Simple, Reliable DNA Extraction from Most Challenging Stool samples using Exgene[™] Stool-Bead DNA Kit

Introduction

DNA yield, DNA purity and bacterial diversity assessments vary depending on the DNA extraction method. To our knowledge, mechanical methods used for cell lysis can increase the efficiency of DNA yield with its powerful lysis ability. To support the experiment which requires high DNA yield, GeneAll features the new stool DNA extraction kit, Exgene[™] Stool-Bead DNA Kit.

The Exgene[™] Stool-Bead DNA Kit allows rapid and reproducible isolation of host genomic DNA, bacterial DNA and viral DNA from stool samples.

It utilizes the combination of chemical and mechanical disruption methods for the most effective in the lysis of a variety of microorganisms and host cells simultaneously. The newly formulated Buffer KW eliminates PCR inhibiting compounds commonly found in stool samples.

The purified DNA is of the highest quality and is fully compatible with downstream PCR, real-time PCR, Southern blotting, microarray technology applications.

Benefits of the Exgene[™] Stool-Bead DNA Kit

- Efficiently homogenize the various microorganisms and host cells
- Novel wash buffer delivers high-purity DNA for sequencing applications
- Fast and easy processing can reduce potential human errors
- Isolate both host DNA and microbial DNA simultaneously
- Recover inhibitor-free DNA, ready to use directly in various downstream applications

Features of the Exgene[™] Stool-Bead DNA Kit

Kit	Exgene [™] Stool DNA	Exgene™ Stool-Bead DNA
Principles of cell lysis	No bead-beating	Mechanical and enzyme disruption
	No enzymes added	
Proteinase K	Х	0
Filter column	0	Х
Preparation time	≥25 min	
Format	Silica-membrane spin column	

Experimental comparison



Fig. 1 Higher yields of DNA with Exgene[™] Stool-Bead DNA kit. DNA was isolated from swin stool samples using three

different commercial kits and compared. Yields were measured by NanoDrop.



Fig. 2 Quality DNA extraction from swin stool sample using Exgene[™] Stool-Bead. Template DNA was isolated from stool sample of swin using Exgene[™] Stool-Bead and supplier Q. Then, GAPDH genes were detected in both kits, but detection occurred in Exgene[™] Stool-Bead kit earlier than in the Supplier Q kit.