

Item No: **N1101** **100 preps**
 N1102 **200 preps**

Eco-Friendly PCR and DNA Fragment Purification Kit

For research use only

Kit Content

Content	N1101	N1102
Solution F	60 ml	60 ml
Wash Buffer PE	15 ml x2	20 ml x3
Eluent Buffer	5 ml	10 ml
Spin column	100 each	200 each

Description

The Eco-Friendly PCR Purification Kit is designed for rapid and efficient purification of DNA from PCR and other enzymatic reaction mixtures. The kit utilizes a proprietary silica-based membrane technology in the form of a convenient spin column, eliminating the need for tedious resin manipulations or toxic phenol-chloroform extractions. The PCR Purification Kit effectively removes primers, dNTPs, unincorporated labeled nucleotides, enzymes and salts from PCR and other reaction mixtures. Each purification column has a total binding capacity of up to 30µg of DNA and the entire procedure takes just 15 min. The purified DNA can be used in common downstream applications such as sequencing, restriction digestion, labeling, ligation, cloning, in vitro transcription, blotting or in situ hybridization.

Principle

A reaction mixture containing DNA is combined with the binding buffer and added to a purification column. A chaotropic agent in the binding buffer denatures proteins and promotes DNA binding to the silica membrane in the column. The chaotropic agent of regular PCR purification method usually contains guanidine salt, a hazardous protein denaturant. The Eco-Friendly system is the only method available that does not utilize Guanidine Salt, in the silica based purification system, which will ensure the safety and health of scientists and the environment.

Features

Safety and environmental protection: No toxic chemicals in the solution, which is safer for people; No toxic chemicals in the waste, which is easy to dispose and good for environment.

High integrity: protect the terminal base pairs of the DNA fragment

Fast: procedure takes 15 minutes.

Highly efficient: 85-100% recoveries

Pure DNA: A260/A280= 1.7-1.9.

Storage And Stability

PCR Purification Kit can be stored for up to 2 years at room temperature (15-25°C) or at 4°C for storage periods longer than 12 months. Any precipitate in the buffers can be re-dissolved by incubating at 37°C before use.

Applications

Fast and efficient purification of DNA fragments ideal for use in all conventional molecular biology procedures including:

- conventional restriction digestion
- PCR
- in vitro* transcription

Quality Control

The kit is tested in the purification of 50 bp, 1 kb and 10 kb PCR products according to the protocol. The quality of the purified DNA is evaluated spectrophotometrically, by agarose gel electrophoresis, digestion with restriction enzymes and automated fluorescent sequencing.

Important Notes

- Prior to the initial use of the kit, dilute the Wash Buffer(PE) with ethanol (100%):

	N1101(100preps)	N1102(200preps)
Wash Buffer(PE)	15 ml ×2	20 ml ×2
Ethanol	60 ml ×2	80 ml ×2
Total Volume	75 ml ×2	100 ml ×2

After the ethanol has been added, mark the check box on the bottle to indicate the completed step.

- Freshly prepared electrophoresis buffers should be used both for gel preparation and for gel running.
- All purification steps should be carried out at room temperature.