Biospecific Interaction Analysis System

BLAcore, an automated system for biospecific interaction analysis, is designed to decrease the time and cost of protein engineering and assay development. The biosensor-based device is particularly useful for characterizing monoclonal antibodies and other biologically active molecules. The system eliminates the need to purify and label interacting biomolecules and provides diverse information otherwise obtainable only by a series of time-consuming and expensive assay procedures. BLAcore can provide direct assessment of kinetic rate constants, specificity determination, and binding site mapping. BLAcore measures the specific interaction between immobilized molecules and their functional counterparts as they pass through a flow cell. The interaction can be viewed in real time on the computer screen.

DNA Cleavage and Deprotection System

The DNA MATE Cleavage and Deprotection System automatically removes DNA from four DNA synthesis columns at once. The system consists of a timer and motor mounted on a stand with a syringe-column-syringe assembly for the removal, recovery, and deprotection of the DNA. One syringe delivers ammonia through the column and another collects the DNA from the other end of the column. The flow rate of the ammonia can be varied, but typically 1.5 ml/hour is continuously fed through the column. The continuous delivery results in faster cleavage of the DNA.

Hybridization Oven

The Turbo-Speed Hybridization Oven circulates air throughout the chamber at high speed to provide rapid heating and cooling. The oven can go from ambient temperature to 65°C and equilibrate in 5 min. It can cool from 65° to 45°C in 5 min without the need to open the door. Other features include a variable speed rotator (to optimize the speed of rotation for a particular probe), a large window, and a wide selection of hybridization bottles and other accessories.

Protective Filter

Vacu-Guard is a protective filter device to enable laboratories to comply with new Occupational Safety and Health Administration regulations for eliminating or minimizing exposure to blood-borne pathogens from any vacuum, suction, and aspiration equipment used in handling contaminated body fluids. The new regulations require the use of engineering controls as the primary means of preventing contamination of such systems by hepatitis B virus, human immunodeficiency virus, and other blood-borne pathogens. The Vacu-Guard’s retention efficiency is rated at 99.99% for 0.1-mm particles or aqueous fluids up to 14 psi (0.9 bar), which is sufficient to prevent aerosols and fluids containing these agents from contaminating equipment and being exhausted into the room.

Desktop Slide Maker

The ColorFast is a compact digital color film recorder for making high-resolution 35-mm slides directly from both Macintosh and IBM-compatible computers. The ColorFast produces slides, instant prints, color overhead transparencies, and color transparencies for scientific, research, and business presentations. It can be used for presenting lab results, scanned images, graphics, educational materials, and lectures.

Isolation of DNA Binding Proteins

DynaBeads M-280 Streptavidin allows for the purification of low-abundance, unstable, sequence-specific DNA binding proteins in less than 30 min by eliminating multiple adsorption steps and time-consuming column chromatography. Highly purified proteins are obtained in one adsorption step. A biotinylated DNA fragment specific for the protein of interest is immobilized onto the DynaBeads. The resulting magnetic DNA affinity beads bind the target protein, in the presence of competitor DNA, with kinetics similar to that of DNA in free solution. Magnetic separation and elution of sequence-specific DNA binding proteins can then be completed in minutes.

Literature

es’c Scientific Software Catalog 1992 offers a selection of more than 200 specialized software packages for IBM-compatible and Macintosh computers. Programs cover molecular biology, scientific word processing, drawing tools for chemists, presentation graphics, molecular modeling, mathematical modeling, statistics and data analysis, graphing and plotting, bibliography management, and translation.


PL Caliber Powerful and Easy to Use Chromatography Workstations gives details of this system’s innovative software modules, which include a comprehensive range of calibration methods, sample integration and analysis, user-designed report facilities, overlay comparison, export of data to word processor and spreadsheet packages, multi-tasking, and more. Polymer Laboratories. Circle 99.