

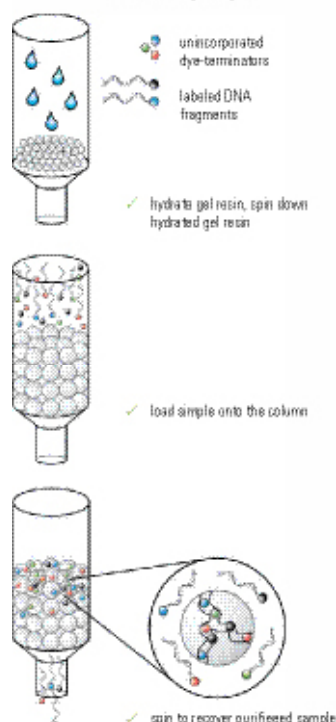
Nucleic Acid Purification

DNA clean up - Sequencing

NucleoSEQ procedure



NucleoSEQ principle



Dye terminator removal kits, NucleoSEQ



LE

For efficient removal of dye terminators, e.g. BigDye™ terminators, using convenient single spin columns filled with dry matrix.

- Preparation time: 5min/step (without hydration of matrix)
- Sample material: 20µL sequencing reaction mix
- Format: mini spin column

Unincorporated dye terminators will negatively affect analysis of sequencing results. Excess of dye terminators causes so-called 'dye blobs' resulting in a partly unreadable sequence.

NucleoSEQ will remove unincorporated dye terminators. The subsequent analysis is of high quality with long reading length and minimised background.

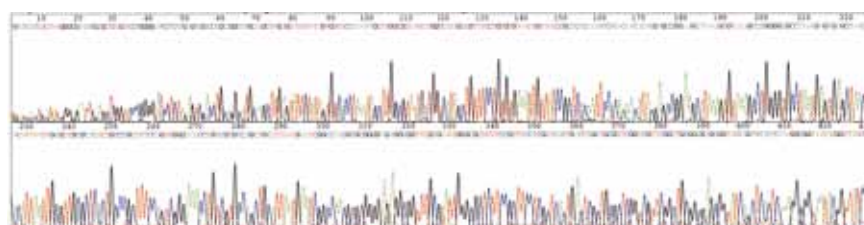
NucleoSEQ columns are designed for the fast, effective and cost efficient clean up of sequencing reactions. The spin columns are pre-filled with a dry size exclusion matrix, which allows an efficient removal of dye terminators. The gel filtration material consists of spheres with uniform pores and separates molecules according to molecular weight. After applying the sequencing reaction to the NucleoSEQ column the small dye terminators and other impurities, e.g., salts, nucleotides, primers, traces of organic solvents, are retained in the pores while labelled DNA fragments are excluded and recovered in the flow through with high yield.

In order to achieve long time storage at room temperature, NucleoSEQ columns are pre-filled with dry filtration resin. The matrix can easily be hydrated by adding water followed by an incubation period (>30 minutes). Hydrated columns are ready to use and can be stored at 4°C for 14 days.

A first short centrifugation step removes the remaining storage buffer. After loading the sample onto the column and a second centrifugation step, the DNA fragments of interest are recovered in the flow through.

Kit components: Pre-filled NucleoSEQ columns, collecting tubes 2mL.

Catalogue No	Alt. No	Spin columns
NZ74052310	740523.10	10 per kit
NZ74052350	740523.50	50 per kit
NZ740523250	740523.250	250 per kit
NZ74052210	740522.10	Receiver columns 20µm, pack of 10
NZ74052250	740522.50	Receiver columns 20µm, pack of 50
NZ740522250	740522.250	Receiver columns 20µm, pack of 250



Sequencing profile of plasmid DNA (pGEM®-T Easy)

Plasmid DNA was purified using NucleoSpin® Plasmid. Sequencing reaction was performed with ABI PRISM® BigDye™ Terminator Cycle Sequencing kit, purified with NucleoSEQ, and analysed on an ABI 310 sequencer.

illustra Sephadex G-25 DNA Grade



GH

For purification of DNA (x 10 bases in length) from small molecules by gel filtration.

- Tested to ensure reproducibly high recovery of DNA
- Used in MicroSpin G-25 columns and NAP columns
- When hydrated, 1g of dry gel swells to 4mL to 6mL volume

Catalogue No	Description	Quantity
GZ17057202	illustra Sephadex G-25 DNA Grade SF	100g