

Mag-Bind® Blood & Tissue DNA HDQ 96 Kit

High-throughput DNA isolation from blood, buccal swabs, saliva & tissue using magnetic beads



384 samples

384 samples in 2 hours



Bead-Based

Scalable DNA purification
100-250 µL input for blood
up to 500 µL input for saliva



Quality

High-quality DNA
suitable for qPCR,
NGS, etc.



Automatable

Adaptable on most
open-ended liquid
handlers

Mag-Bind® Blood & Tissue DNA HDQ 96 Kit offers a versatile method for the isolation of high-quality DNA from a wide variety of samples including fresh or frozen animal cultured cells and tissues, up to 250 µL whole blood, buccal swabs, up to 500 µL saliva, mouse tail snips, dried blood spots, etc. Mag-Bind® Particles HDQ provides quick magnetic response times thereby reducing the overall processing time. This system combines the reversible nucleic acid-binding properties of Mag-Bind® paramagnetic particles with the proven efficiency of Omega Bio-tek's buffer chemistries to provide a rapid and robust method to isolate DNA from a variety of biological samples. The system yields high-quality DNA that is suitable for direct use in most downstream applications, such as amplification, NGS, and enzymatic reactions.

DNA Yield from 200 µL Whole Blood

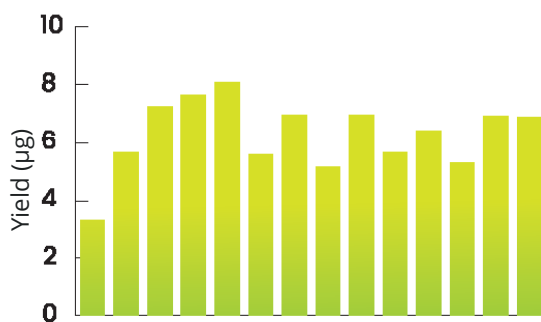


Figure 1. DNA yield from 200 µL whole blood extracted using the Mag-Bind® Blood & Tissue DNA HDQ 96 Kit on the ABI MagMAX® 96 instrument. DNA yield was determined by Promega's Quantifluor® dsDNA system.

Table 1. Genomic DNA was extracted from 1.5mL whole blood using Omega Bio-tek's Mag-Bind® Blood & Tissue DNA HDQ 96 Kit. DNA was analyzed on Thermo Scientific's NanoDrop® 2000c System.

Sample ID	Nucleic Acid Conc. (ng/µL)	A ₂₆₀ /A ₂₈₀	A ₂₆₀ /A ₂₃₀	Yield (µg)
1	118.4	1.82	2.09	59.2
2	90.8	1.84	2.90	45.4
3	80.5	1.85	2.83	40.3
4	127.2	1.81	2.19	63.6
5	73.1	1.75	1.18	36.5
6	162.9	1.83	2.48	81.4

Table 2. Automation run times for processing 96 samples using Omega Bio-Tek's standard workflows on different liquid handling instruments.

Sample Type	Instrument	Estimated Offline Processing Time	Estimated Automated Processing Time
Blood	Hamilton Microlab® STAR™	5 min	1 h 45 min
	Tecan Fluent® 780	5 min	1 h 45 min
	KingFisher™ Flex	1 h	40 min
Saliva	Hamilton Microlab® STAR™	5 min	1 h 45 min
	Tecan Fluent® 780	5 min	1 h 45 min
	KingFisher™ Flex	1 h	40 min
Tissue	Hamilton Microlab® STAR™	1-3 h	1 h 20 min
	Tecan Fluent® 780	1-3 h	1 h 20 min
	KingFisher™ Flex	1-3 h	40 min



innovations in nucleic acid isolation

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Lit No. SL-0014

Mag-Bind® Blood & Tissue DNA HDQ 96 Kit

High-throughput DNA isolation from blood, buccal swabs, saliva & tissue using magnetic beads

DNA Yield from Cow Ear Samples

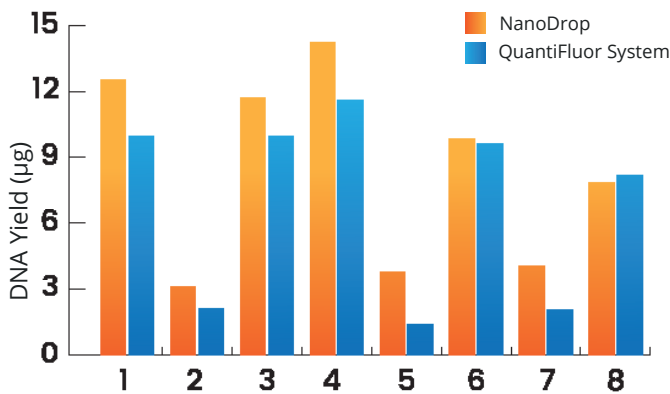


Figure 2. DNA was extracted from one cow ear hole punch and was eluted in 100 µL volume. The extraction followed a modified tissue protocol of Mag-Bind® Blood & Tissue DNA HDQ 96 Kit. The DNA yield was determined using Thermo Scientific's NanoDrop™ 2000c and Promega's QuantiFluor® dsDNA system.

TapeStation® Analysis of Purified DNA

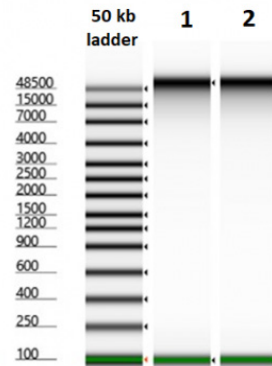


Figure 4. TapeStation® analysis of genomic DNA purified from 250 µL of whole blood using Omega Bio-tek's Mag-Bind® Blood & Tissue DNA 96 Kit (M6399) automated on Hamilton's Firefly NIMBUS® 96. TapeStation® analysis software estimates the molecular weight of the purified DNA to be >60kb.

Comparison of DNA Yield from 500 µL Saliva Samples

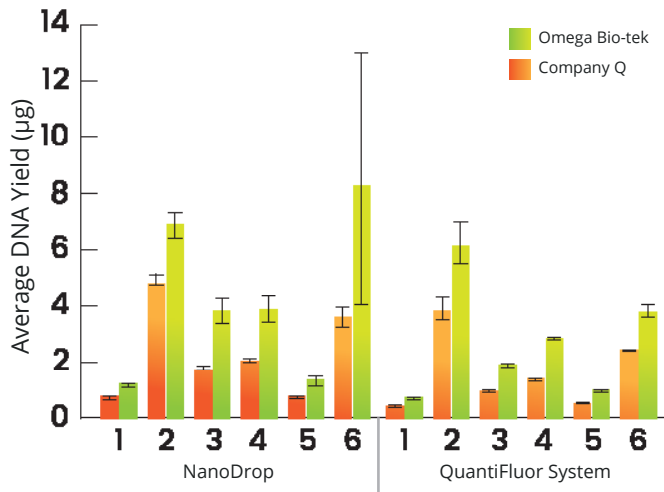


Figure 3. Average DNA yield from 500 µL Saliva Samples isolated from Mag-Bind® Blood & Tissue DNA HDQ 96 Kit automated on Tecan Fluent® platform and comparable kit from Company Q following manufacturer's recommended protocols. Purified DNA was quantified using Thermo Scientific's NanoDrop™ 2000c system as well as Promega's QuantiFluor® dsDNA system.

Product Description	Preps	Cat No.
Mag-Bind® Blood & Tissue DNA HDQ 96 Kit	1 x 96	M6399-00
	4 x 96	M6399-01
	24 x 96	M6399-02

For free samples of any of our kits, visit www.omegabiotek.com

Important: If automating this procedure on a liquid handler or a magnetic processor, please contact your Omega Bio-tek representative for instrument-specific instructions.