PALL Laboratory

www.pall.com/lab

Pall Nucleic Acid Binding Nanosep® Centrifugal Device

DOMINIQUE DUTSCHER SAS

Description

The Pall Nanosep device for nucleic acid binding (NAB) incorporates a dual layer silica-based quartz glass fiber media to allow for efficient binding of DNA and RNA, while providing smooth flow and rapid processing of samples. This media offers researchers the flexibility to purify plasmid DNA, genomic DNA or total RNA from a variety of starting materials: a single column for multiple applications. The new NAB Nanosep device offers flexibility without sacrificing on quantity or quality of the nucleic acid. The Pall NAB Nanosep device is a multipurpose centrifugal device providing flexibility in applications, supported by comprehensive protocols for sample processing.



Maximum yields and quality of nucleic acid purification

- Rapid processing of samples
- Silica-based quartz glass fiber media that allows efficient binding of DNA and RNA
- Constructed of low-binding polypropylene
- Ultrasonically welded seals prevent bypass or seal failure
- Fits standard centrifuge rotors that accept 1.5 mL tubes

Downstream Applications

Purified Plasmid DNA

- Restriction digest
- Cloning
- Sanger sequencing

Purified Genomic DNA

- qPCR
- Next Generation Sequencing

Purified Total RNA

- RT-PCR
- cDNA library construction

Specifications

Materials of Construction
Dual Filter Media: Binder-free, silica-based glass fiber
Housing: Polypropylene

Effective Filtration Area
0.28 cm^2

Sample Volume
Up to 500 µL

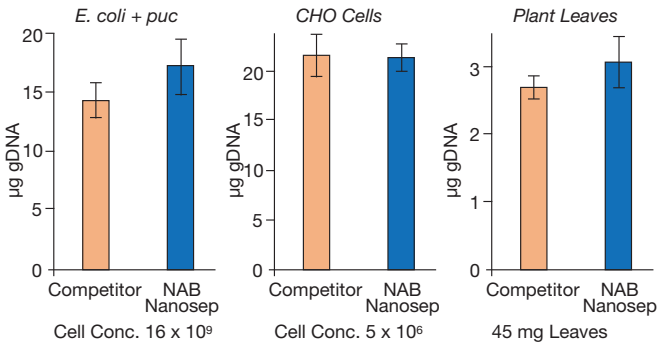
Dimensions
Overall length (fully assembled): 45 mm (1.8 inches)
Column insert height: 23 mm (0.9 inches)

Operating specs
Operating Temperature Range: 15 – 30 °C (59 – 86 °F)
Max. Centrifugal Force: 14,000 x g
Minimum Elution Vol.: 40 µL
Base Pair Binding from 50 bp
Binding Capacity, up to: 160 µg pure RNA,
69 µg pure genomic DNA, 11.5 µg pure plasmid DNA

Performance

Figure 1

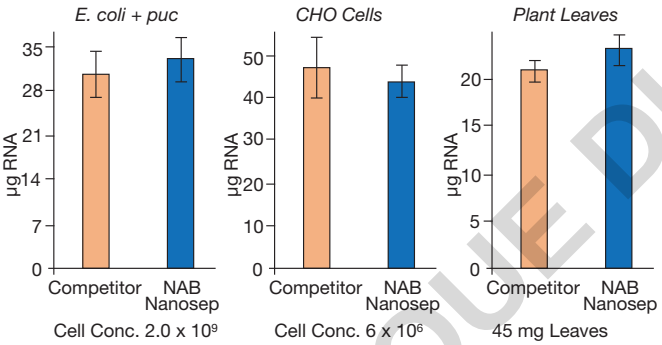
Genomic DNA isolated from freshly harvested E. coli cells, CHO cells and plant leaves compared to the competitor commercial product with commercial buffers for genomic DNA isolation.



Purity (A_{260}/A_{280}) E. coli 1.77 ± .05, CHO 1.79 ± .06, Basil 1.84 ± .04

Figure 2

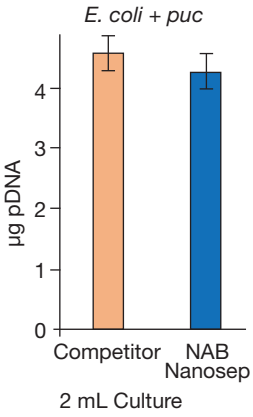
Total RNA isolated from freshly harvested E. coli cells, CHO cells and plant leaves compared to the competitor commercial product with commercial buffers for RNA isolation.



Purity (A_{260}/A_{280}) E. coli 2.05 ± .04, CHO 2.04 ± .01, Basil 2.07 ± .01

Figure 3

Plasmid DNA isolated from freshly harvested E. coli cells compared to the competitor commercial product with commercial buffers.



Purity (A_{260}/A_{280})1.79 ± .03

Yield, purity and reproducibility of nucleic acid isolated from a variety of starting materials are similar for the NAB Nanosep (blue bars) device when compared to the three different devices provided with three different kits from a single competitor (Orange bars). This demonstrates the cross functional capabilities of the NAB Nanosep device; a single device, capable of replacing several competitor devices for all nucleic acid applications without compromising on yield or purity. This is a single competitive product that has been compared to a competitor's products following the manufacturers protocols.

Ordering Information

NAB Nanosep

Part Number	Description	Pkg
ODNABC33	NAB Nanosep Device	24/pkg*
ODNABC34	NAB Nanosep Device	100/pkg*

** Both pack sizes come with 2 additional filtrate tubes for each device*

Accessories and Replacement Parts

Part Number	Description	Pkg
FDX001X34	Nanosep Filtrate Tube	100/pkg

Related Products

Part Number	Description	Pkg
8133	AcroPrep™ Advance 96 Well Long Tip Filter Plate for Nucleic Acid Binding	5/pkg

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