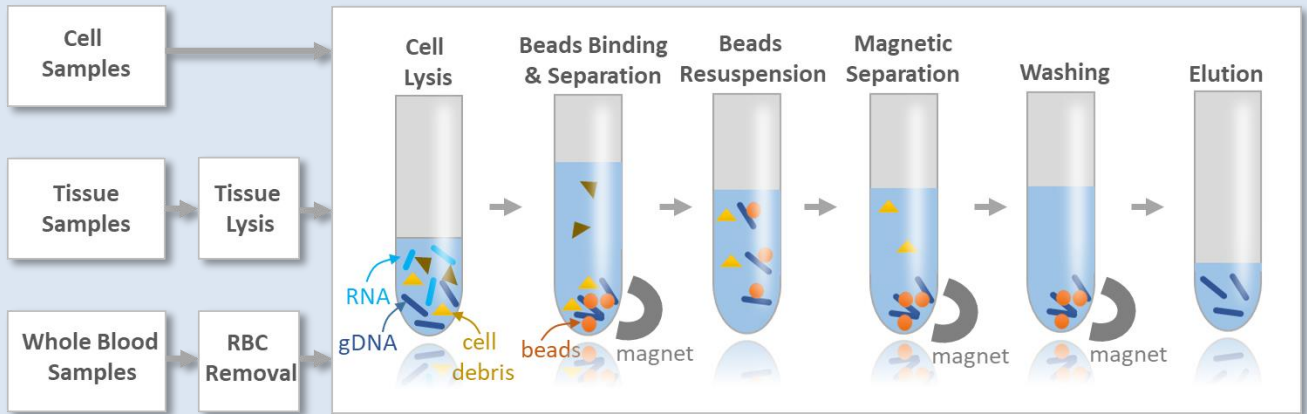


Genomic DNA Extraction Kit (HMW, Magnetic Beads)

HMW: 50 kb to 150 kb

High Purity with Magnetic Beads Technology

The **Genomic DNA Extraction Kit (HMW, Magnetic Beads)** provides a reliable and fast process for extracting high molecular weight (HMW) genomic DNA from cells, blood, and tissues using magnetic beads. The kit provides a reliable and simple approach for high-quality genomic DNA isolation with fast magnetic response time and high binding capacity.



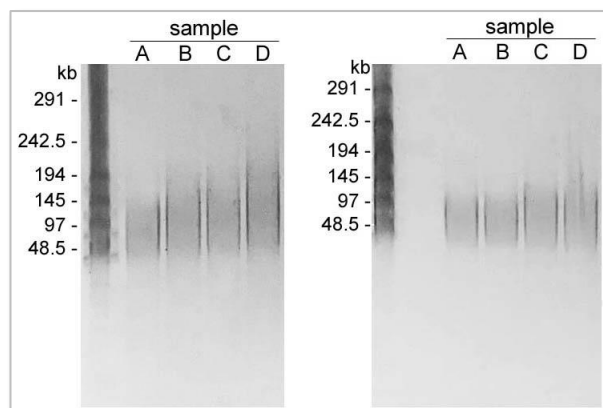
	Cell Samples	Blood Samples	Tissue Samples
Technology	Magnetic beads	Magnetic beads	Magnetic beads
Sample amount	Up to 0.5 million cells	Up to 200 µl whole blood	Up to 10 mg tissue
Genomic DNA size	50-150 kb (tube tapping)	50-150 kb (tube tapping)	50-150 kb (tube tapping)
	40-100 kb (tube vortexing)	40-100 kb (tube vortexing)	40-100 kb (tube vortexing)
Genomic DNA yield	3-6 ug (0.25 -0.5 million cells)	4-12 ug (200 µl blood)	Up to 30 ug (dependent on the tissue)
Elution volume	100 µl	100 µl	100 µl
O.D. 260/280	1.8-2.0	1.8-2.0	1.8-2.0
O.D. 260/230	Above 2.0	Above 2.0	Above 2.0

**HMW Genomic DNA:
50 kb to 150 kb**

High Purity

Simple

- No centrifuge
- No vacuum
- No column



A portion of the extracted genomic DNA samples were loaded on a PFGE gel with a DNA ladder indicated. Sample A: liver tissue; Sample B: intestine tissue; Sample C: whole blood; Sample D: cultured 293T cells



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Tel: (256) 872-0805
Email: support@biodynami.com

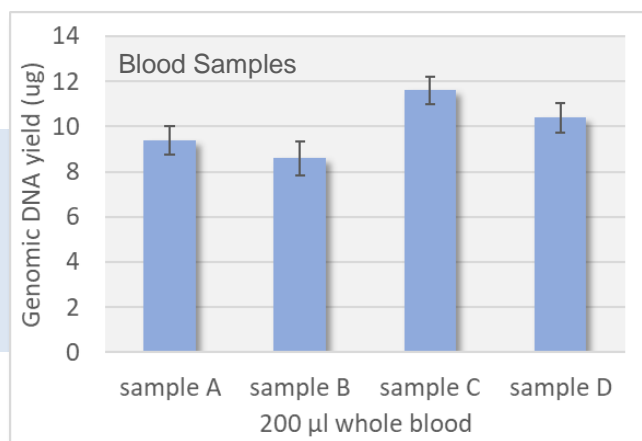
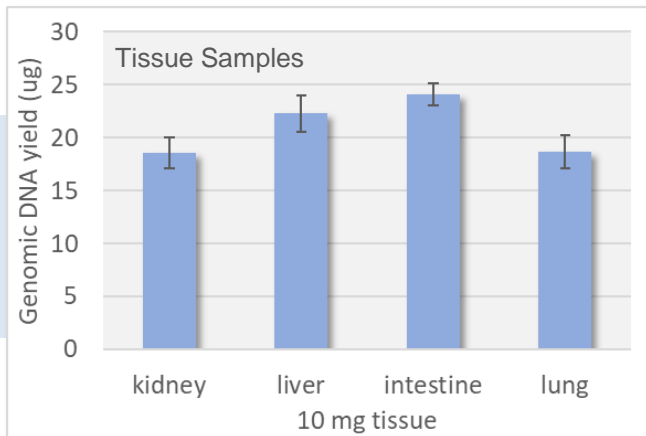
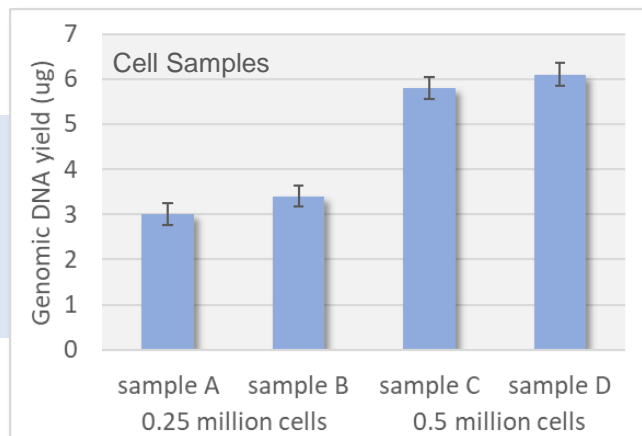
Fast
Simple
Affordable
High-Quality



Genomic DNA Extraction Kit (HMW, Magnetic Beads)

HMW: 50 kb to 150 kb

High Purity with Magnetic Beads Technology



Kit list	Cat.#
Genomic DNA Extraction Kit for Cells (HMW, Magnetic Beads)	50014
Genomic DNA Extraction Kit for Blood (HMW, Magnetic Beads)	50015
Genomic DNA Extraction Kit for Tissues (HMW, Magnetic Beads)	50016

Comparison of gDNA Extraction Kits from Vendors

Vendor and Kit	Approximate Protocol Time*			Note**
	Cells	Blood	Tissues	
BioDynami gDNA Extraction	30 minutes	50 minutes	90 minutes	Fast; Simple; High-yield; High-purity. Unique magnetic beads technology.
Circulomics Nanobind	> 60 minutes	60 minutes	>2 hours	High viscosity made some samples difficult to process.
Revolugen FireMonkey	~45 minutes	>60 minutes	N/A	DNA denaturation due to 80°C heating. Low yield due to only 2nd eluate is used.
Qiagen MagAttract	N/A	60 minutes	Overnight +40 min	Not very high molecular weight.
Qiagen Genomic Tips	3.5 hours	3.5 hours	4 hours	Long workflow; Not very high molecular weight.
Phenol/Chloroform Extraction	> 6 hours	> 6 hours	> 6 hours	Long workflow; Hazardous reagents; DNA resuspension is difficult.

*Workflow times are estimated based on protocol and internal testing

**Based on internal testing

More details at <https://biodynami.com/product/genomic-dna-extraction-hmw-magnetic-beads>



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Fast
 Simple
 Affordable
 High-Quality

