

## ProPrep™ Genomic Blood Card 96

96 Filter Well Blood Card DNA Purification System with ProCipitate™

**From 7 mm punch of dried whole blood**  
**No special card sources, can work with cloth or paper cards**

Product	Size	Item No.
ProPrep™ Genomic Blood Card 96	96 Blood Spot Samples	PBC-96
ProPrep™ Genomic Blood Card 960	960 Blood Spot Samples	PBC-960

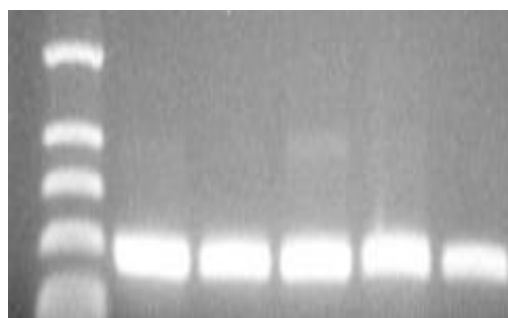
ProPrep™ Blood Card 96 is a complete nucleic acid purification system based upon the unique protein extraction reagent, ProCipitate™. The basic protocol includes an initial dissociation of DNA from the card (65°C), followed by removal of contaminating proteins and heme with ProCipitate™, and finally the concentration of DNA with alcohol precipitation.

The system is designed for 96 well isolation of genomic DNA from one 7 mm punch of dried whole blood per well (equivalent to approximately 15 µl of whole blood). As it is designed specifically for high throughput and automation, the card is not carried forward through the process after the initial DNA desorption.

The ProPrep™ Blood Card 96 is compatible with industry standard papers. The vacuum filter format requires no specialized centrifuges and is amenable to robotic automation. The resulting purified DNA compares favorably in PCR reactions to traditional methods used for whole blood.

### BENEFITS

- No near boiling elutions
- Card not carried through
- Large punch, 7mm
- High yield and purity
- Automation compatible



M ← 280 bp amplicons →

PCR amplified human genomic DNA purified using  
**ProPrep™ Blood Card 96.**  
PCR is owned by Hoffmann LaRoche.

### MATERIALS AND SCOPE OF SUPPLY

Items Required	Quantity	ProPrep™ Genomic Blood Card 96
20 mm NaOH (freshly prepared)	-	Not Supplied
Initial Dissociation Buffer GLB1	10 ml	Supplied
Resuspension Buffer TR3	5 ml	Supplied
ProCipitate™	25 ml	Supplied (Store at 4°C)
96 well Filter Plates		Supplied
96 well Deep Well Plates		Supplied
Wide Bore Pipette Tips	-	Not Supplied
Vacuum Manifold (Cat # VM-111)		Supplied as Accessory (please inquire)

## PROTOCOL

- 1) Cut one 7 mm punch from the card.
- 2) Add 100  $\mu$ l of 20mM NaOH (freshly prepared) and heat for 30 minutes at 65°C.
- 3) Add 100  $\mu$ l of GLB1 buffer to the samples and incubate for 30 minutes at 65°C.
- 4) Transfer the supernatant to another receiver plate and add 250  $\mu$ l of ProCipitate™ (well shaken) using wide bore pipette tips, shake and let sit for 5 minutes at room temperature.
- 5) Transfer the samples to the Unifilter™ filter plate and vacuum filter.
- 6) To the filtrate, add 250  $\mu$ l of isopropanol (room temperature) to each well of collected supernatant. (Alternately, protocols that eliminate centrifugation in steps 6-8 are available, please inquire.)
- 7) Mix on a shaker for 30 minutes at 100 rpm (room temperature).
- 8) Centrifuge at 2,000 x g for 10 minutes.
- 9) Carefully decant supernatant and air dry the pellet at room temperature ( $\approx$  15 min).
- 10) Resuspend the DNA in 20 - 50  $\mu$ l of TR3 or other suitable buffer. Incubate at 55°C while shaking at 200 rpm for 30 minutes.

### System Layout

The 96 well Filter Plate System eliminates centrifugation for the removal of all suspended solids, quickly and in one step. Filtrate is subsequently ready for alcohol precipitation.

