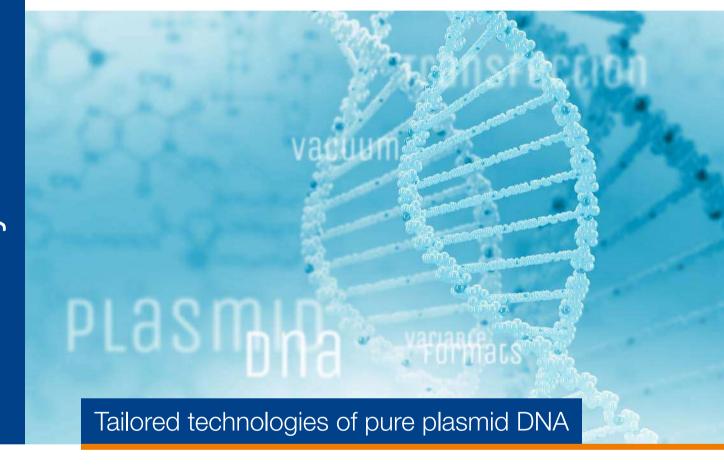
MACHEREY-NAGEL

Plasmid DNA purification guide



Choose the product that matches your needs!

- Mini to Giga scale
- Molecular biology-grade to endotoxin-free quality
- Single prep to high throughput



Purity of plasmid DNA

Plasmid DNA purification with MACHEREY-NAGEL

Salts derived from purification procedures as well as proteins from the bacterial cells can lead to plasmid DNA contamination and poor downstream application results. Salts, as well as proteins, are efficiently depleted by MACHEREY-NAGEL plasmid purification products. In addition, all our kits for plasmid DNA isolation contain RNase to avoid RNA contamination.

However, the majority of impurities in plasmid DNA preparations derive from endotoxins. Endotoxins are lipopolysaccharides from the bacterial cell wall that might be co-purified with the plasmid DNA. Endotoxins have cytotoxic effects and negatively influence cell viability and transfection efficiency. Additionally, endotoxins are known to influence gene expression in cell cultures, leading to false results in gene expression analyses. Endotoxin levels are measured by a standardized test, and the measurement unit is EU (endotoxin unit). MACHEREY-NAGEL provides plasmid isolation products that enable the efficient removal of endotoxins.

Why choose MN for your plasmid DNA application?

Since the development of kit-based plasmid isolation around 30 years ago, MACHEREY-NAGEL has been a pioneer of supplying fast and highly reliable solutions for the purification of plasmid DNA. Today, a comprehensive portfolio of kits based on premium performance anion exchange chromatography or silica membrane technology is available to provide the most adequate solutions for individual requirements.

The plasmid purification product that best fits your needs will depend upon your downstream application. Routine molecular biology applications are not influenced by the presence of endotoxins. However, manipulation of standard eukaryotic cell lines such as HeLa or HEK cells require a higher purity. For these applications, we recommend our transfection-grade plasmid DNA isolation kits with endotoxin levels between 1–50 EU/µg DNA. For highly sensitive applications, we recommend our endotoxin-free kits. These applications include the transfection of precious cell lines, such as primary cells, stem cells or cells growing in low numbers. Our endotoxin-free products enable the isolation of plasmid DNA with endotoxin levels below 0.1 EU/µg DNA.

MN has developed high quality products for plasmid purification to match individual customer requirements.



Icon annotation

Mini

Mini spin column for microcentrifuge tubes (1.5 mL or 2 mL)



Midi column for gravity flow (NucleoBond® Xtra / NucleoBond® PC technology) or 15 mL midi spin columns for centrifuges



NucleoBond® Xtra Maxi / NucleoBond® AX 500 Column for gravity flow



NucleoBond® AX 2000 Columns for gravity flow



NucleoBond® AX 10000 Columns for gravity flow



NucleoBond® PC Prep 100 Column for preparative scale

8-well Mini spin colu

Mini spin columns in 8-well strip format



Mini spin columns in 96-well plate format



Disposable funnel container combined with a mini spin column for vacuum processing (e.g., using NucleoVac 24 Vacuum Manifold), and subsequent centrifugation for elution in a microcentrifuge tubes (1.5 mL or 2 mL)



NucleoSpin® Funnel Column for concentration of large volumes



NucleoBond® Finalizer (Large) for DNA precipitation and filtration

MACHEREY-NAGEL plasmid purification products

Kits for plasmid DNA isolation

| Application | Scale | Culture volume* | Typical yield ** / recovery | Product | | Page |
|--|---------------|-----------------|-----------------------------|---|------------|------|
| Sequencing, cloning | Mini | 1–5 mL | 25–45 µg | NucleoSpin® Plasmid | | 4 |
| | | 1–5 mL | 25-45 µg | NucleoSpin® Plasmid (NoLid) | | 4 |
| | | 1–5 mL | 15-30 µg | NucleoSpin® Plasmid EasyPure | <u>(L)</u> | 5 |
| | 8-well strip | 1–5 mL | 4–30 µg | NucleoSpin® 8 Plasmid | | 4 |
| | 96-well plate | 1–5 mL | 4–30 µg | NucleoSpin® 96 Plasmid | | 4 |
| | 96-well plate | 1.1-1.3 mL | 8 µg | NucleoSpin® 96 Flash | | 6 |
| Transfection-grade plasmid DNA | Mini | 1–5 mL | 15–30 µg | NucleoSpin® Plasmid Transfection-grade | | 7 |
| (< 50 EU/µg DNA) for transfection of non-sensitive cells | 96-well plate | 1–5 mL | 5–20 µg | NucleoSpin® 96 Plasmid Transfection-grade | | 7 |
| HOTT CONDITIVE COILE | Snap | 50 mL | 250 µg | NucleoSnap® Plasmid Midi | (L) (L) | 8 |
| | Midi | < 200 mL | 500 µg | NucleoBond® Xtra Midi | <u>(L)</u> | 9 |
| | Maxi | < 600 mL | 1 mg | NucleoBond® Xtra Maxi | <u>(L)</u> | 9 |
| | | 250-750 mL | 10–150 μg | NucleoBond® Xtra BAC | | 9 |
| | Mega | 150–500 mL | 0.5–2 mg | NucleoBond® PC 2000 | | 10 |
| | Giga | 500-2000 mL | 2-10 mg | NucleoBond® PC 10000 | | 10 |
| Endotoxin-free plasmid DNA (< 0.1 | Midi | < 200 mL | 500 μg | NucleoBond® Xtra Midi EF | <u>(L)</u> | 11 |
| EU/µg DNA) for transfection of sensitive cells | Maxi | < 600 mL | 1 mg | NucleoBond® Xtra Maxi EF | <u>(L)</u> | 11 |
| | Mega | 150-500 mL | 0.5–2 mg | NucleoBond® PC 2000 EF | | 12 |
| | Giga | 500-2000 mL | 2–10 mg | NucleoBond® PC 10000 EF | | 12 |
| | Preparative | 5–20 L | 80-100 mg | NucleoBond® PC Prep 100 | | 12 |
| | 96-well plate | 1–5 mL | 2-50 µg | NucleoBond® 96 Xtra EF | | 11 |
| Desalting and concentration tools | Midi | | 90–100 % | NucleoSnap® Finisher Midi | | 13 |
| | Maxi | | 90–100 % | NucleoSnap® Finisher Maxi | | 13 |
| | Midi | | 90–100 % | NucleoSpin® Finisher Midi | | 13 |
| | Midi | 5 mL eluate | 60–90 % | NucleoBond® Finalizer | | 14 |
| | | | | | | |

Plasmid purification technologies

| | NucleoSpin [®] | NucleoSpin® 8 | NucleoSpin® 96 | NucleoSnap [®] | NucleoBond [®] | NucleoBond® 96 |
|------------|--------------------------|-----------------------------|-----------------------------|--|---|-------------------------------|
| Technology | Silica membrane | Silica membrane | Silica membrane | Precipitation and filtration | Anion exchange chromatography | Anion exchange chromatography |
| Format | Mini spin column | 8-well strip | 96-well plate | Snap off column | Mini to preparative scale columns | 96-well plate |
| Processing | Vacuum or centrifugation | Vacuum or centrifugation | Vacuum or centrifugation | Vacuum (centrifuga- tion for elution) | Gravity flow (NucleoBond® PC Prep 100 intended for HPLC, FPLC) | Gravity flow |

Sequencing, cloning

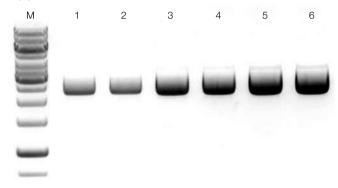
NucleoSpin® Plasmid

Reliable preparation of plasmid DNA from low to high throughput

- High capacity up to 50 μg plasmid DNA with NucleoSpin® Plasmid
- Optional washing step for highest plasmid quality
- Customized support for use of NucleoSpin® 8/96 Plasmid on various automation platforms available

| | Mini | 8-well | 96-well |
|------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | NucleoSpin® Plasmid | NucleoSpin® 8 Plasmid | NucleoSpin® 96 Plasmid |
| Technology | Silica membrane technology | Silica membrane technology | Silica membrane technology |
| Endotoxin level | >> 50 EU/µg DNA | >> 50 EU/µg DNA | >> 50 EU/µg DNA |
| Vector size | < 25 kbp | < 15 kbp | < 15 kbp |
| Sample material | 1–5 mL <i>E. coli</i> culture | 1–5 mL <i>E. coli</i> culture | 1–5 mL <i>E. coli</i> culture |
| Typical yield | 25–45 μg | 4–30 μg | 4–30 µg |
| Elution volume | 50 μL | 75–150 μL | 75–150 μL |
| Theoretical binding capacity | 60 µg | 30 µg | 30 µg |
| Preparation time | 20 min/6 preps | 45 min/6 strips | 45 min/plate |

Application data



High yield plasmid Mini prep

Plasmid DNA isolation (pUC18) from E. coli DH5 α using NucleoSpin® Plasmid. For the isolation 2 mL (lane 1-2), 5 mL (lane 3-4) and 8 mL (lane 5-6) LB cultures were used and analyzed on an agarose gel (2 μ L of each eluate). Lane M: marker.

| Product | Preps | REF | |
|----------------------------------|-----------------|--------------------|--|
| NucleoSpin® Plasmid | 10/50/250 | 740588.10/.50/.250 | |
| NucleoSpin® Plasmid (NoLid) | 10/50/250 | 740499.10/.50/.250 | |
| NucleoSpin® 8 Plasmid | 12x8/60x8 | 740621 / .5 | |
| NucleoSpin® 8 Plasmid Core Kit* | 48 x 8 | 740461.4 | |
| NucleoSpin® 96 Plasmid | 1x96/4x96/24x96 | 740625.1/.4/.24 | |
| NucleoSpin® 96 Plasmid Core Kit* | 4x96/24x96 | 740616.4/.24 | |
| Related product | | | |
| NucleoSpin® Plasmid Buffer Set | 1 | 740953 | |

^{*} Kits with basic content focusing on automation platforms. Additional accessories can be combined as needed.

Sequencing, cloning

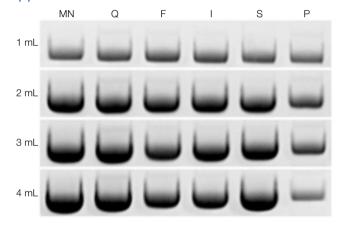
NucleoSpin® Plasmid EasyPure

Rapid small scale preparation of plasmid DNA

- Ultrafast procedure with one combined washing and drying step
- Liquid RNase easy handling without dissolving
- LyseControl for visualization of completed alkaline lysis

| | IVIIII |
|------------------------------|-------------------------------|
| | NucleoSpin® Plasmid EasyPure |
| Technology | Silica membrane technology |
| Endotoxin level | >> 50 EU/µg DNA |
| Vector size | < 25 kbp |
| Sample material | 1–5 mL <i>E. coli</i> culture |
| Typical yield | 15–30 µg |
| Elution volume | 50 μL |
| Theoretical binding capacity | 35 µg |
| Preparation time | 14 min/6 preps |

Application data



Time saving isolation of plasmid DNA with NucleoSpin® Plasmid EasyPure

Plasmid DNA was isolated from bacterial culture with the NucleoSpin® Plasmid EasyPure and competitor kits. The NucleoSpin® Plasmid EasyPure enables successful plasmid DNA isolation even with increasing culture volumes in a very short prep time.

Plasmid DNA was eluted in 50 μL elution buffer. 2.5 μL from each eluate were analyzed on a 1 % TAE agarose gel.

| Product | Preps | REF |
|------------------------------|-----------|--------------------|
| NucleoSpin® Plasmid EasyPure | 10/50/250 | 740727.10/.50/.250 |



Sequencing, cloning

NucleoSpin® 96 Flash

High throughput purification of small and large constructs

- Cost efficient solution for plasmid DNA isolation
- Protocol for large, low copy constructs available

| | 96-well |
|------------------|---|
| Product | NucleoSpin® 96 Flash |
| Technology | Alkaline lysis with subsequent filtration and precipitation |
| Processing | Manual or automated |
| Endotoxin level | >> 50 EU/µg DNA |
| Sample material | 1.1–1.3 mL (high copy), 1.1–3.9 mL (low copy) |
| Vector size | < 250 kbp |
| Typical yield | 8 µg (1.3 mL high copy), 1 µg (1.3 mL low copy) |
| Preparation time | 90 min/2 plates |

| Product | Preps | REF |
|----------------------|-----------------------|-----------------|
| NucleoSpin® 96 Flash | 2 x 96/4 x 96/24 x 96 | 740618.2/.4/.24 |



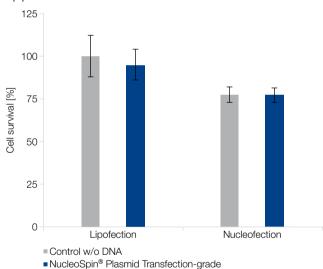
NucleoSpin® Plasmid Transfection-grade

A fast way to purify plasmid DNA for transfections

- Diminished endotoxin content due to a novel technology (unique endotoxin removal buffer, patented)
- The mini spin and 96-well solution for plasmid DNA with low endotoxin levels

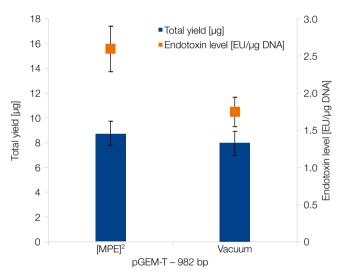
| | Mini | 96-well | |
|------------------------------|--|---|--|
| | NucleoSpin® Plasmid Transfection-grade | NucleoSpin® 96 Plasmid Transfection-grade | |
| Technology | Silica membrane technology | Silica membrane technology | |
| Endotoxin level | < 50 EU/µg DNA | 1–50 EU/µg DNA | |
| Sample material | 1–5 mL <i>E. coli</i> culture | 1–5 mL <i>E. coli</i> culture | |
| Vector size | < 25 kbp | < 25 kbp | |
| Typical yield | 15–30 µg | 5–20 µg | |
| Elution volume | 30–50 μL | 100–200 μL | |
| Theoretical binding capacity | 35 µg | 20 μg | |
| Preparation time | 20 min/6 preps | 45 min/plate | |
| | | | |

Application data



Cell compatibility of eluted DNA

A pCMV-GFP plasmid (kindly provided by PlasmidFactory GmbH & Co. KG, Bielefeld, Germany) was purified from *E. coli* using NucleoSpin® Plasmid Transfection-grade. Plasmids were transfected into HEK239 cells by lipofection (Lipofectamine 2000) or Nucleofection $^{\rm TM}$ with $>90\,\%$ transfection efficiency in both cases. Cell survival was compared to controls without DNA addition. The results show that cell survival is not affected by DNA eluates purified with NucleoSpin® Plasmid Transfection-grade.



Isolation of plasmid DNA from bacterial cultures

Plasmid DNA was isolated from 1.5 mL of bacterial cultures ($E.\ coli$ DH5a, high copy plasmid pGEM®-T Easy; 982 bp insert; n = 24) using the NucleoSpin® 96 Plasmid Transfection-grade kit on an [MPE]2 positive pressure module (dark blue) or a manual vacuum manifold (light blue). Total yield was determined by UV spectrometry showing comparable yields between positive pressure or vacuum processed samples.

| Product | Preps | REF |
|---|-----------------|--------------------|
| NucleoSpin® Plasmid Transfection-grade | 10/50/250 | 740490.10/.50/.250 |
| NucleoSpin® 96 Plasmid Transfection-grade | 1x96/4x96/24x96 | 740491.1/.4/.24 |
| NucleoSpin® 96 Plasmid Transfection-grade Core Kit* | 4×96/24×96 | 740492.4/.24 |

^{*} Kits with basic content focusing on automation platforms. Additional accessories can be combined as needed.

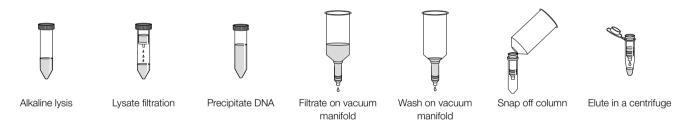
NucleoSnap® Plasmid Midi

Ultrafast plasmid Midi prep due to vacuum processing

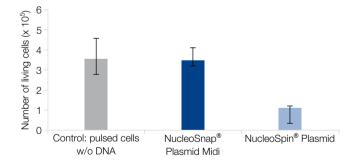
- New column design (snap off column) for vacuum processing of large sample volumes
- Isolate up to 250 μg plasmid DNA in only 35 minutes
- No need for time consuming DNA precipitation

| | Only |
|------------------------------|---|
| | NucleoSnap® Plasmid Midi |
| Technology | Precipitation and filtration |
| Processing | Vacuum, centrifugation for lysate clarification and elution |
| Endotoxin level | < 50 EU/µg DNA |
| Sample material | ≤ 50 mL <i>E. coli</i> culture (OD600 = 5) |
| Vector size | < 25 kbp |
| Typical yield | 250 µg |
| Elution volume | 200–500 μL |
| Theoretical binding capacity | 1.5 mg |
| Preparation time | 35 min/6 preps |

Procedure



Application data



Superior performance in electroporation experiments

Eukaryotic cells were manipulated with the Nucleofector™ technology. The viability of cells treated with plasmid DNA isolated with the NucleoSnap® Plasmid Midi kit is comparable to the viability of cells in the mock control (grey bar), indicating that the plasmid DNA does not affect cell viability. In contrast, Nucleofection™ with plasmid DNA isolated with the molecular biology-grade NucleoSpin® Plasmid kit leads to a decrease in cell viability.

| Product | Preps | REF |
|------------------------------|-------|---------------|
| NucleoSnap® Plasmid Midi | 10/50 | 740494.10/.50 |
| Related products | | |
| NucleoVac 24 Vacuum Manifold | 1 | 740299 |
| NucleoVac Mini Adapter | 100 | 740297.100 |
| NucleoVac Valves | 24 | 740298.24 |
| NucleoVac Vacuum Regulator | 1 | 740461 |

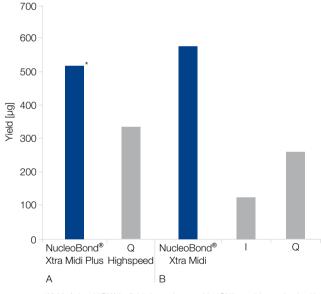
NucleoBond® Xtra

2nd generation anion exchanger for fast purification of plasmid DNA

- Column filter for fast and easy lysate clarification included high filter flow rates, parallel lysate clearing, and loading onto the column
- Midi and Maxi preps with extremely high yield
- BAC kit for large construct DNA

| | Midi NucleoBond® Xtra Midi / Plus* | Maxi NucleoBond® Xtra Maxi/Plus* | Maxi NucleoBond® Xtra BAC |
|------------------------------|---|---|-------------------------------|
| Technology | Anion exchange chromatography | Anion exchange chromatography | Anion exchange chromatography |
| Endotoxin level | 1–10 EU/µg DNA | 1–10 EU/µg DNA | 1–10 EU/µg DNA |
| Sample material | < 200 mL (high copy), < 400 mL (low copy) | < 600 mL (high copy), 1200 mL (low copy) | 250-750 mL (low copy) |
| Vector size | < 300 kbp | < 300 kbp | < 300 kbp |
| Typical yield | 500 µg | 1000 µg | 10–150 μg |
| Theoretical binding capacity | 800 µg | 2000 µg | 150 µg |
| Preparation time | 70 min/prep, 30 min/prep* | 75 min/prep, 35 min/prep* | 75 min/4 preps |

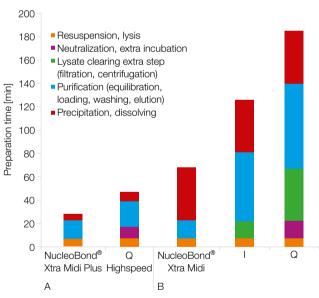
Application data



^{*}Yield of plasmid DNA is slightly lower due to residual DNA remaining on the desalting tool (compared to kits without desalting tool).

Yield in comparison to competitor anion exchange based kits

Plasmid DNA was isolated following each manufacturer's protocol using the maximum culture volume with high plasmid content. Yield of plasmid DNA was determined after DNA precipitation. Comparison: A) Kits including desalting tool, B) Kits without desalting tool.



Shorter preparation time compared to competitors

NucleoBond[®] Xtra shows up to 60% time saving and up to 100% higher yields compared to competitor products. Comparison: A) Kits including desalting tool, B) Kits without desalting tool.

| Product | Preps | REF |
|-----------------------------------|-----------|--------------------|
| NucleoBond® Xtra Midi | 10/50/100 | 740410.10/.50/.100 |
| NucleoBond® Xtra Midi Plus* | 10/50 | 740412.10/.50 |
| NucleoBond [®] Xtra Maxi | 10/50/100 | 740414.10/.50/.100 |
| NucleoBond® Xtra Maxi Plus* | 10/50 | 740416.10/.50 |
| NucleoBond® Xtra BAC | 10/25 | 740436.10/.25 |

^{*}NucleoBond® Xtra Plus kits contain NucleoBond® Finalizer for plasmid desalination and concentration. See page 14 for details.

NucleoBond® PC

- 1st generation anion exchanger for purification of plasmid DNA
- No centrifugation required for clarification of lysates with NucleoBond® Folded Filters, no shearing forces
- Separate kit components available: NucleoBond® AX Columns, RNase, and buffers

| | Mega | Giga | |
|------------------------------|---|--|--|
| | NucleoBond® PC 2000 | NucleoBond® PC 10000 | |
| Technology | Anion exchange chromatography | Anion exchange chromatography | |
| Endotoxin level | 1–10 EU/µg DNA | 1–10 EU/µg DNA | |
| Lysate clarification | Folded filters | Folded filters | |
| Sample volume | 150–500 mL (high copy), 500–2000 mL (low copy) | 500–2000 mL (high copy), 1–4 L (low copy) | |
| Typical yield | 0.5–2 mg | 2–10 mg | |
| Theoretical binding capacity | 2 mg | 10 mg | |
| Preparation time | 90-120 min/4-6 preps | 120–150 min/2 preps | |

| Product | Preps | REF |
|--------------------------|-------|--------|
| NucleoBond® PC 2000 | 5 | 740576 |
| NucleoBond® PC 10000 | 5 | 740593 |
| Related products | | |
| NucleoBond® Buffer Set I | 1 | 740601 |
| NucleoBond® AX 2000 | 10 | 740525 |
| NucleoBond® AX 10000 | 5 | 740534 |

Endotoxin-free plasmid DNA

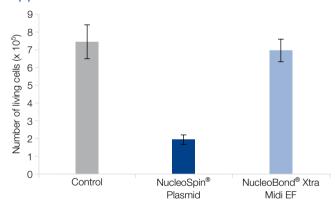
NucleoBond® Xtra EF

2nd generation anion exchange technology for time saving endotoxin-free plasmid DNA

- Plasmid DNA for transfection of highly sensitive cells (e.g., primary cells, stem cells)
- Patented endotoxin removal by additional washing step
- Column filter included in Midi/Maxi columns high filter flow rates, parallel lysate clearing and, loading onto the column ensures fast processing

| | Midi NucleoBond® Xtra Midi / Plus* EF | Midi NucleoBond® Xtra Maxi / Plus* EF | 96-well NucleoBond® 96 Xtra EF |
|------------------------------|---|--|---|
| Technology | Anion exchange chromatography | Anion exchange chromatography | NucleoBond® 96 Xtra EF Anion exchange chromatography |
| Endotoxin-level | < 0.05 EU/µg DNA | < 0.05 EU/µg DNA | < 0.1 EU/µg DNA |
| Processing | Gravity flow | Gravity flow | Gravity flow |
| Sample material | < 200 mL (high copy), < 400 mL (low copy) | < 600 mL (high copy), < 1200 mL (low copy) | 1–5 mL |
| Vector size | < 300 kbp | < 300 kbp | < 25 kbp, < 300 kbp (without NucleoBond® Finalizer Plate) |
| Typical yield | 500 µg | 1000 μg | 2–4 μg (1.5 mL culture in 96-well plate) 10–50 μg (5 mL culture in glass tube) |
| Theoretical binding capacity | 800 µg | 2000 μg | 50 μg |
| Preparation time | 85 min/prep, 45 min/prep* | 90 min/prep, 50 min/prep* | 120 min/plate |

Application data



Efficient transfection of endotoxin-sensitive eukaryotic cells

Huh-7 cells were transfected with Lipofectamine® 2000 reagent (Life Technologies). The viability of cells treated with plasmid DNA isolated with the NucleoBond® Xtra Midi EF kit is comparable to the viability of cells in the control, indicating that the plasmid DNA does not affect cell viability.

| Product | Preps | REF |
|--------------------------------|---------------|---------------|
| NucleoBond® Xtra Midi EF | 10/50 | 740420.10/.50 |
| NucleoBond® Xtra Midi Plus EF* | 10/50 | 740422.10/.50 |
| NucleoBond® Xtra Maxi EF | 10/50 | 740424.10/.50 |
| NucleoBond® Xtra Maxi Plus EF* | 10/50 | 740426.10/.50 |
| NucleoBond® 96 Xtra EF* | 1 x 96/4 x 96 | 740430.1/.4 |

^{*} NucleoBond® Xtra Plus kits contain NucleoBond® Finalizer for plasmid desalination and concentration. See page 14 for details.

Endotoxin-free plasmid DNA

NucleoBond® PC EF

- 1st generation anion exchange technology for endotoxin-free plasmid DNA from
- No centrifugation required for clarification of lysates with NucleoBond® Folded Filters, no shearing forces
- Separate kit components available: NucleoBond® AX Columns, RNase, and buffers

| | Mega NucleoBond® PC 2000 EF | Giga NucleoBond® PC 10000 EF | PrepS NucleoBond® PC Prep 100 |
|------------------------------|-------------------------------|-------------------------------|----------------------------------|
| Technology | Anion exchange chromatography | Anion exchange chromatography | Anion exchange chromatography |
| Endotoxin level | < 0.1 EU/µg DNA | < 0.1 EU/µg DNA | < 0.1 EU/µg DNA |
| Sample material | 150-500 mL | 500-2000 mL | 5–20 L |
| Vector size | < 300 kbp | < 300 kbp | < 300 kbp |
| Typical yield | 0.5–2 mg | 2–10 mg | 80-100 mg |
| Theoretical binding capacity | 2000 µg | 10000 µg | 100 mg |
| Preparation time | 150 min/2 preps | 180 min/2 preps | 20 h/prep |

References

Song et al. 2017 "Different antiviral effects of IFNa subtypes in a mouse model of HBV infection." Scientific Reports

Adoro et al. 2015 "IL-21 induces antiviral microRNA-29 in CD4 T cells to limit HIV-1 infection." Nature Communications

| Product | Preps | REF |
|-------------------------|-------|--------|
| NucleoBond® PC 2000 EF | 5 | 740549 |
| NucleoBond® PC 10000 EF | 5 | 740548 |
| NucleoBond® PC Prep 100 | 1 | 740594 |
| Related products | | |
| NucleoBond® AX 2000 | 10 | 740525 |
| NucleoBond® AX 10000 | 5 | 740534 |



Desalination and concentration tools

NucleoSnap® Finisher – NucleoSpin® Finisher

The fastest way to finish NucleoBond® Midi and Maxi preps

- No time consuming isopropanol precipitation
- Up to 24 samples in parallel
- Fast procedure for > 6 samples, vacuum or centrifugation

| | Snap | Snap | Funnel |
|------------------|---|---|---|
| | ☐ NucleoSnap® Finisher Midi | NucleoSnap® Finisher Maxi | NucleoSpin® Finisher Midi |
| Technology | DNA precipitation and filtration | DNA precipitation and filtration | DNA precipitation and filtration |
| Processing | Vacuum, centrifugation for elution | Vacuum, centrifugation for elution | Centrifugation |
| Vector size | < 25 kb | < 25 kb | < 25 kb |
| Sample material | DNA eluate | DNA eluate | DNA eluate |
| Compatibility | Eluates from NucleoBond® Xtra Midi (EF), NucleoBond® PC 20 / 100 | Eluates from NucleoBond® Xtra Maxi (EF), NucleoBond® PC 500 (EF) | Eluates from NucleoBond® Xtra Midi/Maxi (EF), NucleoBond® PC 20/100/500 (EF) |
| Typical recovery | 90–100 % | 90–100 % | 90–100 % |
| Elution volume | ≥ 100 µL | ≥ 100 µL | ≥ 100 µL |
| Preparation time | < 10 min/12 preps | < 10 min/12 preps | 15 min/6 preps |

| Product | Preps | REF |
|------------------------------|-------|---------------|
| NucleoSnap® Finisher Midi | 10/50 | 740434.10/.50 |
| NucleoSnap® Finisher Maxi | 10/50 | 740435.10/.50 |
| NucleoSpin® Finisher Midi | 10/50 | 740439.10/.50 |
| Related products | | |
| NucleoVac 24 Vacuum Manifold | 1 | 740299 |
| NucleoVac Mini Adapter | 100 | 74097.100 |
| NucleoVac Valves | 24 | 740298.24 |
| NucleoVac Vacuum Regulator | 1 | 740641 |



Desalination and concentration tools

NucleoBond® Finalizer

Proven syringe filters for speeding up anion exchange plasmid preparations

- Eliminates centrifugation steps for precipitation reduces prep time from 1 h to only 5 min
- Two sizes available, to be combined with Midi and Maxi preparations
- No loss of DNA pellets or incomplete solubilization of barely visible precipitates

| | NucleoBond® Finalizer | NucleoBond® Finalizer Large |
|----------------------------------|--|--|
| Technology | DNA precipitation and filtration | DNA precipitation and filtration |
| Vector size | 2–50 kbp | 2-50 kbp |
| Sample material | 5 mL DNA eluate | 15 mL DNA eluate |
| Compatibility | Eluates from NucleoBond® Xtra Midi (EF), | Eluates from NucleoBond® Xtra Midi (EF), |
| | NucleoBond® PC 100/500 (EF) | NucleoBond® PC 2000 (EF) |
| Typical recovery | NucleoBond® PC 100/500 (EF) 60-90 % | NucleoBond® PC 2000 (EF) 60-90 % |
| Typical recovery Elution volume | | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |

| Product | Preps | REF |
|-----------------------------|-------|-----------|
| NucleoBond® Finalizer | 20 | 740519.20 |
| NucleoBond® Finalizer Large | 20 | 740418.20 |



Kits for plasmid DNA isolation

Ordering information

| Product | Preps / Pack of | REF |
|---|-----------------------|--------------------|
| Molecular biology-grade plasmid DNA | | |
| NucleoSpin® Plasmid | 10/50/250 | 740588.10/.50/.250 |
| NucleoSpin® Plasmid (NoLid) | 10/50/250 | 740499.10/.50/.250 |
| NucleoSpin® Plasmid EasyPure | 10/50/250 | 740727.10/.50/.250 |
| NucleoSpin® 8 Plasmid | 12x8/60x8 | 740621/.5 |
| NucleoSpin® 8 Plasmid Core * Kit | 48 x 8 | 740461 |
| NucleoSpin® 96 Plasmid | 1x96/4x96/24x96 | 740625.1/.4/.24 |
| NucleoSpin® 96 Plasmid Core * Kit | 4×96/24×96 | 740616.4/.24 |
| NucleoSpin® 96 Flash | 2 x 96/4 x 96/24 x 96 | 740618.2/.4/.24 |
| Transfection-grade plasmid DNA | | |
| NucleoSpin® Plasmid Transfection-grade | 10/50/250 | 740490.10/.50/.250 |
| NucleoSpin® 96 Plasmid Transfection-grade | 1x96/4x96/24x96 | 740491.1/.4/.24 |
| NucleoSpin® 96 Plasmid Transfection-grade Core * Kit | 4×96/24×96 | 740492.4/.24 |
| NucleoSnap® Plasmid Midi | 10/50 | 740494.10/.50 |
| NucleoBond® Xtra Midi | 10/50/100 | 740410.10/.50/.100 |
| NucleoBond® Xtra Midi Plus (incl. Finalizer) | 10/50 | 740412.10/.50 |
| NucleoBond® Xtra Maxi | 10/25 | 740436.10/.25 |
| NucleoBond® Xtra Maxi Plus (incl. Finalizer) | 10/50 | 740416.10/.50 |
| NucleoBond® Xtra BAC | 10/50/100 | 740414.10/.50/.100 |
| NucleoBond® PC 2000 | 5 | 740576 |
| NucleoBond® PC 10000 | 5 | 740593 |
| Endotoxin-free plasmid DNA | | |
| NucleoBond® Xtra Midi EF | 10/50 | 740420.10/.50/.100 |
| NucleoBond® Xtra Midi Plus EF (incl. Finalizer) | 10/50 | 740422.10/.50 |
| NucleoBond® Xtra Maxi EF | 10/50 | 740424.10/.50/.100 |
| NucleoBond® Xtra Maxi Plus EF (incl. Finalizer) | 10/50 | 740426.10/.50 |
| NucleoBond® 96 Xtra EF | 1 x 96/4 x 96 | 740430.1/.4 |
| NucleoBond® PC 2000 EF | 5 | 740549 |
| NucleoBond® PC 10000 EF | 5 | 740548 |
| NucleoBond® Prep 100 | 1 | 740594 |
| Desalination and concentration tools for anion exchange eluates | | |
| NucleoSnap® Finisher Midi | 10/50 | 740434.10/.50 |
| NucleoSnap® Finisher Maxi | 10/50 | 740435.10/.50 |
| NucleoSpin® Finisher | 10/50 | 740439.10/.50 |
| NucleoBond® Finalizer | 20 | 740519.20 |
| NucleoBond® Finalizer Large | 20 | 740418.20 |
| Accessories | | |
| NucleoVac 24 Vacuum Manifold | 1 | 740299 |
| NucleoVac Mini Adapter | 100 | 740297.100 |
| NucleoVac Valves | 24 | 740298.24 |
| NucleoVac 96 Vacuum Manifold | 1 | 740681 |
| NucleoVac Vacuum Regulator | 1 | 740461 |
| | | |
| NucleoBond® Xtra Combi Rack NucleoBond® Xtra Smart Rack | 1 | 740415 |

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