Integrated multiomics turns data into impact

Extract deeper insights using fit-for-purpose solutions

Illumina offers a powerful, integrated suite of assays, instruments, and informatics—so you can shift your focus to the science itself. Ask the critical questions and discover more from each sample. We deliver the tools to find the answers, together.

If you want to study...	And your research objectives include...	Illumina offers a solution
The genome	Genome-wide discovery of **genetic variants** (SNVs, indels)[a]	Illumina DNA Prep product line Illumina Cell-Free DNA Prep
	Deep, targeted profiling of **coding regions**	Illumina DNA Prep with Exome 2.5 Enrichment Illumina FFPE DNA Prep with Exome 2.5 Enrichment
	Detection of complex genomic variation, including **structural variants and haplotype phasing**	Illumina TruPath™ Genome
	High-throughput genotyping for large-scale **variant screening**	Infinium™ genotyping arrays[b]
The epigenome	Genome-wide DNA **methylation profiling** to study epigenetic regulation	Infinium methylation arrays[b]
The genome + epigenome	**Simultaneous detection** of genetic variants and DNA methylation states in a single assay	Illumina 5-Base DNA Prep Illumina 5-Base DNA Prep with Enrichment
The transciptome	Discovery and quantification of **protein-coding transcripts**	Illumina Stranded mRNA Prep
	Comprehensive profiling of **coding and noncoding RNA**	Illumina Stranded Total RNA Prep with Ribo-Zero™ Plus
	Quantitative gene expression profiling across **defined transcript targets**	Illumina RNA Prep with Enrichment
	Profiling of **small regulatory RNA species**, including microRNAs	Illumina miRNA Prep
	Single cell–level gene expression analysis to resolve cellular heterogeneity and rare cell populations	Illumina Single Cell 3' RNA Prep
	Spatially resolved gene expression analysis within intact tissue architecture	Illumina spatial technology (coming soon)
The proteome	High-multiplex **protein quantification** for biomarker discovery and validation	Illumina Protein Prep

a. SNVs, single nucleotide variants; indels, insertions-deletions.
b. Arrays run on the iScan™ or NextSeq™ 550 Systems.

Streamline your multiomics sequencing workflows

Reduce time and complexity with innovative library prep solutions paired with trusted sequencing systems and easy-to-use analysis software—all optimized to work together.

Library prep

Solutions for the genome, epigenome, transcriptome, and proteome

Sequencing

- NovaSeq™ X Series
- NextSeq 2000 System
- MiSeq™ i100 Series

Analysis

DRAGEN™ secondary analysis

Interpret

Illumina Connected Multiomics

Sequencing systems are the trusted backbone of the Illumina multiomics ecosystem

MiSeq i100 Series

Rapid pilot and method optimization

NextSeq 2000 System

Versatile and accessible multiomics

NovaSeq X Series

Multiomics discovery at scale

Analysis solutions that turn complexity into clarity

DRAGEN secondary analysis

Accurate | Comprehensive | Efficient

Transforms sequencing data into analysis-ready variant, expression, and methylation outputs across genomic and multiomic workflows

Illumina Connected Multiomics

Intuitive | Interactive | Scalable

Simplifies large-scale biological data analysis for visualizing multiomic data sets and generating publication-ready insights

Connect the omes. Multiply insights.

Access deeper discoveries with advanced multiomics solutions from Illumina.

Scan to explore how Illumina Connected Multiomics supports integrated multiomic interpretation