

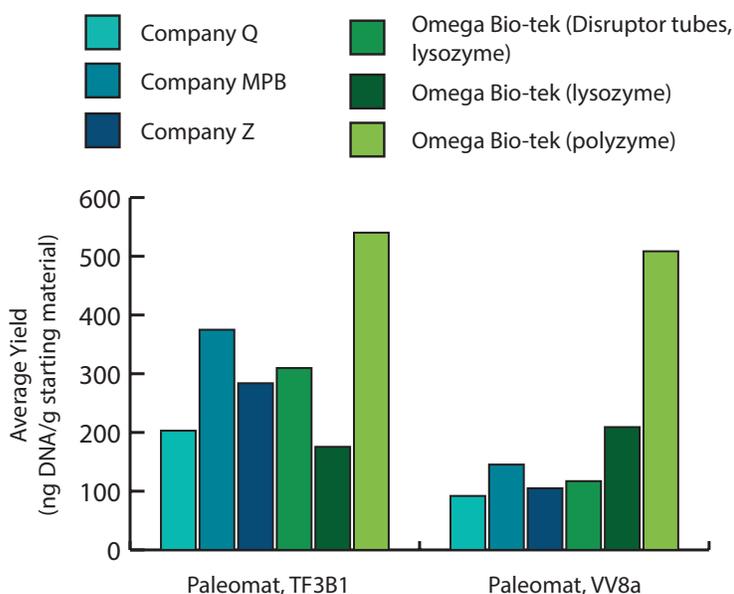
Mag-Bind® Universal Metagenomics Kit

DNA extraction from a wide variety of environmental sample types

Features and Benefits

- Hybrid, customizable protocol for metagenomics and microbiome studies from environmental samples
- Multi-step lysis to overcome extraction bias for high recovery of nucleic acids
- High quality DNA suitable for a variety of downstream applications such as qPCR & NGS

Average Yields from Paleomats Collected from Antarctica



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 recommended protocols.

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.

Omega Bio-tek has partnered with the Extreme Microbiome Project (XMP) to develop the Mag-Bind® Universal Metagenomics Kit 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 that 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 Yield from Rhizosphere Samples

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

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 NanoDrop® 2000c.

Product Info

Part Number	Preparations
M5633-00	5
M5633-01	50