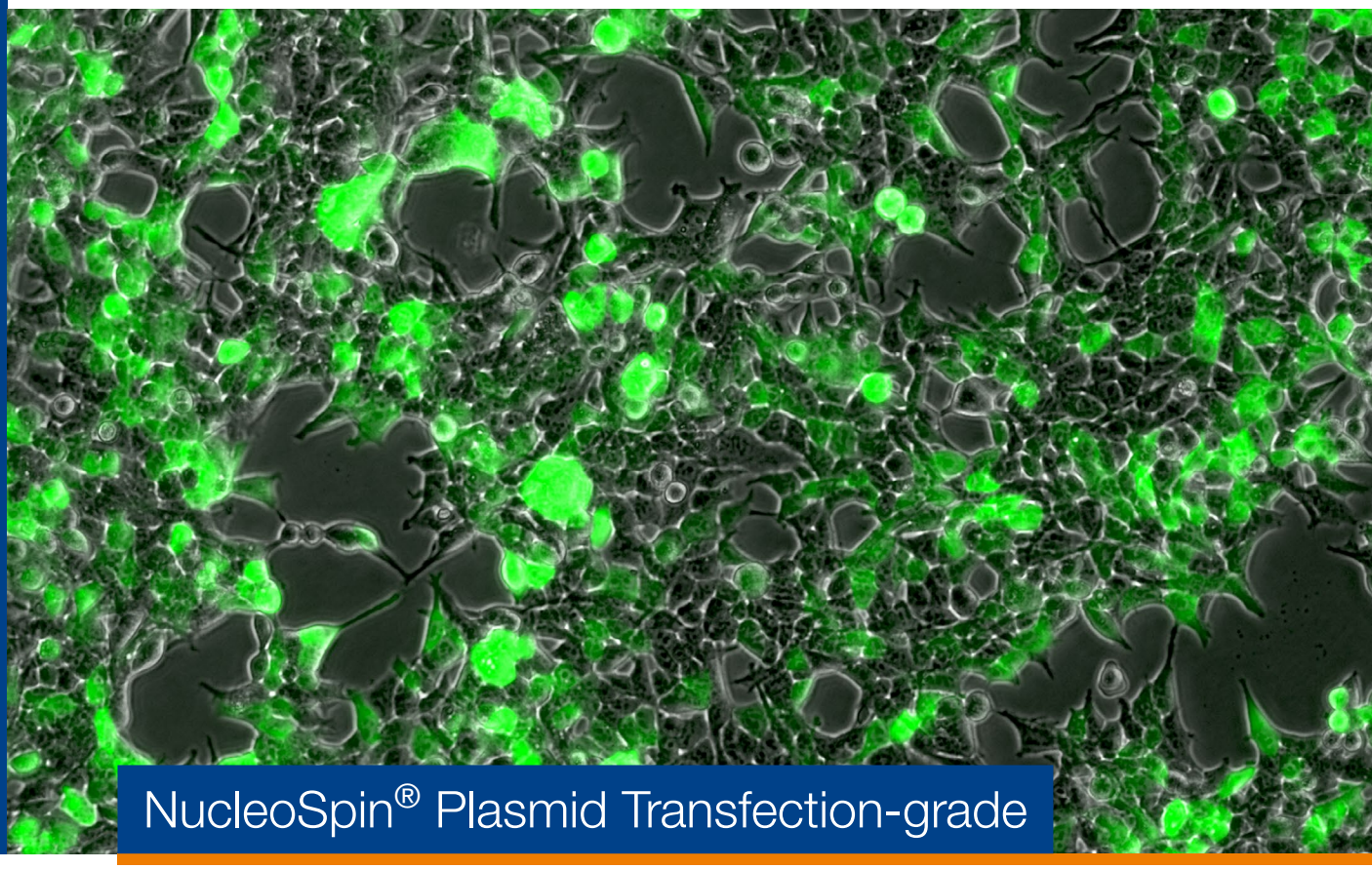
Bioanalysis

MACHEREY-NAGEL

Plasmid purification for transfection



NucleoSpin® Plasmid Transfection-grade

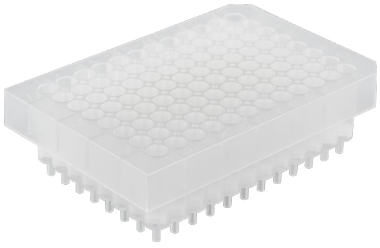
Do you need a fast way to purify plasmids for transfection?

- Novel technology to diminish endotoxin content for successful transfections
- Purification in mini-format simplifies your work-flow
- HTP-version supports plasmid screening

NucleoSpin® Plasmid Transfection-grade

A new technology to diminish endotoxin levels

Endotoxins are co-purified during plasmid preparations from bacterial lysates. Since they interfere with eukaryotic cell survival, endotoxin reduction is essential prior to cell transfection. MACHEREY-NAGEL has developed a new mini-format technology to reduce endotoxins from bacterial lysates.

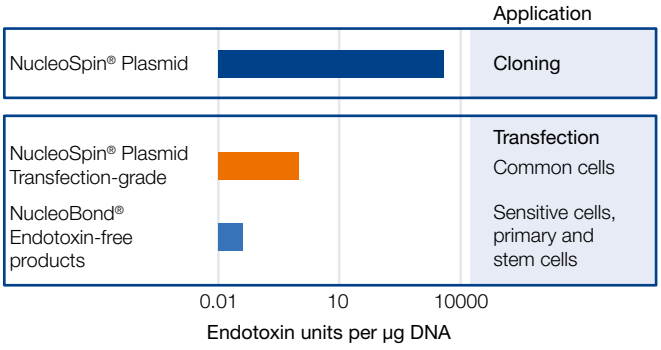


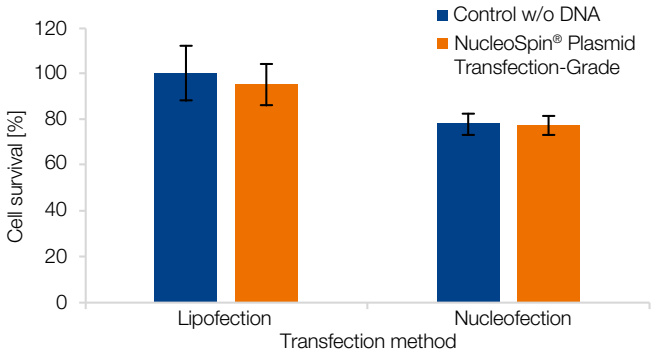
Product-at-a-glance

Technology	Silica-membrane and endotoxin reduction technology
Format	Mini spin columns / 96-well plates
Endotoxin content	< 50 EU/µg DNA (EU = Endotoxin Units)
Sample material	Up to 5 mL bacterial culture
Vector size	< 15 kbp
Typical yield	5–20 µg
Elution volume	30–200 µL
A_{260}/A_{280}	1.80–1.85
Preparation time	14 min/6 preps or 45 min/96 preps
Binding capacity	35 µg

Application data

Plasmids were purified from *E. coli* (DH5α) with different plasmid purification products from MACHEREY-NAGEL.





Endotoxin levels appropriate for individual applications

A quantitative chromogenic LAL-test was used to assess endotoxin content. As indicated, the content of endotoxin is strongly depended on the technology of plasmid purification. Low endotoxin levels were detected after purification with NucleoSpin® Plasmid Transfection-grade, resulting in a plasmid solution directly appropriate for transfection of common cells.

Cell compatibility of eluted DNA

A pCMV-GFP plasmid (kindly provided by PlasmidFactory GmbH und 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 (Lonza) with > 90 % transfection ratio in both cases. Cell survival was compared to controls without DNA addition. Similar ratios show that cell-survival is not affected by DNA eluates purified with NucleoSpin® Plasmid Transfection-grade.

Ordering information

Product	Specifications	Preps	REF
NucleoSpin® Plasmid Transfection-grade	Single spin plasmid purification and endotoxin removal	10 / 50 / 250	740490.10 / .50 / .250
NucleoSpin® 96 Plasmid Transfection-grade	Plasmid purification and endotoxin removal in 96-well format	1 x 96 / 4 x 96 / 24 x 96	740491.1 / .4 / .24
NucleoSpin® 96 Plasmid Transfection-grade Core Kit	Plasmid purification and endotoxin removal in 96-well format	4 x 96 / 24 x 96	740492.4 / .24

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MACHEREY-NAGEL

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