ResolveDNA®

BioSkryb GENOMICS

Unlock Your Discovery Potential with Single-Cell Whole Genome Amplification

ResolveDNA Whole Genome Amplification System

Enables whole genome sequencing from a single cell
Whole genome amplification from single cells or low-input (4 pg to <10 ng) DNA samples

Provides industry-leading genomic coverage
Leverages a novel patented technology, primary template-directed amplification (PTA)[1], to dramatically increase genomic capture and coverage to 97%

Results in unprecedented single nucleotide variant (SNV) calling resolution
Reduces biases, experimental artifacts, and poor reproducibility associated with other whole genome amplification methods[2]

Fits into established laboratory protocols
Compatible with various methods of single-cell singulation, sequencing platforms, and downstream applications, including whole exome and panel-based sequencing[3]

Scales to experiment size
Low-cost, automation-compatible, scalable approach with up to 384 reactions per kit

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. Data on file

Assay Performance

ResolveDNA WGS Performance	
Characteristic	**Observed Values**
Accuracy	99.99%
Sensitivity	96.90%
Specificity	99.99%
Allelic Balance	93.80%
Genomic Coverage	97.50%

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

A Revolution in Resolution
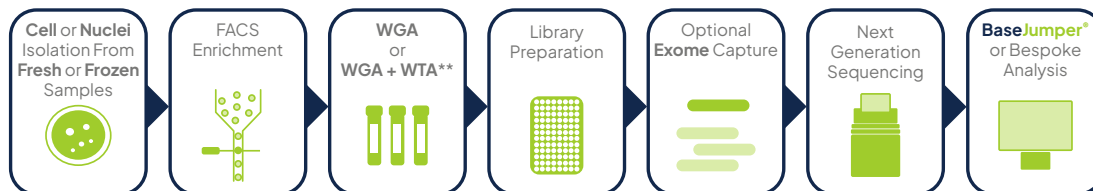## From Each Cell

DNA

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

Resolve More.

ResolveServices℠

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

Cell or **Nuclei** Isolation From **Fresh** or **Frozen** Samples → FACS Enrichment → **WGA** or **WGA + WTA**** → Library Preparation → Optional **Exome** Capture → Next Generation Sequencing → **BaseJumper®** or Bespoke Analysis

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

BioSkryb GENOMICS

bioskryb.com

TAS_044.5 | 08/2024

For Research Use Only. Not for Use in Diagnostic Procedures.