
ILLUMINA SEQUENCING PLATFORMS
illumina®

For Research Use Only. Not for use in diagnostic procedures.

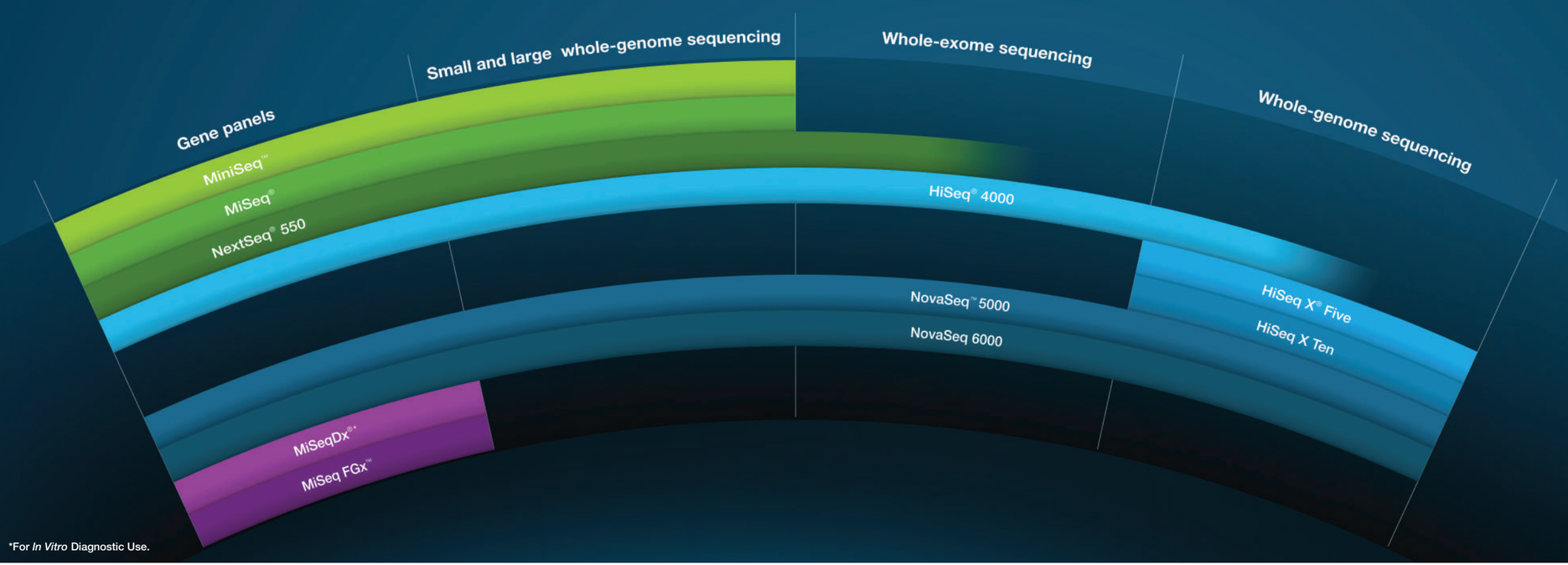
PROVEN QUALITY. TRUSTED SOLUTIONS.

Every day, researchers are using Illumina next-generation sequencing (NGS) systems to better understand human health and disease, as well as gain more insights into nonhuman organisms. We're enhancing research in emerging fields, from reproductive health to forensic science.

All Illumina sequencing systems utilize our proven technology. They perform fully automated and robust sequencing, enabling more accurate analysis. Our trusted solutions allow you to expand your research and achieve a high level of accuracy.

With a full range of solutions, we have the perfect instrument to meet your ever-evolving needs.

METHODS ACROSS THE GENOMIC SPECTRUM



*For *In Vitro* Diagnostic Use.

We offer a wide range of options, from scalable systems to application-focused solutions.

PERSONAL

From the MiniSeq platform to the NextSeq platform, our lower throughput systems leverage the power of Illumina NGS technology in an accessible benchtop format, making it easy for virtually any lab to accelerate their research.

PRODUCTION

Power your high-throughput studies with production-scale sequencing for diverse applications. From the HiSeq Series to the NovaSeq Series, we're revolutionizing genomics with unparalleled power.

DEDICATED

Built for clinical and forensics applications, the MiSeqDx platform and MiSeq FGx platform provide robust solutions able to provide greater and deeper insights compared to previously used technologies.

ACCESSIBLE SOLUTIONS.
TAILORED POWER.

ILLUMINA SEQUENCING PLATFORMS










Product	MiniSeq™	MiSeq®	NextSeq® 550‡		HiSeq® 4000	HiSeq X® Five†	HiSeq X Ten†	NovaSeq™ 5000°	NovaSeq 6000	MiSeqDx®‡ §	MiSeq FGx™
Key methods	Targeted DNA and targeted RNA sequencing	Small-genome sequencing, amplicon sequencing, targeted DNA and RNA sequencing	Genome sequencing, exome sequencing, and transcriptome sequencing		Production-scale genome sequencing, exome sequencing, and transcriptome sequencing	Population-scale human WGS	Population-scale human WGS	Expression profiling, whole-transcriptome analysis, whole-exome sequencing, low pass WGS, liquid biopsy, WGS, tumor-normal profiling		Targeted DNA sequencing (IVD mode); all associated MiSeq methods (research mode)	Targeted STR/SNP, RNA, whole, targeted mtDNA, or nonhuman sequencing
Run mode	—	—	Mid-output	High-output	—	—	—	2 flow cells (S1#, S2)	4 flow cells (S1#, S2, S3#, S4#)	IVD mode and research mode	Forensic genomics mode and research mode
Flow cells processed per run	1	1	1	1	1 or 2	1 or 2	1 or 2	1 or 2	1 or 2	1	1
Output range	0.6–7.5 Gb	0.3–15 Gb	20–39 Gb	30–120 Gb	125–1500 Gb	900–1800 Gb	900–1800 Gb	167– 2000 Gb	167– 6000 Gb	0.3–15 Gb	0.3–15 Gb
Run time	4–24 hours	5–55 hours	15–26 hours	12–30 hours	< 1–3.5 days	< 3 days	< 3 days	TBA	< 1 day to 40 hours**	5–55 hours	5–55 hours
Reads per flow cell*	25 million†	25 million	130 million	400 million	2.5 billion	3 billion	3 billion	Up to 3.3 billion	Up to 10 billion	25 million	25 million
Maximum read length	2 x 150 bp	2 × 300 bp	2 × 150 bp	2 × 150 bp	2 × 150 bp	2 × 150 bp	2 × 150 bp	2 x 150 bp	2 x 150 bp	2 × 300 bp	2 × 300 bp

* Clusters passing filter.
† For MiniSeq High Output Kit only.

‡ For *In Vitro* Diagnostic Use.
§ For MiSeq Reagent Kit v3 only.

‖ Includes array scanning functionality for cytogenomic and karyomapping applications.

¶ Specifications shown for an individual HiSeq X System instrument. The HiSeq X System is available only as part of the HiSeq X Five or HiSeq X Ten System.

The NovaSeq 5000 System, NovaSeq 5000 System upgrade, and NovaSeq Reagent Kits with S1, S3, or S4 flow cells are not currently available to order.

** For a dual S2 flow cell run at 2 × 150 bp.

A CONTINUUM OF COMPREHENSIVE RESOURCES

From an initial evaluation to product support, Illumina offers seamless NGS solutions to optimize your process. As the innovators of next-generation sequencing technology, we're here to deliver the experience and expertise to help accelerate your progress and propel your success.

EVALUATING YOUR NEEDS

We help you find the right solution from the very beginning. Discuss your needs with a sales representative, and get training from our instructors to discover how you can fully expand your research.

SETTING UP YOUR WORKFLOW

From library prep to informatics, our solutions help optimize your workflow so you know you're being the most efficient you can be.

MAINTAINING AND SUPPORTING YOUR SYSTEM

Our support doesn't end once you're set up. Whether you need bioinformatics training or sequencing consulting, we have the services you need to keep your lab running smoothly.

Our trusted solutions allow you to expand your research and achieve the highest yield of error-free reads. They also allow you to obtain the greatest accuracy with the highest percentage of sequenced bases above Q30. And with the fewest false positives, false negatives, and miscalls among leading sequencing platforms—you can improve efficiency like never before.*†

From library prep and sequencing to informatics, Illumina genomic solutions empower researchers across the globe to find the answers they're looking for.

Learn more about the right solution for your lab
www.illumina.com/systems

*** Data calculations on file. Illumina, Inc. December 2016.**
† Based on a comparison of the 2 industry-leading sequencing platforms.