



Biozym
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Protocol
DNA Purification from
Bacteria with
4ward-NA[®] puriSorb[®]

- 4ward-NA[®] puriColumns -

Cat. No. 4w03.010

Cat. No. 4w03.050

Cat. No. 4w03.250

Version 1.2

For research use only

Principle

⁴ward-NA[®] DNA purification kits (Bacteria) are designed for extraction and purification of DNA from a wide range of bacteria species. ⁴ward-NA[®] puriSorb[®] technology allows the purification **in one single step** after lysis. Impurities are bound, and the purified DNA shows up in the eluate. The excellent purity of the DNA allows immediate use in all common downstream applications (PCR etc.).

Kit contents

The kit contains all important reagents for lysis and DNA purification.




Component	Art.No. 4w03.010	Art.No. 4w03.050	Art.No. 4w03.250
Buffer 4wC (B)	2 ml	8 ml	30 ml
Proteinase K	0,15 ml	7 ml	28 ml
SDS- Solution	1,5 ml	15 ml	75 ml
Activation Solution (ActivS)	6,0 ml	20 ml	100 ml
Lysozyme (25 mg/μl)*	0,15 ml*	0,6 ml*	2,9 ml*
DTT (1,4- Dithio-DL-threitol)	0,1 ml	0,2 ml	1ml
RNase A	0,5 ml	1,5 ml	6 ml
EDTA Solution	0,2 ml	0,5 ml	0,8 ml
⁴ ward-NA [®] puriColumns	10	50	250
Waste Tubes	10	50	250
DNA Tubes	10	50	250

* ad H₂O

Storage Conditions

During shipment all kit components are stable at room temperature. After arrival, store **chemicals at +2 °C to +8 °C**. All other components can be stored at room temperature. Please see expiration date of kit.

Safety Information

Protease 	Danger	H315, H318, H334, H335 P261, P280, P342+P311, P305+P351+P338
DTT 	Warning	H315, H319 P280, P305+P351+P338, P321, P362, P332+P313, P337+P313
SDS 	Danger	H315, H318 P305+P351+P338

Hazard Statements

H315 Causes skin irritation
H318 Causes serious eye damage
H319 Causes serious eye irritation
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 May cause respiratory irritation

Precautionary Statements

P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P280	Wear protective gloves/protective clothing/eye protection/ face protection
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P305+P351+ P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P321	Specific treatment (see on this label)
P362	Take off contaminated clothing and wash before reuse
P332+P313	If skin irritation occurs: Get medical advice/attention
P337+P313	If eye irritation persists: Get medical advice/attention

When working with chemicals, always wear a suitable lab coat, disposable gloves and protective goggles. For more information, please contact us for the appropriate material safety data sheets (MSDS).

Before starting

Activation of 4ward-NA® puriSorb® in 4ward-NA® puriColumn

A1	Add 350 µl Activation Solution onto each 4ward-NA® puriColumn . Incubate for at least 5 min at room temperature. Centrifuge at max. 350 x g for 1 min remove excess Activation Solution. Discard the waste tube.
A2	The activated 4ward-NA® puriColumn in a DNA tube is ready for purification.

- Preheat an incubator/ thermomixer to **56 °C**

Protocol

Lysis of Bacteria for DNA purification

1. Transfer **0.5 ml of bacterial culture** (up to **1.5 OD600**) to a 1.5 ml reaction tube. Centrifuge (**6,000 x g, 1 min**), discard the supernatant.
2. Add **90 µl Buffer 4wC (B)**, **10 µl Lysozyme** and **20 µl RNase A** to the cell pellet. Resuspend cells and Incubate (**56 °C, 20 min**).
- 3.
4. Add **90 µl SDS-Solution**, **10 µl Proteinase K**, **2.5 µl DTT** and **2 µl EDTA**. Incubate (**56 °C, 60 min**).

Purification of DNA using 4ward-NA® puriSorb® (ONE-STEP)

P1	Transfer between 60 µl and 120 µl of the lysate to each activated 4ward-NA® puriColumn well. Incubate for at least 3 min and centrifuge at <u>max.</u> 700 x g for 1 min .
	The eluate contains the ready to use purified DNA.

Troubleshooting, FAQ and Special Applications

Please contact us for further information about our innovative DNA Purification System using the 4ward- NA[®] puriSorb[®].

Contact Information

Web: www.biozym.com

Email: support@biozym.com

Tel: +49 5152 9020

Ordering Information and Prices

For ordering information and prices please contact: support@biozym.com

