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12/9/cl 12/8/18 JH

GenePath Program Upgrade Kit

Instruction Manual

Catalog Number

310-0075



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Caution: Please read thoroughly and familiarize yourself with the entire contents of this instruction manual before using the product for the first time.

Section 1 Introduction

The GenePath instrument is based on the pulsed field method of CHEF (Contoured Clamped Homogeneous Electric Field). The system has been preprogrammed to analyze a variety of organisms (*E. coli*, *Pseudomonas*, *Enterobacter*, *Enterococcus*, *Staphylococcus*, and *Candida*). The system was also designed to easily accept new programs. The GenePath Program Upgrade Kit contains 15 new programs that are based on the separation of a particular size range.

1.1 Components

Item	Quantity
GenePath Program Upgrade disk	1
RS-232 Cable	1
Manual	1

1.2 Required Items

Item

PC Computer with the following minimum requirements:

486 co-processor

DOS 6.x Operating System

8 Mb of RAM memory

3.25 inch disk drive

9-pin serial or COM port

1.3 Precautions

The program is to be used only with the GenePath System.

Section 2 Instructions

2.1 Installing the RS-232 Cable

1. Connect the female end of the 9-pin RS-232 cable to either the COM1 or COM2 port (serial port) on the PC computer. For most PC's this port is located on the back panel.
2. Connect the male end of the 9-pin RS-232 cable to the port on the back of the GenePath.

2.2 Downloading the GenePath Programs

1. Turn on the PC computer. Turn on the GenePath and use the INCREASE or DECREASE keys on the front panel to select the data load mode (display shows dLd).
2. Insert the GenePath Upgrade Program disk into drive A on the computer.
3. In DOS, select the A drive by typing in **A:**. Type in **gpsend** to start the GenePath program.

4. The main menu of the GenePath Download Program will be displayed. To view an explanation of a menu item, use the Up and Down keys to highlight the desired menu item and press the ENTER key. When you are finished reading the explanation, press ENTER to return to the main menu.
5. Select **Setup the RS-232 parameters** and press ENTER. Enter the number of the COM port (1 or 2) to which the RS-232 cable was connected as directed in Section 2.1. Press ENTER to return to the main menu.
6. Select **Check GenePath Status** and press ENTER. The message "The GenePath is Ready" should be displayed. Press ENTER to return to the main menu. If the message "The GenePath is not ready" is displayed, check that the GenePath is in the "dLd" program, that the RS-232 cable is firmly connected, and that the correct COM port was selected.
7. Select **Downland to GenePath** and press ENTER. The program will download to the GenePath. During this process the bytes sent and percent completion are displayed. An irregular clicking sound will be made by the GenePath, indicating the download is in progress. After about 35 seconds, the clicking will stop and a message will be displayed indicating the download is complete. Press ENTER to return to the main screen.
Note: If the program needs to be stopped during the download process, press the escape key (ESC). Press ENTER to return to the main screen. To re-install the new programs, turn the GenePath system off and then back on. Repeat the downloading process from step 2.2.6.
8. To leave the GenePath Upgrade Program, select **Exit to DOS** and press ENTER.
9. Check that the new programs have been downloaded to the GenePath. All of the programs listed in Section 3 should be accessible.

Section 3 Programs

3.1 Program Parameters

Program 1: PSU

This program is to separate *Pseudomonas*.

Run time: 19.5 hours

Program 2: Eco

This program is to separate *E.coli*.

Run time: 20.0 hours

Program 3: Enb

This program is to separate *Enterobacter*.

Run time: 17.0 hours

Program 4: CAn

This program is to separate *Candida*.

Run time: 48.0 hours

Program 5: StA

This program is to separate *Staphylococcus*.

Run time: 20.0 hours

Program 6: Enc

This program is to separate *Enterococcus*.

Run time: 20.0 hours

Program 7: SCREEN

This program is to quickly check your sample plugs for preliminary analysis.

Run time: 4.0 hours

Program 8: 1-50

This program is to separate DNA in the size range of 1-50 Kb.

Run time: 7.0 hours

Program 9: 1-100

This program is to separate DNA in the size range of 1-100 Kb.

Run time: 12.0 hours

Program 10: 1-200

This program is to separate DNA in the size range of 1-200 Kb.

Run time: 12.7 hours

Program 11: 25-250

This program is to separate DNA in the size range of 25-250 Kb.

Run time: 18.5 hours



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