

TECHNICAL BULLETIN

Vac-Man® Laboratory Vacuum Manifold

Instructions for Use of Product
A7231



Vac-Man[®] Laboratory Vacuum Manifold

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 Visit the web site to verify that you are using the most current version of this Technical Bulletin
 E-mail Promega Technical Services if you have questions on use of this system: techserv@promega.com

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1. Description

The Vac-Man[®] Laboratory Vacuum Manifold, when used in conjunction with the PureYield[™] Plasmid Midiprep or PureYield[™] Plasmid Maxiprep Systems, the Wizard[®] DNA Purification Systems and SV Total RNA Isolation Systems, is the ideal system for rapid, effective nucleic acid purification. Reliable, sturdy and easy to use, the Vac-Man[®] Laboratory Vacuum Manifold will process from 1 to 20 samples simultaneously. Because each manifold comes complete with a set of 20 individually controlled One-Way Luer-Lok[®] Stopcocks, as many or as few samples as desired can be processed at one time. The One-Way Luer-Lok[®] Stopcocks are designed to accommodate our PureYield[™] Binding Columns and Wizard[®] Minicolumns and Maxi/Megacolumns.



Laboratory vacuum use can present a safety hazard. Please read and carefully follow the operating instructions and cautionary notes in this Technical Bulletin before using the Vac-Man[®] Laboratory Vacuum Manifold.

2. Product Components

PRODUCT	SIZE	CAT.#
Vac-Man® Laboratory Vacuum Manifold, 20-sample capacity	1 each	A7231

Each system includes:

- 1 Vac-Man® Laboratory Vacuum Manifold, 20-sample capacity
- 20 One-Way Luer-Lok® Stopcocks
- 1 Neoprene Stopper
- 6 Spinlock II Adapters

PRODUCT	SIZE	CAT.#
One-Way Luer-Lok® Stopcocks	10 each	A7261



Figure 1. Vac-Man® Laboratory Vacuum Manifold.

3. Composition of the Vac-Man® Laboratory Vacuum Manifold

The Vac-Man® Laboratory Vacuum Manifold is manufactured from linear, low-density polyethylene (LLDPE). The One-Way Luer-Lok® Stopcocks are made from polycarbonate (body), polyethylene (handle) and polypropylene (cap). The vacuum hose connector is made from polypropylene. The stopper is a standard laboratory neoprene stopper.

LLDPE demonstrates good to excellent resistance to alcohols and to acidic and alkaline conditions. Polypropylene demonstrates good to excellent resistance to alcohols and to acidic and alkaline conditions below 80°C.

4. Setup and Operation of the Vac-Man® Laboratory Vacuum Manifold

The Vac-Man® Laboratory Vacuum Manifold is designed for use with nucleic acid purification systems from Promega. Please see the purification system technical manuals for advice on appropriate vacuum pressures or sources for nucleic acid purification.

If you have any questions about the suitability of your vacuum source, please contact your local Promega branch office or distributor. Contact information available at: www.promega.com

E-mail: techserv@promega.com



Do not substitute chemicals. Always follow safe laboratory practices, including the use of safety glasses and a laboratory coat.

Comparison of Inches of Hg to Other Pressure Measurements	
1 Inch Hg	15 Inches Hg
3.368kPa	50.8kPa
25.4Torr	381Torr
0.0334atm	0.501atm
0.491psi	7.37psi
2.54cm Hg	38.1cm Hg
33.86mbar	508mbar

4.A. Initial Setup

1. Inspect the manifold connectors, One-Way Luer-Lok® Stopcocks and Spinlock II Adapters for any evidence of wear or mishandling. Do not use the manifold if significant damage, such as a crack or an abrasion, is apparent.
2. Insert the Neoprene Stopper into the hole located at one end of the manifold. The stopper should fit snugly. The Neoprene Stopper functions as a safety valve in the event of excessive pressure buildup. Do not restrict the removal of the Neoprene Stopper in any way (e.g., tape, wire, etc.).
3. Attach a One-Way Luer-Lok® Stopcock to each of the 20 connectors located on the top of the manifold. Secure each stopcock by turning the stopcock collar about ¼ turn clockwise. Do not force the collar; this may strip the Luer-Lok® connector threads on the manifold. Close all the stopcocks by turning each stopcock handle to a horizontal position.
4. **Optional:** The Spinlock II Adapters act as an extension of the Luer-Lok® Stopcocks. These Adapters may be used to make the manipulation of the stopcock valves easier. Insert a Spinlock II Adapter into a One-Way Luer-Lok® Stopcock. Secure by turning about ¼ turn clockwise. Do not force, as this may strip the connector threads.
5. Attach a vacuum hose to the hose connector located at the end of the manifold opposite the rubber stopper hole. Like the stopper, the hose connection can function as a safety valve in the event of inadvertent excessive pressure buildup.

Do not fix the vacuum hose to the manifold with a hose clamp.
6. Connect the vacuum hose to your vacuum source. The Vac-Man® Laboratory Vacuum Manifold is ready for use.

4.B. Use with Promega's Nucleic Acid Purification Products

Before each use, drain the manifold thoroughly (see Section 4.C). Detailed instructions for use of the Vac-Man[®] Manifold with PureYield[™] and Wizard[®] products are supplied with the individual systems. Do not use other chemicals or purification systems with the manifold. Use of other chemicals may create a safety hazard. The Vac-Man[®] Laboratory Vacuum Manifold was designed for use with the PureYield[™] and Wizard[®] purification products only. If chemicals other than those supplied or recommended for use with the PureYield[™] or Wizard[®] purification systems have been accidentally used with the Vac-Man[®] Vacuum Manifold, make sure that the chemicals are disposed of according to proper procedures.

4.C. Vac-Man[®] Laboratory Vacuum Manifold Cleanup

Inspect for any cracks or significant abrasions. If there is any sign of damage, do not use.

1. With the vacuum off, disconnect the vacuum hose from the manifold. Take the manifold to a lab sink or other appropriate liquid disposal area.
2. Remove the Neoprene Stopper and let the contents of the manifold drain into the sink.
3. Replace the Neoprene Stopper and reconnect the manifold to the vacuum hose.

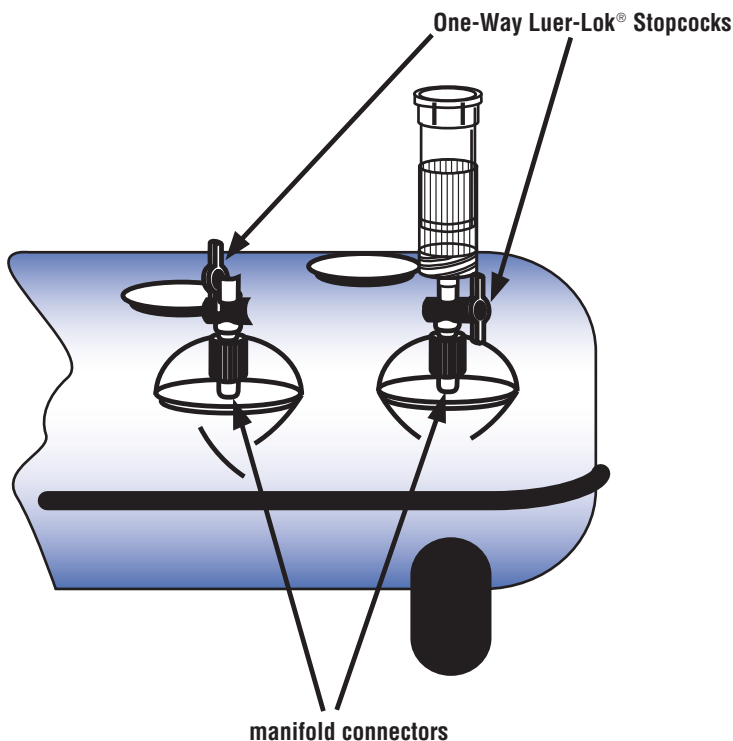


Figure 2. Detail of the Vac-Man[®] Laboratory Vacuum Manifold showing the One-Way Luer-Lok[®] Stopcocks and manifold connectors.

5. Related Products

Product	Size	Cat.#
Vac-Man® Jr. Laboratory Vacuum Manifold, 2-sample capacity	1 each	A7660
Vacuum Adapters	20 each	A1331
PureYield™ Plasmid Miniprep System	100 preps	A1223
	250 preps	A1222
PureYield™ Plasmid Midiprep System	25 preps	A2492
	100 preps	A2495
PureYield™ Plasmid Maxiprep System	10 preps	A2392
	25 preps	A2393
PureYield™ RNA Midiprep System	10 preps	Z3740
	50 preps	Z3741
Wizard® SV Gel and PCR Clean-Up System	50 preps	A9281
	250 preps	A9282
Wizard® SV Genomic DNA Purification System	50 preps	A2360
	250 preps	A2361
SV Total RNA Isolation System	50 preps	Z3100
	250 preps	Z3105
Wizard® <i>Plus</i> SV Minipreps DNA Purification System	50 preps	A1330
	250 preps	A1460
	1,000 preps	A1465
Wizard® <i>Plus</i> SV Minipreps DNA Purification System + Vacuum Adapters	50 preps	A1340
	250 preps	A1470

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Product claims are subject to change. Please contact Promega Technical Services or access the Promega online catalog for the most up-to-date information on Promega products.