

# Mag-Bind® Universal Metagenomics Kit

DNA extraction from a wide variety of environmental sample types

CAT NO: M5633



## Hybrid Protocol

Customizable protocol for metagenomics and microbiome studies from environmental samples



## Multi-step lysis

Overcome bias for high recovery of nucleic acids



## Quality

High quality DNA suitable for qPCR & NGS and other downstream applications



## Bead-Based

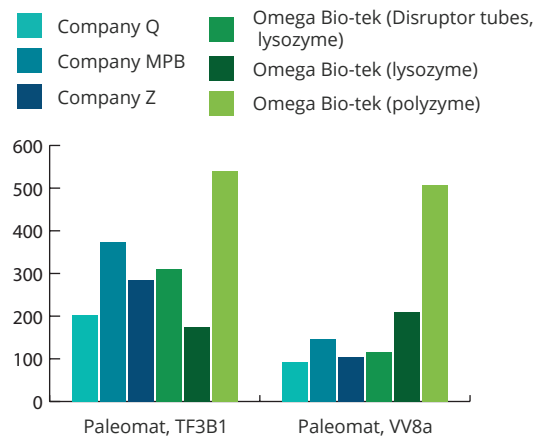
High throughput purification

Environmental metagenomics involves dealing with a nearly infinite number of different combinations of microbiome communities and sample types. Current commercial extraction kits are designed for speed and ease of use, and are not nearly robust enough to consistently extract an adequate yield and representation of DNA from the resident microbiome for downstream analyses.

**Mag-Bind® Universal Metagenomics Kit** was developed in collaboration with Extreme Microbiome Project (XMP) to develop the for DNA extraction from organisms found in extreme environments that is also compatible for most environmental sample types. This new kit employs a hybrid, self-customizable protocol covers proper pre-treatment for a variety of sample types, a core multi-lysis (mechanical, enzymatic, and chemical) extraction protocol, along with other optional sample type-specific steps. This approach provides investigators the ability to use one single kit to optimize and maintain their DNA extraction method for consistent results and analysis.

### Average Yields from Paleomats Collected from Antarctica

**Figure 1.** Average yields from Paleomats (ancient microbial mats associated with former lake beds) -- TF3B1 and VV8a -- collected from Antarctica extracted using kits from Omega Bio-tek and other manufacturers following manufacturer's recommended protocols.



### Average Yield from Rhizosphere Samples

**Table 1.** Harvested microorganisms were pelleted and resuspended in 1 mL of PBST. 100 µL of this resuspension was spiked with 3 µL of ZymoBIOMICS™ Microbial Community DNA Standard and DNA was extracted using kits from Omega Bio-tek and Company Q following manufacturer's recommended protocols. DNA was quantified with Thermo Scientific's NanoDrop® 2000c.

Table 1.

Company	Average Yield (µg)
Omega Bio-tek	1.23 ± 0.27
Company Q	0.22 ± 0.04

Product Description	Preps	Cat No.
Mag-Bind® Universal Metagenomics Kit	5	M5633-00
	50	M5633-01

For free samples of any of our kits, visit [www.omegabiotek.com](http://www.omegabiotek.com)



innovations in nucleic acid isolation

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