

NANOBIND[®] HMW DNA EXTRACTION

NANOBIND MAGNETIC DISKS

- Circulomics technology reimaged for HiFi sequencing
- Easy bind, wash, and elute magnetic processing
- Highest DNA quality
- Manual or automation-compatible (requires automated version of kit)

WHAT'S NEW

- 24 samples per kit and new, reduced pricing
- New protocols for improved sample handling
- One-stop sample-to-answer workflow and support

A KIT FOR NEARLY ANY SAMPLE TYPE

- **Nanobind CBB kit** – cells, bacteria, and blood (102-301-900)¹
- **Nanobind tissue kit** – cells, bacteria, blood and tissues (102-301-900)²
- **Nanobind plant nuclei kit** – plants (102-302-000)³

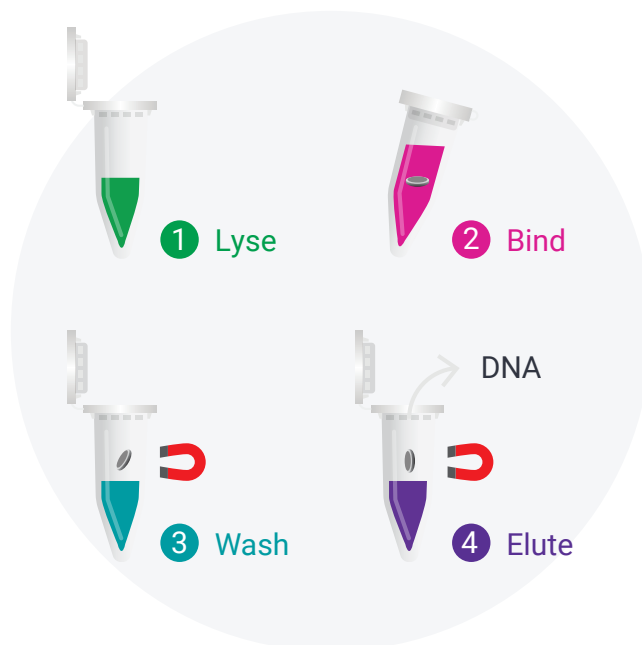
DIVERSE SAMPLE TYPES

High-quality HiFi sequencing results across all supported sample types⁴

Kit	Sample type	Recommended library size (kb)	Mean HiFi read length (bp)	HiFi yield (Gb)
Nanobind CBB kit	MCF-7	15–18	17,585	35.5
	<i>L. monocytogenes</i>	7–12	10,271	27.8
	Human blood	15–18	14,552	37.7
Nanobind plant nuclei kit	Tobacco	15–18	16,277	32.3
Nanobind tissue kit	Human colon	15–18	12,814	28.1

EXTRACT HMW DNA FOR HIFI SEQUENCING IN FOUR STEPS

As fast as 45 minutes, depending on sample type



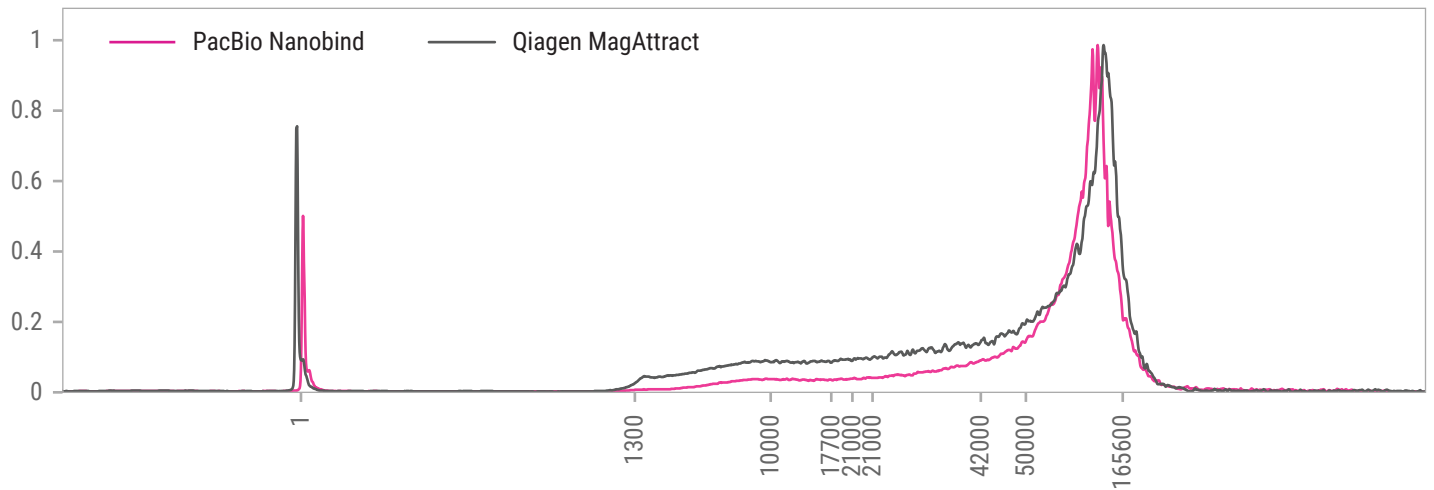
HUMAN BLOOD SEQUENCING

NANOBIND HMW DNA VS QIAGEN MAGATTRACT HMW

- Higher extraction yield and UV purity
- Reduced amounts of fragmented DNA
- Improved read length and low distributions



Kit	Whole blood input (μL)	GQN (10 kb)	260/280	260/230	Extraction yield (μg)	Mean HiFi read length	HiFi yield (Gb)
Nanobind CBB kit (n=3) ⁵	200	9.5 ± 0.1	1.8 ± 0.03	1.9 ± 0.3	5.2 ± 0.1	12,067 ± 467	27.9 ± 0.4
Qiagen MagAttract HMW kit (n=3)	200	8.7 ± 0.1	1.4 ± 0.1	0.4 ± 0.1	1.3 ± 0.3	10,985 ± 478	25.6 ± 2.5



HMW DNA size distribution extracted with Nanobind and MagAttract on the Femto Pulse system (Agilent Technologies).

KEY REFERENCES

1. Nanobind CBB kit – Guide & overview
2. Nanobind tissue kit – Guide & overview
3. Nanobind plant nuclei kit – Guide & overview
4. Procedures and checklists for different sample types
5. Technical note: Sample preparation for PacBio HiFi sequencing from human whole blood

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