

PuroSPIN™ 96-well Silica Membrane DNA/RNA Purification Plate

Speed up your RNA and DNA processing purification by going high throughput! Our Purification Plate allows the user to process up to 96 samples simultaneously. Each well features a thick silica membrane to maximize nucleic acid binding and recovery of RNA and DNA from many sample types.

Features:

- Each well features a thick silica membrane to maximize nucleic acid binding and recovery of RNA and DNA from many sample types.
- Allow the user to process up to 96 samples simultaneously.
- Processing can be done via centrifugation or vacuum.

Purification of Short DNA Fragments

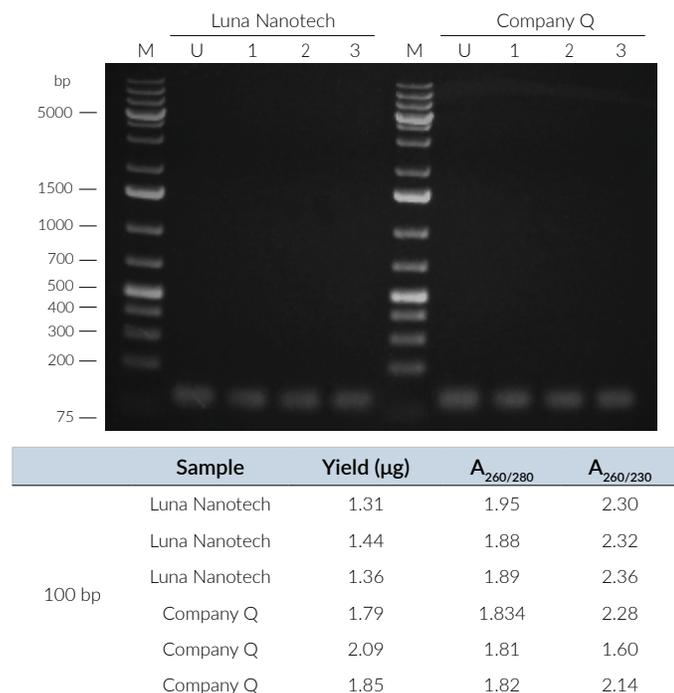


Figure 1. 100 bp DNA fragments were extracted from PCR reaction mixtures using Luna Nanotech's PuroSPIN-96™ PCR Product Purification Kit and a standard spin column PCR Purification Kit from Company Q, according to the manufacturer's recommended protocol, in triplicate. DNA samples were resolved on a 1% w/v agarose gel. Lane M represents the Thermo Scientific™ GeneRuler 1kb Plus DNA Ladder and Lanes U represent un-purified PCR product. DNA concentration and purity were measured using Thermo Scientific's NanoDrop™ One system.

Product Description	Skirt Format	Mfr. No.	Thomas No.
PuroSPIN™ 96-well Silica Membrane DNA/RNA Purification Plate, 10 Plates	Full skirt	USP-096F	CHM11N947
	Semi-skirt	USP-096S	CHM11N946

Features	Specifications
Loading volume	Semi-skirted: 1.2 mL Full-skirted: 800 µL
Binding capacity	RNA: 200 µg Plasmid DNA: up to 20 µg PCR Product: up to 20 µg Genomic DNA: 100 µg
Elution volume	≥ 30 µL
DNA binding technology	Silica membrane
Applications	High throughput extraction of genomic DNA and RNA from bacteria, viruses, yeast, cultured cells, blood, buccal swabs, animal tissue, plasmid DNA purification, PCR product cleanup, gel extraction

Purification of Long DNA Fragments

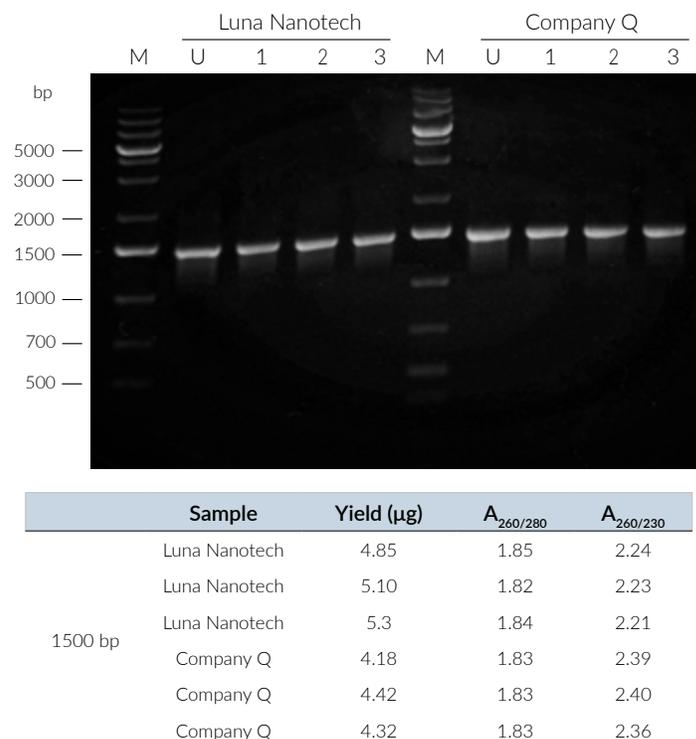
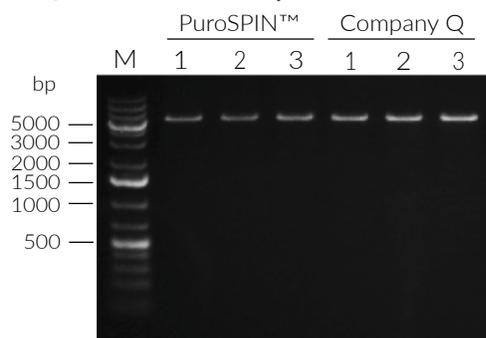


Figure 2. 1500 bp DNA fragments were extracted from PCR reaction mixtures using Luna Nanotech's PuroSPIN-96™ PCR Product Purification Kit and a standard spin column PCR Purification Kit from Company Q, according to the manufacturer's recommended protocol, in triplicate. DNA samples were resolved on a 1% w/v agarose gel. Lane M represents the Thermo Scientific™ GeneRuler 1kb Plus DNA Ladder and Lanes U represent un-purified PCR product. DNA concentration and purity were measured using Thermo Scientific's NanoDrop™ One system.

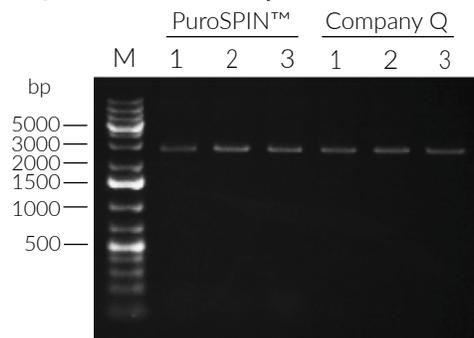
Comparison of Luna Nanotech's 96-well silica plates to Competitor Q's individual silica spin columns



Sample	Conc. (ng/μL)	A _{260/280}	A _{260/230}	
p11	Luna Nanotech	7.76	1.92	2.07
	Luna Nanotech	7.36	2.03	1.79
	Luna Nanotech	9.38	2.03	1.90
	Company Q	5.11	1.86	0.58
	Company Q	7.5	1.82	1.35
	Company Q	6.54	1.86	0.51

Figure 1. p11 plasmid DNA was purified from 1.5 mL of DHα *Escherichia coli* cultures using Luna Nanotech's PuroSPIN-96™ Plasmid Miniprep Kit and a plasmid miniprep kit (silica spin column based) from Company Q according to the manufacturer's recommended protocol, in triplicate. FastDigest HindIII was used to linearize the purified plasmid DNA (5704 bp) and samples were resolved on a 1% w/v agarose gel. Lane M represents the Thermo Scientific™ GeneRuler 1kb Plus DNA Ladder.

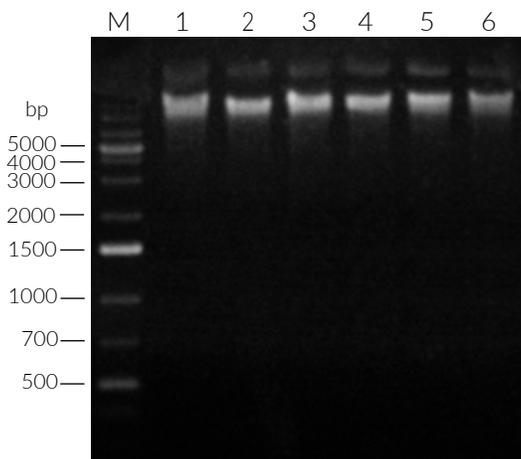
Comparison of Luna Nanotech's 96-well silica plates to Competitor Q's individual silica spin columns



Sample	Conc. (ng/μL)	A _{260/280}	A _{260/230}	
pUC19	Luna Nanotech	9.76	1.88	1.49
	Luna Nanotech	10.74	1.92	1.21
	Luna Nanotech	11.65	1.97	1.85
	Company Q	5.95	1.93	0.57
	Company Q	6.40	1.89	0.53
	Company Q	6.17	1.86	0.54

Figure 2. pUC19 plasmid DNA was purified from 1.5 mL of DHα *Escherichia coli* cultures using Luna Nanotech's PuroSPIN-96™ Plasmid Miniprep kit and a plasmid miniprep kit (silica spin column based) from Company Q according to the manufacturer's recommended protocol, in triplicate. FastDigest HindIII was used to linearize the purified plasmid DNA (2686 bp) and samples were resolved on a 1% w/v agarose gel. Lane M represents the Thermo Scientific™ GeneRuler 1kb Plus DNA Ladder.

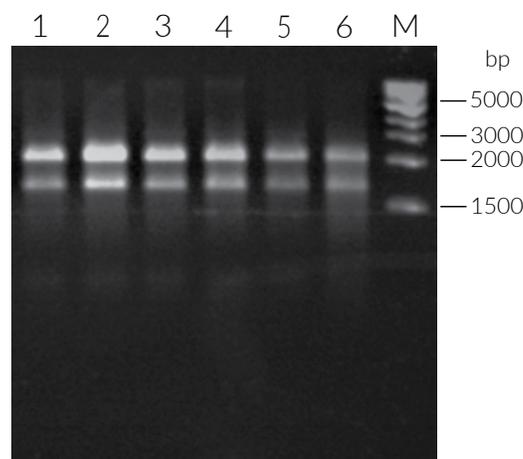
Genomic DNA from Bacteria



Sample	1	2	3	4	5	6
Conc. (ng/μL)	35.25	36.82	38.23	35.01	41.87	32.07
Yield (μg)	3.53	3.68	3.82	3.50	4.19	3.21
A _{260/280}	1.69	1.71	1.71	1.70	1.67	1.68
A _{260/230}	1.26	1.35	1.35	1.23	1.06	1.28

Figure 2. Genomic DNA was extracted from *Escherichia coli* using Luna Nanotech's PuroSPIN-96™ Genomic DNA Purification Kit according to the manufacturer's recommended protocol. DNA samples were resolved on a 1% w/v agarose gel and concentration and purity were measured using Thermo Scientific's NanoDrop™ One system. Lane M represents the Thermo Scientific™ GeneRuler 1kb Plus DNA Ladder.

Total RNA from Bacteria



Sample	1	2	3	4	5	6
Conc. (ng/μL)	180.15	305.46	196.18	231.75	122.61	246.25
Yield (μg)	18.02	30.55	19.62	23.18	12.26	24.62
A _{260/280}	2.16	2.19	2.16	2.18	2.15	2.18
A _{260/230}	2.55	2.53	2.59	2.53	2.65	2.56

Figure 2. Total RNA was extracted from *Escherichia coli* using Luna Nanotech's PuroSPIN-96™ Total RNA Purification Kit according to the manufacturer's recommended protocol. RNA samples were resolved on a 1% w/v agarose gel and concentration and purity were measured using Thermo Scientific's NanoDrop™ One system. Lane M represents the Thermo Scientific™ GeneRuler 1kb Plus DNA Ladder.