ResolveServices℠

BioSkryb GENOMICS

Supercharge Your Single-Cell Multiomics Projects with Single-Cell Genomics Experts

ResolveServices℠ Projects

PhD project management and reporting

Increase probability of success with single-cell genomics experts with a track record of successfully completed projects with academia, industry, and government agencies.

Cell sorting from fresh or frozen cells and tissues

Expand the number of cells available for analysis by using validated cell isolation and sorting technologies, whether the starting material is fresh or frozen tissue, cell cultures or single cells.

Single-cell or low-input DNA whole genome amplification with ResolveDNA®

Leverage primary template-directed amplification (PTA) to dramatically increase genomic capture and coverage to 97%. Reduce biases, experimental artifacts, and poor reproducibility associated with other whole genome amplification methods.[1,2]

Single-cell whole genome and transcriptome amplification with ResolveOME™

Couple the industry-leading performance of PTA whole genome amplification with a transcriptomic assay that improves gene body coverage, representation across transcript sizes, and variant calling versus droplet-based RNA sequencing methods.[3,4]

Library preparation and low-pass sequencing to qualify libraries for deeper sequencing

Use ResolveDNA or ResolveOME Single-Cell Core Kits for preparing Illumina® libraries. The fragment sizing and yield of Illumina libraries are determined before sequencing to maximize results. Additional sequencing options are available.

Design custom projects with ResolveDNA® and ResolveOME™

Change the starting material from cells to nuclei, include exome or panel enrichment, or add oligo-conjugated antibodies for triomic (DNA, RNA, and targeted protein) analysis.

Bioinformatics analysis with BaseJumper®

Reduce the dependency on internal computational resources with bioinformatics analysis and publication-ready data visualization by PhD-level computational biologists.

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

Table 1: ResolveOME WGS DNA Performance

Characteristic	Observed Values
Accuracy	99.99%
Sensitivity	96.65%
Specificity	99.99%
Allelic Balance	91.20%
Genomic Coverage	97.59%

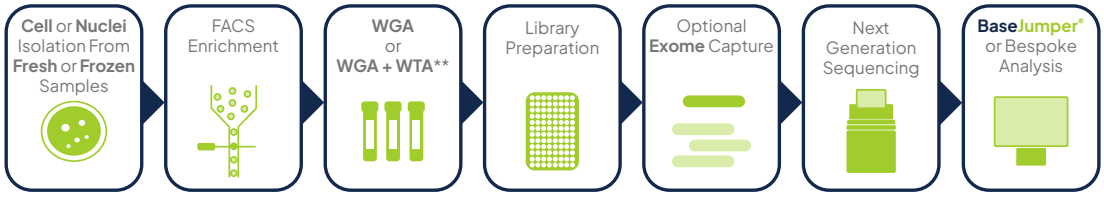
Table 2: ResolveOME WTS RNA Performance

Characteristic	Observed Values
Protein Coding Genes	3451 ± 732
Concordance	0.97
Variance (CV)	32.9%

Assay performance characteristics of DNA (Table 1) and RNA (Table 2) isolated using ResolveOME Whole Genome and Transcriptome Single-Cell Core Kit. Analysis of FACS-sorted NA12878 single cells prepared with ResolveOME versus gold-standard reference. WGS: whole genome sequencing. WTS: whole transcriptome sequencing.

ResolveServices℠

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



FACS: Fluorescence-Activated Cell Sorting, WGA: Whole Genome Amplification, WTA: Whole Transcriptome Amplification,
Optional **targeted protein detection available

Products

Product	Description	Codes	Well Format
ResolveOME™ Whole Genome and Transcriptome Single-Cell Core Kit	PTA-based kit for whole genome and transcriptome amplification plus NGS library preparation from single cells.	100956	96
		100957	384
ResolveDNA® Whole Genome Single-Cell Core Kit	PTA-based kit for whole genome amplification plus NGS library preparation from single cells.	100954	96
		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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