

Stool DNA Isolation Kit

NORGEN
BIOTEK  CORP.



Rapid and simple purification of bacterial and host DNA from stool and fecal samples

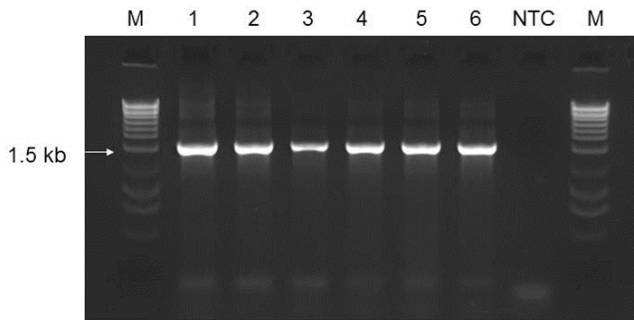


Figure 1. Detection of Prokaryotic Bacteria from Different Stool Samples.

Total DNA was isolated from 200 mg stool samples. Next, 2 μ L from each 50 μ L elution was added into 18 μ L of PCR master mix for amplification of bacterial DNA using universal prokaryotic primers. 10 μ L of the PCR products were loaded on a 1.5% TAE Agarose gel (Lanes 1-6). The 1.5 kb band was amplified in all samples, indicating the quality of DNA for prokaryotic bacterial detection in end-point PCR. Lane M: Norgen's HighRanger 1kb DNA Ladder.

Features

- ✓ Universal procedure for simultaneous isolation of both host DNA and microbial DNA
- ✓ Eliminates PCR inhibitors including humic acid
- ✓ High quality, inhibitor-free DNA for sensitive downstream applications

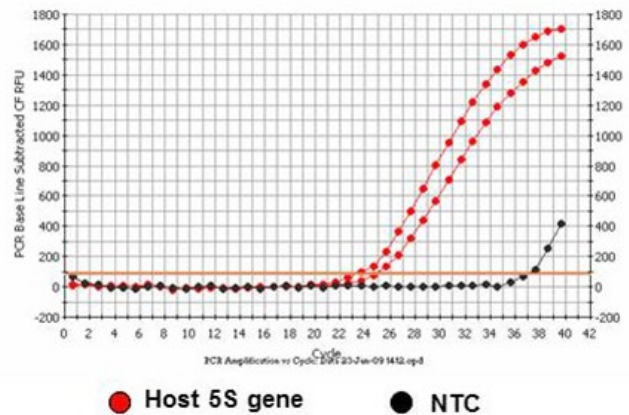


Figure 2. Detection of host DNA by using 5S primers in a real-time PCR reaction (SYBR Green).

Norgen's Stool DNA Isolation Kit was used to isolate DNA from 200 mg stool samples. From each 50 μ L elution, 15 ng of DNA (2 μ L) was mixed in a total volume of 20 μ L of real-time PCR reaction buffer and the real-time PCR was conducted. The PCR successfully detected the 5S gene from the host DNA, indicating the high quality of DNA isolated.

Kit	Size	Cat. #
Stool DNA Isolation Kit	50 preps	27600
Stool Nucleic Acid Isolation Kit	50 preps	45600

North American Toll-Free: 1-866-667-4362

Phone: 905-227-8848 Fax: 905-227-1061

info@norgenbiotech.com

www.norgenbiotech.com

ISO 13485:2003, ISO 9001:2008, ISO 15189:2007 Registered

Stool RNA Isolation Kit

NORGEN
BIOTEK  CORP.



Convenient and rapid purification of total RNA from small amounts of stool samples

Features

- ✓ Simultaneous isolation of both host RNA and microbial RNA (universal protocol)
- ✓ Eliminates PCR inhibitors including humic acid
- ✓ High quality RNA for sensitive downstream applications

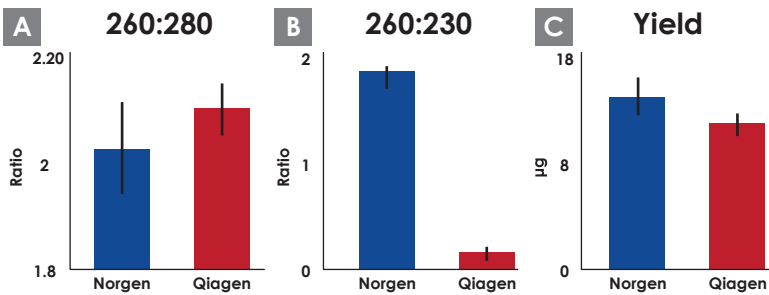


Figure 1. Yield and quality of purified stool RNA measured using nanospectrophotometry.

Norgen's Stool RNA Purification Kit was compared to a competitor kit using 200mg of stool. Comparisons were based on yield, and A260:A280/A260:A230 ratios measured using the NanoVue Plus™. A) Both kits isolated RNA with high A260:A280 ratios (all samples were found to be above 1.8 and below 2.2). B) Norgen's kit was found to isolate RNA with a high A260:A230 (with all samples falling in the 1.8-2.2 range). The competitor kit, however, was found to isolate RNA with extremely low A260:A230 ratios, with none of the samples displaying a A260:A230 ratio higher than 0.20. C) Norgen's kit was found to isolate higher amounts of RNA, with an average yield of 14.58 µg, compared to the competitor's average of 12.26 µg.

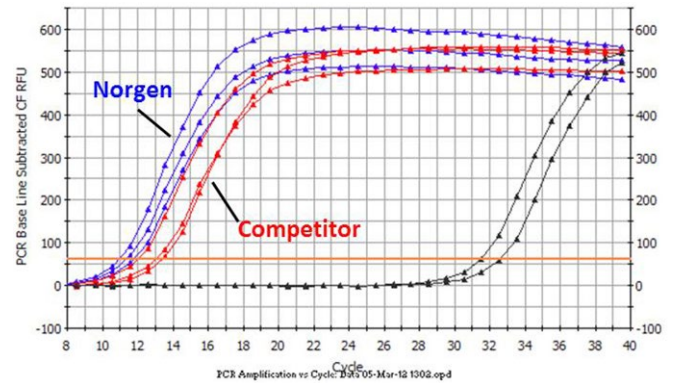


Figure 2. RT-qPCR of purified stool RNA isolated using Norgen's Stool RNA Purification Kit and a leading competitor's kit.

Five microliters of purified RNA were used in a 20 µL reverse-transcription reaction using Invitrogen's Superscript III system with 16S reverse primers. The cDNA generated was then used in a qPCR reaction involving Norgen's 2X PCR Mastermix spiked with SYBR green (Bio-Rad), using 0.3µM of primers against bacterial 16S. As can be seen in the amplification plot, Norgen's kit outperformed the leading competitor's kit by on average 1.5 Ct values. This indicates that Norgen isolated higher quality and yields of RNA from stool, that can be used in an array of downstream applications.

Kit	Size	Cat. #
Stool RNA Isolation Kit	50 preps	49500
Stool Nucleic Acid Isolation Kit	50 preps	45600

North American Toll-Free: 1-866-667-4362

Phone: 905-227-8848 Fax: 905-227-1061

info@norgenbiotek.com

www.norgenbiotek.com

ISO 13485:2003, ISO 9001:2008, ISO 15189:2007 Registered