RapidClean[™]

Fast, convenient, phenol-free purification of DNA and RNA samples

RapidClean™ is a novel affinity resin designed to remove all protein from aqueous solutions of single- or double- stranded nucleic acids, providing an alternative to hazardous and lengthy phenolchloroform procedures. The RapidClean resin binds and removes protein in a 5-minute protocol that combines convenience, speed, and nucleic acid recovery rates in excess of 95%.

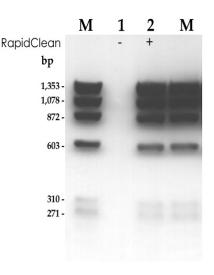


RapidCleanTM

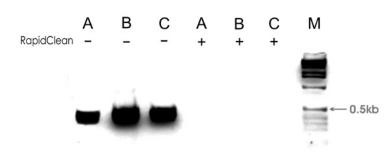
Fast, convenient, phenol-free purification of DNA and RNA samples

Remove Exonuclease

Extraction with RapidClean completely removes Exonuclease III. φ X174/ HaeIII DNA (lane M) is digested by a 40 min incubation at 37°C with 10 units of Exonuclease III (lane 1), but no digestion occurs when the incubation mix is extracted twice with RapidClean before addition of the φ X174/HaeIII DNA target (lane 2).



Remove DNA Polymerase

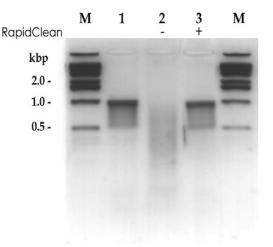


RapidClean completely removes DNA polymerase.

No Taq DNA Polymerase activity remains after extraction with RapidClean. PCR reactions using polymerase from three different vendors (A, B, C) were extracted (+) or not extracted (-) using RapidClean, and then subjected to 30 PCR cycles. No amplified product was detected in the samples extracted with RapidClean.

Remove DNA Glycosylase

RapidClean completely removes Uracil DNA glycosylase. After two extractions with RapidClean, no UDG activity is detected after a 7 minute incubation at 95°C. Lane M: 1kb DNA ladder. Lane 1: dU-DNA fragment incubated without UDG. Lane 2: dU-DNA fragment incubated with UDG reaction mix. Lane 3: Identical to Lane 2, but the UDG reaction mix was extracted with RapidClean prior to the addition of the dU-DNA fragment.





RapidCleanTM

Fast, convenient, phenol-free purification of DNA and RNA samples

Purification Equivalent to Phenol-Chloroform

RapidClean purifies plasmid DNA as efficiently as phenolcholorform extractions. Crude plasmid pellet containing pUC119 plasmid DNA was ethanol precipitated, suspended in TE buffer (lane 1), treated with RNase (lanes 2 and 5), and extracted with RapidClean once (lane 3) or twice (lane 4), or extracted with phenol-chloroform once (lane 6) or twice (lane 7).

1 2 3 4 M 5 6 7

Remove DNA Ligase



RapidClean completely removes T4 DNA ligase. No detectable ligase activity remains in a reaction mix after extraction with RapidClean (lane 2). EcoRI digested λ -DNA (lane C, Control) was incubated for 16 hours at room temperature with T4 DNA ligase (lane 1) or with the same mixture extracted with RapidClean (lane 2).





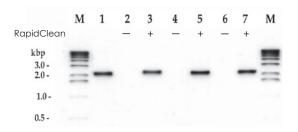
RapidClean Resin arrives as a ready-to-use 10x slurry; its blue color makes the protein pellet easy to see when pipetting. **RapidClean Kit** includes RapidClean Resin and spin filters to aid in resin removal.

Features

- Complete removal of proteins from aqueous solutions of nucleic acids
- Protocol less than 5 minutes, start to finish
- Non-toxic alternative to phenol-chloroform extraction
- Nucleic acid recovery rates >95%
- Recovery of nucleic acids from 5 nucleotides to greater than 40 kb
- Suitable for DNA, RNA, cDNA, microRNA, oligonucleotides

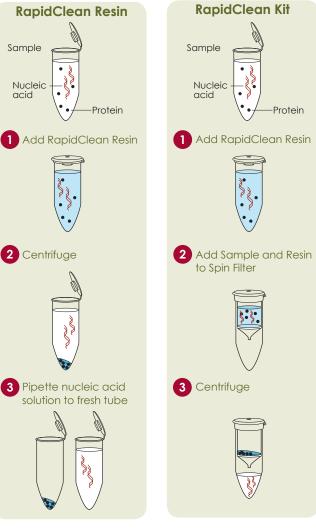
Extraction with RapidClean completely removes DNase I, Mung Bean Nuclease, and \$1 nuclease activity.

M12mp18 ssDNA (lane 1) is completely digested by 30 minute incubations at 37°C with DNase 1 (lane 2), Mung Bean Nuclease (lane 4) or S1 nuclease (lane 6), but no residual nicking activity is observed if the reactions are first extracted



twice with RapidClean (lanes 3, 5, and 7). Lane M: 1 kb DNA ladder.







Ordering Information

Catalog Number	Product	Size
K-01001-010	RapidClean™ Kit	10 RXNS
K-01001-025	RapidClean™ Kit	25 RXNS
R-14011-250	RapidClean™ Resin	250 µl
R-14011-B10	RapidClean™ Resin	1 ml

Advansta Corporation

2140 Bering Drive | San Jose, CA 95131 Tel: 650.325.1980 | Fax: 650.325.1904 | Email: sales@advansta.com Product information: www.advansta.com/RapidClean Copyright © 2010-2014 Advansta. All rights reserved. The Advansta logo is a registered trademarks of the Company. RapidClean™ is a trademark of the Company. All other trademarks, service marks and trademares appearing in this brochure are the property of their respective owners.

