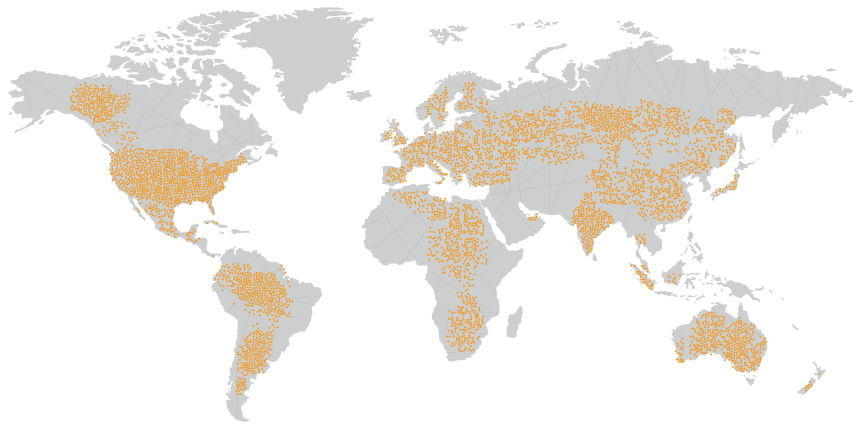


## About Strand

### A History of Innovative Genomic Research

Strand Life Sciences is a global genomic profiling company and leader in precision medicine diagnostics, aimed at empowering cancer care and genetic testing for inherited diseases. Strand works with physicians and hospitals to enable faster clinical decision support for accurate molecular diagnosis, prognosis, therapy recommendations, and clinical trials. The Strand Center for Genomics & Personalized Medicine is India's 1st and only CAP & NABL accredited NGS laboratory.

[www.strandls.com](http://www.strandls.com)



### A Trusted Partner to Companies Worldwide

For 15 years, our genomics products and solutions have facilitated the work of leading researchers and medical geneticists in over 2,000 laboratories and 100 hospitals around the world.

#### **Strand Life Sciences Pvt. Ltd**

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