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Certificate of Analysis

Product: GENECLEAN® II Kit
Catalog No.: 1001-400; 1001400
Lot No.: 83741

The GENECLEAN® II Kit is designed to optimally purify DNA from solutions, agarose gels, acrylamide gels and enzymes reactions. DNA purified with GENECLEAN is excellent for all uses, such as cloning, PCR, sequencing, or any other necessary reaction.

STORAGE CONDITIONS

All GENECLEAN® Kits are shipped at room temperature. All GENECLEAN® II reagents are stable at room temperature. NaI solution must be kept away from light and open air sources to prevent oxidation. NaI is packaged under nitrogen gas to further reduce chance of oxidation. Purging NaI's bottle with nitrogen gas is a preferred storage method after opening, especially for long-term storage. Ensure that the NaI cap is always very tight. Sealing the cap after opening and during long-term storage is also recommended. See the provided Kit Manual for further indications of NaI. Shelf life may be extended by storing at 4°C. Expiration date is April, 2017.

OPTIMAL REACTION PARAMETERS

Above 500 bp:
4.5 M NaI pH 7.0-7.4

Between 200-500 bp:
4.5 M NaI pH 6.0
New Wash/Ethanol Concentration must be ~ 50%

SPECIFICATIONS

Reagent: NaI pH Range: 7.0-7.4 6 M NaI NAI melted 0.1 g gel slice in 5 minutes at 55°C Less than 15% DNA 1 kb and above is left unbound in NaI.	NaI Cat #: 1001401 Lot #: 76565 **Passed**
Reagent: NEW WASH pH Range: 7.4-8.0 Removed salts from GLASSMILK pellet without eluting off DNA. Less than 1% DNA was lost from GLASSMILK during the NEW WASH step.	NEW WASH Cat #: 1001402 Lot #: 36100 **Passed**
Reagent: TBE Modifier pH Range: 5.8 +/- 0.2 TBE Modifier aids in melting TBE gel slices and reverses inhibitory effects of borate buffer. Less than 20% DNA was left unbound in the NaI/TBE Modifier solution.	TBE Modifier Cat #: 1001403 Lot #: 37437 **Passed**
Reagent: GLASSMILK Had binding capacity of 1 mg DNA/1 ml GLASSMILK. Greater than 85% of the DNA bound in 5 minutes at room temperature.	GLASSMILK Cat #: 1001404 Lot #: 52866 **Passed**

REAGENT PERFORMANCE

All reagents are stable at room temperature. Overexposure to oxygen or contaminants will cause oxidation and subsequently a rise in the pH of the NaI. Thus reducing the shelf life. Yellowing of NaI may be an indication of such oxidation.
One microliter of GLASSMILK will bind up to one microgram of DNA in 4.5 M NaI within 5 minutes at room temperature.

In order to pass quality control tests:
Less than 5% of DNA is lost during treatment with NEW WASH.
Enzymes, primers, and salts must be removed.
TBE yield must be 80% of the original material with 20% left in NaI/TBE Modifier.
No endonuclease contamination detected after incubation for 16 hours at 37° C.

Conclusions: This lot of Geneclean II is released for product sales.

03/16/2016 - John Huang, PhD
QBioGene/MP Biomedicals, LLC
Quality Control Manager

MSDS available online at www.mpbio.com