Arima SV Detection Assay

An end-to-end solution for the detection and discovery of structural variants and rearrangements.

Unlocking the Potential of Clinical and Translational Research Samples

Human clinical research samples, whether cultured, isolated, frozen, or formalin-fixed paraffin-embedded (FFPE), play an indispensable role in biomedical and translational research. In particular FFPE samples often present challenges due to DNA damage; however, the Arima SV Detection Assay is designed to overcome these barriers.

Leveraging the new Arima Bioinformatics Pipeline, researchers can go from data generation to .

Advantages of the Arima SV Detection Assay

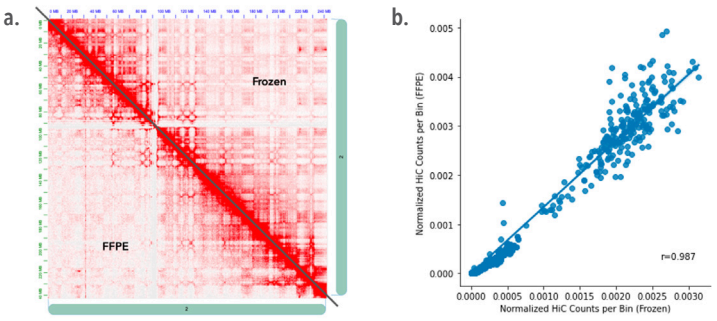
Maximum Discovery: Use Arima's proven HiC+ technology to generate high-quality data from clinically relevant samples

Depth Without the Depth: superior sensitivity compared to WGS with proximity-linked reads

Lower Investment: This assay usus well-established NGS technologies; so no need for specialized optical genome mapping or long-read equipment

High-Quality Data for Comprehensive Insights

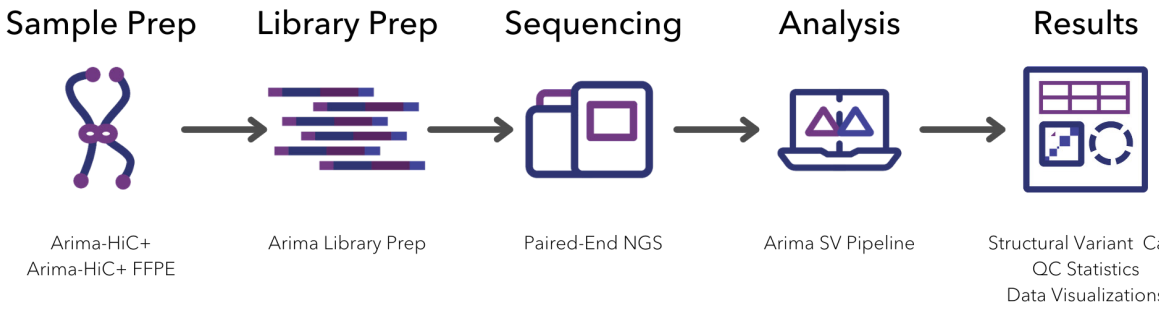
Generate dependable results from FFPE tissue samples to detect both coding and non-coding structural variants in this hard-to-use sample type.



FFPE Sample Results are Highly Correlated to Frozen Tissues. Matched frozen and FFPE tissue of K562 cell cultures were processed with the Arima-HiC+ and Arima-HiC+ FFPE kits, respectively. Libraries were generated following Arima protocols and sequenced using Illumina next generation sequencing (57M and 27M reads were generated, respectively). Representative data for Chromosome 2 at 500 Mb are show in a. Hi-C contact heat map (500Mb resolution) and b. correlation plot of the normalized Hi-C counts per bin for frozen versus FFPE samples showing a high correlation (r=0.987).

Arima SV Detection Assay Workflow

The Arima SV Detection Assay includes reagents for Arima-HiC+ sample preparation and library preparation, in addition to access to the Arima SV pipeline hosted on the Arima Bioinformatics Platform. This assay is compatible with human FFPE and fresh/frozen tissues samples, cell lines and cultures, and cells isolated from liquid biopsies.



Product List

Product	Description	Size	SKU
Arima SV Detection Assay	Includes: - Arima-HiC+ FFPE kit(s) - Arima Library Prep module - Arima SV Pipeline Analysis.	8 sample 16 sample	A203080 A203081
Arima SV Pipeline Analysis	Analysis of Arima-HiC+ NGS data on the Arima Bioinformatics Platform.	1 sample 8 sample 16 sample	A202082 A202080 A202081

Arima offers end-to-end service with all our products for any sample type.

Specifications

Category	Specification
Sample Input	5 mm^3 of tissue (~5 x 5µm FFPE tissue sections) 50 mg of fresh frozen tissue 2 mL whole blood ≥1 million cells (standard input method) ≤1 million cells (low input method)
Sequencing Requirements	2 x 150 paired-end reads from Illumina® or Element® A minimum of 100M reads for SV detection is recommended*
Analysis Pipeline	FASTQ Read 1 and Read 2 data 50 –500 Million sequencing reads

*Performance results vary based on sample quality and purity.

Contact an Arima Genomics scientist for a quote or project consultation.

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