ResolveOME™



Decipher Mechanisms of Gene Expression Changes with Single-Cell Multiomics

Resolve OME Whole Genome and Transcriptome Amplification System



Enables whole genome and transcriptome sequencing from a single cellUses 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, automation-compatible, scalable approach with up to 384 reactions



Bioinformatics analysis available with BaseJumper®

Bioinformatics analysis and data visualization through BaseJumper bioinformatics platform and computational biology custom services



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

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 Cell ID
- Resolve Isoforms
- **Resolve Fusions**

Resolve More.

ResolveServicesSM

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



Products

Product	Description	Codes	Well Format
ResolveOME TM	PTA-based kit for whole genome and transcriptome amplification plus NGS library Core Kit preparation from single cells.	100956	96
Whole Genome and Transcriptome Single-Cell Core Kit		100957	384
ResolveDNA®	PTA-based kit for whole genome amplification Kit plus NGS library preparation from single cells.	100954	96
Whole Genome Single-Cell Core Kit		100955	384
ResolveDNA® Whole Genome Amplification Kit	PTA-based kit for whole genome amplification from as little as 4 pg input DNA.	100545	Up to 384*
BaseJumper® Bioinformatics Platform	A platform for multiomic data analysis.	100605	-
ResolveXOME™ Exome Capture Module	Exome capture module for use with ResolveDNA or ResolveOME Single-Cell Core Kits.	Early- Access	-

^{*}Dependent on workflow option used

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



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