

Decipher Mechanisms of Gene Expression Changes with Single-Cell Multiomics

ResolveOME Whole Genome and Transcriptome Amplification System



Enables whole genome and transcriptome sequencing from a single cell

Uses a single cell for the construction of a whole-genome and full-length mRNA transcriptome library



Provides industry-leading genomic coverage and resolution

Leverages a novel patented technology, primary template-directed amplification (PTA), to dramatically increase genomic capture and coverage to 97%^{1,2}



Superior transcriptome capture and coverage

Increases gene body coverage, representation across transcript sizes, and variant calling versus droplet-based RNA sequencing methods^{3,4}



Fits into established laboratory protocols

Compatible with various methods of single-cell singulation, sequencing platforms, and downstream applications, including whole exome and panel-based sequencing⁴



Scales to experiment size

Low-cost, scalable approach with up to 96 reactions per kit



Bioinformatics analysis included

Bioinformatics analysis and data visualization through **BaseJumper®** bioinformatics platform



References:

1. Gonzalez-Pena V, et al. Proc. Natl. Acad. Sci. U.S.A. 2021; 118 (24): e2024176118; doi: 10.1073/pnas.2024176118
2. Luquette L, et al. Nat Gen. 2022; 54: 1564–1571. doi: 10.1038/s41588-022-01180-2
3. Marks JR, et al. bioRxiv. 2023; doi: <https://doi.org/10.1101/2022.04.29.489440>
4. Data on file

Assay Performance

| ResolveOME WGS DNA Performance | |
|--------------------------------|------------|
| Accuracy | 99.99% |
| Sensitivity | 96.65% |
| Specificity | 99.99% |
| Allelic Balance | 91.20% |
| Genomic Coverage | 97.59% |
| ResolveOME WTS RNA Performance | |
| Protein Coding Genes | 3451 ± 732 |
| Concordance | 0.97 |
| Variance (CV) | 32.9% |

Figure 1: Assay Performance Characteristics. Analysis of NA12878 single cells prepared with ResolveOME Whole Genome Single-Cell Core Kit versus gold standard reference. WGS: whole genome sequencing, WTS: whole transcriptome sequencing.

A Revolution in Resolution From Each Cell

DNA

- Resolve SNV
- Resolve SV
- Resolve CNV
- Resolve Ploidy
- Resolve Exomes
- Resolve Genomes
- Resolve Panels
- Resolve Edits

DNA + RNA

- Resolve Transcriptomes
- Resolve Isoforms
- Resolve Cell ID
- Resolve Fusions

Resolve More.

ResolveServicesSM

Custom-built service projects, from singulating cells to figures. Services can include:

- Cell and/or nuclei sorting from fresh or frozen cells and tissues
- Whole genome amplification or whole genome and transcriptome amplification
- Exome capture or targeted protein analysis
- Library preparation for downstream applications
- Analysis using our bioinformatics platform, **BaseJumper[®]**, or bespoke computational analysis

Products

| Codes | Product | Description |
|-------------------|---|---|
| 100956 | ResolveOME™ Whole Genome and Transcriptome Single-Cell Core Kit | PTA-based kit for accurate and reproducible whole genome and transcriptome amplification plus sequencing library preparation from single cells. 96 reactions per kit. |
| 100954 100955 | ResolveDNA® Whole Genome Single-Cell Core Kit | PTA-based kits for accurate and reproducible whole genome amplification plus sequencing library preparation from single cells. Kits available with 96 or 384 reactions. |
| 100605 | BaseJumper® Bioinformatics Platform | A complete bioinformatics solution for multiomic data analysis and visualization. |
| Early-Access Only | ResolveXOME™ Exome Capture Module | Exome capture module for use with ResolveDNA Whole Genome Single-Cell Core Kit. |

For a complete list of services, products, and pricing, email a member of our team, info@bioskryb.com.



bioskryb.com



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