

Vacuum Regulator Instructions

Introduction

The vacuum regulator is designed to be used with the Model 785 Vacuum Blotter. A low vacuum source (5 inches of Hg) is required for a successful vacuum transfer of nucleic acids. The role of the vacuum regulator is to accurately reduce and control the vacuum pressure.

Note: Use vacuum tubing 1/2 inch OD x 1/4 inch ID.

Caution: 1. Do **NOT** use ³ 25 inches of Hg in the vacuum regulator.
2. The vacuum regulator is not designed to handle vapors or liquids.

Set-Up

1. Make a liquid trap from a side-arm flask (1,500-2,000 ml). Attach a 5 ml pipet to a one-hole stopper by pushing half of the pipet through the stopper. Plug this stopper into the side-arm flask. Connect vacuum tubing from the base unit of the Model 785 Vacuum Blotter to the side-arm flask.
2. Connect vacuum tubing from the pipet to one of the vacuum regulator ports.
3. Connect the vacuum source to the remaining vacuum regulator port.
4. Check all vacuum line connections for an air-tight seal.

Operating Procedure

1. Set up the gel and the Model 785 Vacuum Blotter for transfer. Refer to Section 3 of the Model 785 Vacuum Blotter Instruction Manual for specific instructions.
2. Before applying vacuum for transfer, turn the bleed valve knob counterclockwise several times to prevent high initial vacuum.
3. Start the vacuum source and slowly turn the bleed valve clockwise to the recommended pressure. Prewarm Bio-Rad's pump for 10-15 minutes before blotting.
4. With a finger, apply gentle pressure on top of the gel along the gasket window border. The vacuum pressure helps to form a tight seal between the gel and the window gasket of the Model 785 Vacuum Blotter.
5. Adjust the bleed valve as necessary to attain desired pressure.