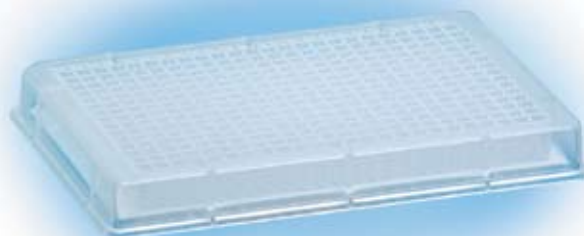


# PCR Cleanup with 384-Well DNA Binding Filter Plates



## High purity, high yield binding plate for automated PCR cleanup.

- **Easy to use protocol adaptable to most liquid handling instruments available online at [www.gelifesciences.com/whatman](http://www.gelifesciences.com/whatman)**
- **High efficiency bind-wash-elute processing with collection by filtration:** Simplifies automation with no cross contamination.
- **Highly reproducible results (< 10% CV):** Consistent processing with automated methods.
- **DNA yields up to 7 µg/well with OD260/280 > 1.8:** DNA purity sufficient for sensitive downstream applications.
- **DNA concentrations as high as 0.5 µg/µl:** Minimal liquid hang-up for reduced elution volume.
- **Purify DNA fragments from 100 bp - 10 kb:** > 85% recovery.

The Whatman™ protocol for PCR Cleanup in 384-well plates is a highly efficient method for purifying double-stranded DNA fragments. The choice of DNA binding buffer enhances the binding of DNA while eliminating excess PCR components.

Whatman manufactures a line of DNA Binding Plates engineered for automated applications. These high quality multiwell plates feature a novel filter media for the efficient binding of DNA with purification performed quickly and easily with common buffers.

## 384-Well DNA Binding Filter Plates

- **High DNA binding capacity**
- **No crosstalk between wells**
- **Consistent performance across the plate**

- **High DNA recovery**
- **Purified DNA can be used for DNA sequencing and microarray printing**
- **Purification unaffected by PCR additives**

### Technical specification

	384-well
<b>Well capacity:</b>	100 µl
<b>Working volume:</b>	90 µl
<b>Elution volume loss (centrifuge):</b>	< 2 µl
<b>Centrifugation stack height (max):</b>	5.85 cm
<b>Dimensions:</b>	
<b>Length (mm)</b>	127.89
<b>Width (mm)</b>	85.67
<b>Height (mm)</b>	14.86
<b>DNA binding capacity/well*:</b>	> 7µg

\*Binding in a buffer containing 20% 8 M GuHCl: 80% Ethanol (v/v)

### Ordering information

Catalog number	Description	Quantity/case
7700-2110	384-Well DNA Binding Plate	50
7701-5400	384-Well 400 µl Deep Well Plate	50
7701-1100	384-Well 100 µl DNA Collection Plate	50
7704-0001	Clear Polyester Plate Seals	100



# 384-Well PCR cleanup performance characteristics

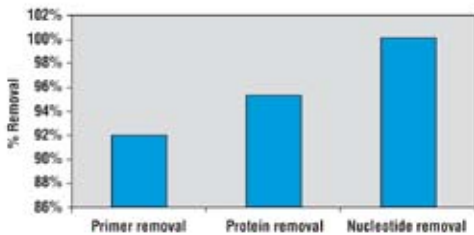


Fig 1. Removal of incorporated PCR components.

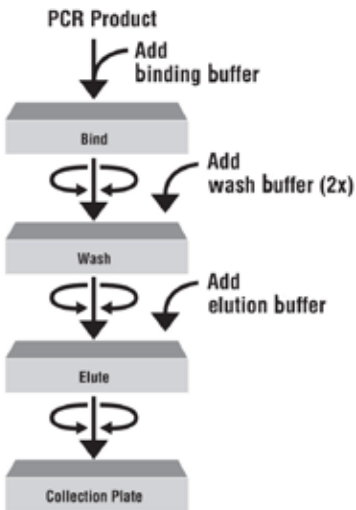


Fig 2. Procedure overview

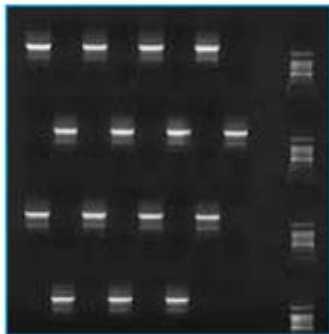


Fig 3. Well to well discrimination

Alternating positive and negative PCR purification (1.9kb pGEM insert PCR product). 1 µl of each eluate was re-amplified (25 µl PCR reaction with nested primers) to increase the sensitivity of crosstalk detection. The photo is a 1% agarose gel of reamplified material.

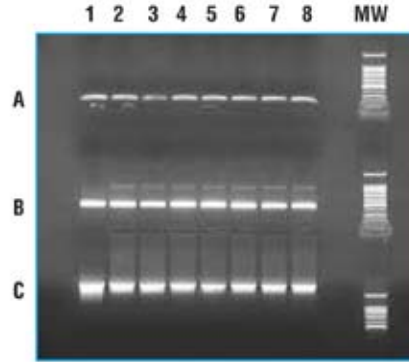


Fig 4. Consistent purification. PCR fragments before (Lane 1) and after (Lanes 2 - 8) cleanup. Row A is 213 bp amelogenin, Row B is 500 bp pGEM/luc and Row C is 1.9 kb pGEM/luc amplicons separated on a 1% agarose gel.

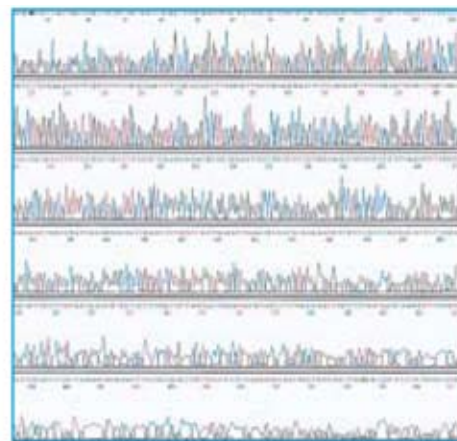


Fig 5. High purity product. Electropherogram of 1.8 kb PCR product.

[www.gelifesciences.com/whatman](http://www.gelifesciences.com/whatman)

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Previously published January 2003.

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