

MagBinder® Fit²⁴



Automated, high-volume
DNA & RNA purification

 **omega**
BIO-TEK

omegabiotek.com



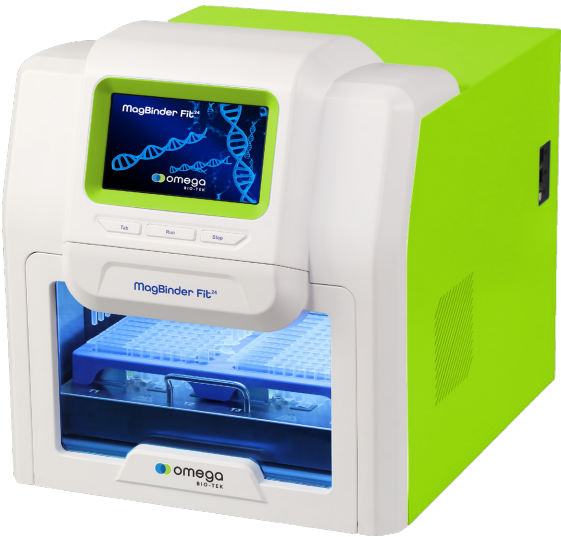
MagBinder® Fit²⁴ Nucleic Acid Purification System

New Standard for High-Volume, Cost-Effective Nucleic Acid Purification




Elevate your laboratory experience with the MagBinder® Fit²⁴ Nucleic Acid Purification System. Efficiency, affordability, precision, and reliability, all in one powerful instrument. Order yours now and unlock the future of automated nucleic acid purification!


- Flexible purification of 1 to 24 high or low volume samples
- Faster workflows using pre-filled MB Fit24™ cartridges
- Easy-to-use with a wide range of sample types




Process a variety of Sample types



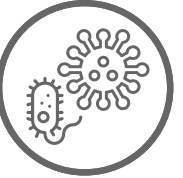
Whole Blood




Saliva




Cell-free DNA




Pathogens




Swab




Fecal



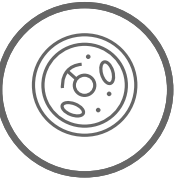
FFPE




Plasmid




Insect and Mullosc



Tissue



Plant



Environmental

Research and IVD Ready

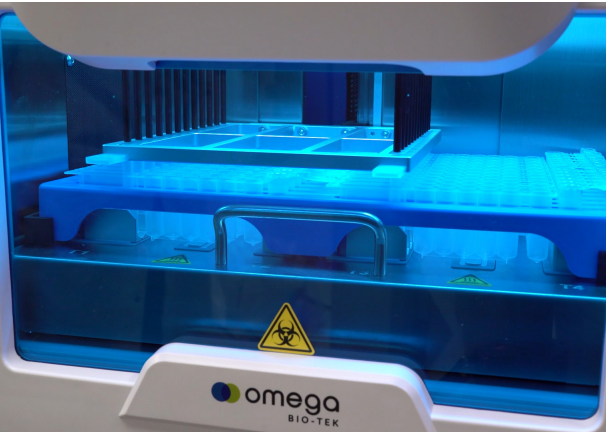
The MagBinder® Fit²⁴ is not just an instrument, it is your solution to more efficient, automated workflows, specifically designed for nucleic acid purification for research applications, and in countries that accept CE-IVD, in vitro diagnostic applications. Tailored for use in laboratories that cannot justify a high-throughput solution, it brings efficiency to your research protocols.

MagBinder® Fit²⁴ Nucleic Acid Purification System

New Standard for High-Volume, Cost-Effective Nucleic Acid Purification

Simple and Efficient

Experience efficient nucleic acid purification with the MagBinder® Fit²⁴ Nucleic Acid Purification System. Our affordable, state-of-the-art instrument utilizes 24 magnetic rods coordinated to pick-up, transfer, and release magnetic particles within reagent cartridge wells, ensuring a reliable and streamlined process for DNA and RNA purification. Accommodating 1 to 24 samples simultaneously, the MagBinder® Fit²⁴ is compatible with a range of sample types, thanks to Omega Bio-tek's line of magnetic bead-based nucleic acid extraction cartridges and kits.



Flexibility at its Finest

Designed to work seamlessly with both Omega Bio-tek Mag-Bind® kits and specially designed MB Fit24™ cartridges, the MagBinder Fit24 can be a turnkey solution or provide a flexible, programmable platform. Complete with validated, pre-loaded protocols for MB Fit24 cartridges, getting your workflow started can be a breeze. For those labs that prefer more flexibility, the user-friendly interface empowers effortless programming of new protocols directly on the instrument. Omega Bio-tek can also provide optimized and customized protocols for any Mag-Bind kit.

Have any questions about instrument protocols? Reach out to an Omega Bio-tek application specialist for support. Automation@omegabiotek.com



MB Fit24™ cfDNA Kit

Pre-scripted solution for the purification of high-quality cfDNA from up to 4 mL plasma or serum samples

- Extract cfDNA from 4 mL plasma with no sample splitting
- Pre-filled cartridges with pre-defined, validated scripts for MagBinder Fit24
- Optimized to extract smaller DNA fragments (150-400 bp)

Specifically designed for use with the MagBinder® Fit24 Nucleic Acid Purification System, this kit revolutionizes your workflow, allowing for the extraction of circulating DNA from up to 4 mL plasma/serum samples serum eluted in as little as 50 µL optimized to extract smaller DNA fragments (150-400 bp). The MB Fit24™ cfDNA Kit streamlines your process by eliminating reagent preparation and buffer dispensing and the semi-automated extraction workflow is capable of processing up to 24 samples in less than 55 minutes.

Product	Cat. No.
MB Fit24™ cfDNA Kit	B3298-10-48PF

TapeStation Analysis Shows Well-Defined cfDNA Peaks from Lot L

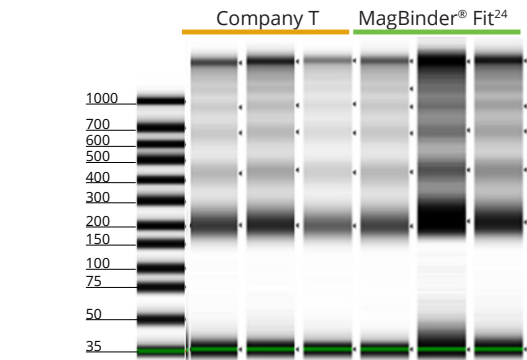


Figure 1. TapeStation Analysis of cfDNA extracted from 4 mL of plasma from Lot L show well-defined cfDNA peaks, with additional multimers above.

Features	Specifications
Starting material	Up to 4 mL plasma/serum
Elution Volume	50-100 uL
Technology	Magnetic Beads
Processing Mode	Pre-filled, Automated
Throughput	1-24
Estimated offline Processing	40 minutes
Online Processing Time	53 minutes
Note	Downstream applications: NGS, qPCR

TapeStation Analysis Shows Well-Defined cfDNA Peaks from Lot I

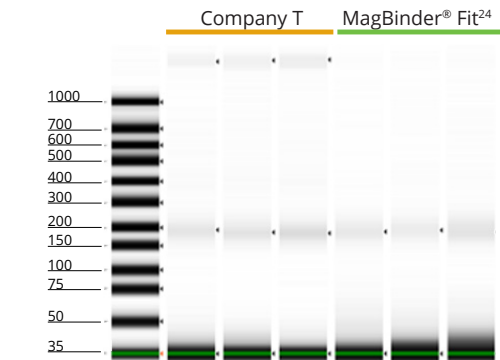


Figure 2. TapeStation Analysis of cfDNA extracted from 4 mL of plasma from Lot I show the main cfDNA peak ~170 bp.

Average Ct Values Illustrate Absence of Inhibitors

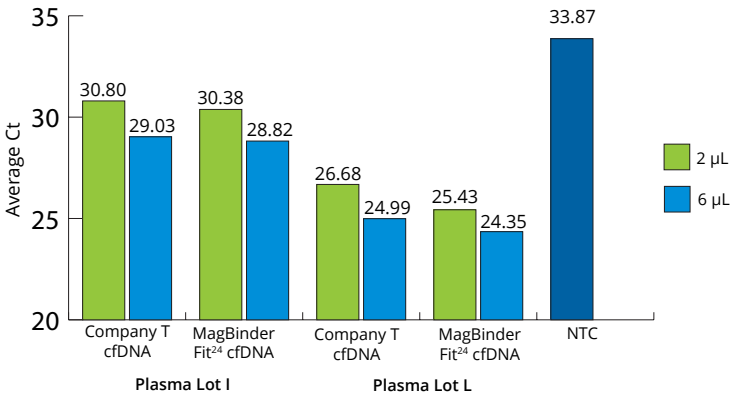


Figure 3. qPCR analysis results in a ΔCt within the expected range of 1-1.5 for the cfDNA extracted using the MB Fit24 cfDNA Kit, illustrating reduced inhibition.

MB Fit24™ Blood & Tissue DNA Kit

Pre-scripted solution for purification of high-quality of DNA from blood, saliva, cultured cells, or fresh or frozen tissue

- Pre-filled cartridges with pre-defined, validated scripts for MagBinder Fit24
- 24 lysed samples processed in less than 50 minutes

Experience the power of Mag-Bind® Particles PF-HDQ, providing reversible nucleic acid binding properties. Paired with Omega Bio-tek's buffers, this system offers a fast and convenient method for isolating DNA from diverse sample types. The purification procedure delivers high-quality DNA, ready for direct use in various downstream applications such as PCR amplification, next-generation sequencing, and enzymatic reactions

Product	Cat. No.
MB Fit24™ Blood & Tissue DNA Kit	B6399-5-48PF

MB Fit24™ Blood & Tissue DNA Kit Produces Consistently High Yields of High-Quality DNA

Sample	Avg. Yield (µg)	A260/A280	A260/A230
Saliva	7.99±0.70	1.78±0.06	1.76±0.19
Whole Blood	10.16±0.70	1.88±0.02	2.18±0.16

Figure 1. The average DNA yield from 250 µL whole blood samples and 500 µL of stabilized saliva were obtained using the MB Fit24 Blood & Tissue DNA Kit . The absorbance ratios > 1.8 indicate high purity of the isolated DNA.

Features	Specifications
Starting material	250 µL blood samples, 500 uL saliva, swabs, or fresh/frozen cultured cells and tissue
Elution Volume	100 uL
Technology	Magnetic Beads
Processing Mode	Pre-filled, Automated
Throughput	1-24
Estimated offline Processing	Blood, saliva, cells, swabs: 30 minutes Tissue: 1-3 hours
Online Processing Time	47 minutes
Note	Downstream applications: NGS, qPCR, microarray

Extracted DNA is Unfragmented and of High Molecular Weight

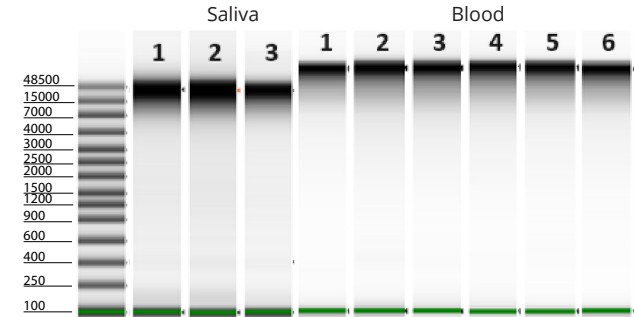


Figure 2. DNA extracted using the MB Fit24 Blood & Tissue DNA Kit yield unfragmented DNA from both blood and saliva. The DNA purified from blood is of high molecular weight, showing > 60 kb.

qPCR Analysis Illustrates Absence of Inhibitors

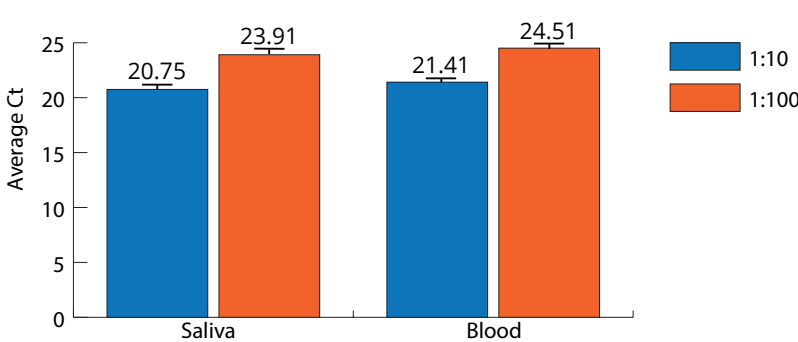


Figure 3. qPCR analysis of both blood and saliva results in ΔCt values ~3.3, indicating the absence of inhibitors within the extracted DNA and substantiating its suitability for use in applications downstream.



Omega Bio-tek Inc.
400 Pinnacle Way, Suite 450
Norcross, GA 30071

www.omegabiotek.com

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