

Informatics tools. The KnowItAll ADME/Tox Edition is an integrated system for ADME/Tox evaluation developed as the result of a collaboration between Bio-Rad, ComGenex, and CompuDrug International. The system reduces the time spent in drug discovery and development and helps drug developers avoid unnecessary R&D costs by enabling them to predict, evaluate, and eliminate unsuitable drug candidates early in the drug discovery process, before they are even synthesized. Tools include applications to identify compounds with potentially poor absorption profiles, predict a compound's metabolic fate, and assess its potential toxicity.

Bio-Rad

www.bio-rad.com



Cartridges. These units replace flash columns in purification systems with luer lock end fittings without additional hardware or changing method protocols. They are compatible with Analogix and ISCO Redisep flash purification systems and are available in five bed masses: 4, 12, 40, 120, and 330 g. The RS series allow purifications from 3 mg to 15 g, and custom, normal, and reverse-phase sorbent packing is available. The cartridges are disposable and prepacked with flash silica for normal phase separations and purification.

Analogix

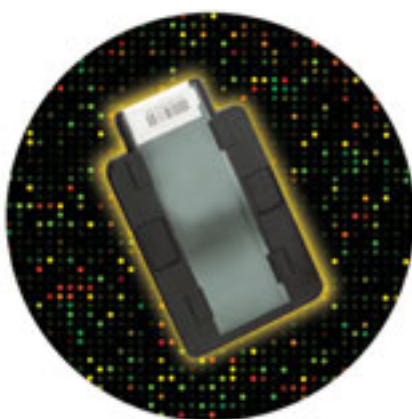
www.ana-logix.com

Software. The ProteinLynx Global SERVER 2.0 suite is available on the IBM eServer pSeries 630. It is equipped with IBM POWER4 microprocessors, a server-on-a-chip that contains two 1-GHz processors, and self-healing technologies to guard against, and recover from, system failure.

The software is designed to run Linux and AIX operating systems, and it increases the range of manageable and scalable platforms.

Waters

www.waters.com



Microarray kit. These 60-mer catalog oligo kits can be used by researchers in disease and drug discovery because they show improvements in sensitivity over the 25-mer probe length format. Based on 1 × 3 in. glass slide formats, the kits are easily integrated into established microarray laboratories. They show high sensitivity and can detect one transcript per cell, per million cells. Kits also provide high reproducibility, quality data, access to sequence information, comprehensive content, and customization.

Agilent Technologies

www.agilent.com

Cloning kits. CopyControl PCR incorporates CopyControl cloning technology, which enables users to grow PCR clones at single copy to ensure insert stability and cloning of encoded expressed toxic proteins; and then, whenever users desire, they can induce the clones to make up to 200 copies per cell for high yields of DNA for all applications. PCR and cDNAs up to 15 kb are efficiently cloned.

Epicentre

www.epicentre.com

Rehydration solution. DeStreak prevents horizontal streaking in the first dimension of 2-D gel electrophoresis. By minimizing streaking, it improves the clarity and reproducibility of 2-D gel electrophoresis. The same mechanism by which

DeStreak eliminates streaking in the pH region 7–9 also prevents the nonspecific oxidation of proteins that would otherwise generate extra protein spots and irreproducible 2-D patterns. It also minimizes gel distortion caused by streaking in any run length or pH range and is effective when used with high sample loads.

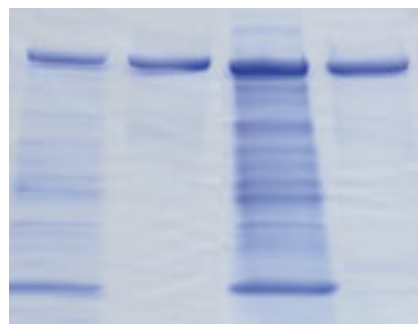
Amersham Biosciences

www.amershambiosciences.com

Analyzer. The Mercur provides an automated atomic fluorescence spectrometer based on the cold-vapor technique for mercury analysis, from the sub-parts-per-trillion to the mid-parts-per-billion level on a single system. The fully integrated computer with a high-performance touch screen ensures maximum operating comfort. As a stand-alone system, it has extensive features without the need for an additional computer. Features include low detection limits, a wide dynamic range of up to six decades, a maximum degree of automation and high sample throughput, a continuous flow mode with and without autosampler, and integration of an intelligent dilution routine with AS 52s autosampler.

Analytik Jena AG

www.analytik-jena.de



Buffer. Talon xTractor is for immobilized metal affinity chromatography. The buffer gently disrupts bacterial cells for protein purification, and it is optimized for extraction of polyhistidine-tagged proteins, so it is compatible with all BD Talon resin applications. The xTractor method does not denature or shear the proteins, improving the odds of preserving valuable biological activity.

BD Biosciences

www.bdbiosciences.com



Safety cabinet. The SterilchemGARD III Advance is an ergonomically enhanced biological safety unit designed for class II, Type B2 installations where total exhaust is required. The cabinet avoids air recirculation and generates 100% exhaust to protect personnel from particulates, gases, and vapors. It is useful in toxicology, microbiology, and pharmacology applications in which clean air is essential and small amounts of gases, vapors, or chemical effluents are generated. The cabinet is available in 4- and 6-ft models.

Baker Company www.bakerco.com

Reaction station. The Carousel 6 allows chemists to increase the productivity of their chemistry for larger-scale synthesis, including process development and the synthesis of intermediates and building blocks. This synthesizer combines the technology of the 12-place Carousel with familiar 250-mL flasks and formats. It provides six heated and stirred positions on a standard hot-plate stirrer and boils water in under 25 min.

Genevac www.genevac.com



Camera. The integrated systems available include the three-chip cameras—the

SyncroCOOL 435 and JVC KY-F75. In addition, single-chip cameras, such as the JVC KY-1030, Nikon DXM1200, and Sony DFW-X700 and SX900 models, are fully integrated. They also have high-speed refresh rates.

Syncroscopy www.syncroscopy.com

Assay and plates. The MultiScreen PAMPA (parallel artificial membrane permeability assay) and permeability filter plates are for 96-well predictive, non-cell-based assays. The plates support artificial membrane strategies for passive transport assays and act as predictive models for oral absorption. Predictive outcomes such as these are an effective and reliable way to increase screening throughput and eliminate the costly testing of unsuitable transcellular compounds before Caco-2 tests. High-throughput MultiScreen plates increase library screening over IAM columns. The plates are automation-compatible.

Millipore www.millipore.com



Scanner. The GeneChip Scanner 3000 is a microarray scanner about the size of a personal computer. It gives researchers peak scanning performance for applications that include RNA expression and DNA analysis. Data from the scanner are compatible with data from previous experiments using GeneChip arrays, as well as with other Affymetrix instruments and software.

Affymetrix www.affymetrix.com

Cabinets. The class II Heraeus HERAsafe KS safety cabinets provide product and personnel protection through their



ergonomic design. They feature a slanted front window, rear cabinet wall, digital eye-level display, and remote control. The information displayed includes downflow rate, total operating hours, time of day, and optional UV-C irradiators' operating time. The display also has a stopwatch function. The work aperture has a height of 10 in.

Kendro www.kendro.com

Genotyping. This product allows researchers to conduct ultrahigh-throughput genotyping using the 3730xl and 3730 DNA analyzers. It can help production-scale laboratories analyze more than 1 million genotypes per instrument per day. The system uses multiplexing to rapidly identify large numbers of target genetic sequences in a single biological sample.

Applied Biosystems www.appliedbiosystems.com

Catalog. This directory contains a wide range of products for liquid handling, including more than 800 different glass and plastic sample vials, from 0.1 to 500 mL in volume, with selected caps and seals to meet modern requirements. The catalog also lists automatic synthesizers for peptide, organic, and catalytic synthesis. For tissue culture work, roller apparatus, culture flasks, and a variety of homogenizers are supplied, as well as special consumables such as media bottles, tubes, and sample vials.

Zinsser Analytic www.zinsser-analytic.com

Platform. The IQ Kinase assay platform provides high-throughput analysis of protein kinases. They are homogeneous and universal, so no antibody is required. The IQ can be performed in 96-, 384-, or 1536-well formats.

Pierce www.piercenet.com



Capsule. The Minimate Tangential Flow Filtration Capsule is a disposable filtration device for research and entry-level production of new drugs. The filtration capsule enables rapid prototyping to accelerate and simplify scale-up for many bioprocessing applications. It is designed for single use, eliminating the need for cleaning and cleaning validation. The capsule's design retrofits to existing devices and prevents flexing when subjected to intense pressure drops. With a range of 10 mL to 2 L, it can be used in all areas of bioprocessing, including biotechnology, molecular biology, protein chemistry, biochemistry, microbiology, and immunology.

Pall Corporation www.pall.com



Workstations. The 4000 MPH series of instruments and the Microlab Star can perform sample normalization with Vector control software. Vector software accepts data from various plate reader manufacturers, calculates volumes, and creates appropriate pipetting sequences during run time. One method can be used for repeated normalization procedures with variable sample numbers, final volumes, and concentrations without reprogramming.

Hamilton www.hamiltoncompany.com

Pipet tips. BioRobotix are liquid-sensing 96-well tips for use in workstations with a Span-8 pod. They are available in sterile, nonsterile, and filtered versions and are quality-control-tested on the actual workstation for which they were created. The 15

quality-control tests include parameters such as total indicator runout and percentage coefficient of variance.

Molecular Bioproducts www.mbpinc.com

Enzymes. Three protein kinases added to this panel include a receptor tyrosine kinase, FGFR4, and two soluble tyrosine kinases, c-KIT and Yes. These active and pure kinases are available in microgram or milligram quantities.

PanVera LLC www.panvera.com



Syringe filter. The Millex 33-mm syringe filter with Durapore PVDF Membrane is used for the sterile filtration of antibiotics, media preservatives, and protein-containing solutions. It offers nearly 20% more surface area than traditional 25-mm syringe filters, increasing flow rate and throughput and accelerating filtration. The filter has a maximum housing pressure of 150 psig (10 bar) and is available in 50 and 250 packs with pore sizes of 0.1, 0.22, and 0.45 μm .

Millipore www.millipore.com



DNA gel extraction. This kit recovers fully functional DNA from agarose gel slices in a single 10-min spin. DNA fragments that are 100–10,000 bp in size are efficiently recovered. The purified DNA is ready for sequencing, cloning, or labeling with no additional purification. The kit is available as a 50-pack containing 50 Montage DNA Gel Extraction units, centrifugal devices, and a 500-mL bottle of 50 \times modified TAE buffer for gel casting and running. Each centrifugal device is

ready to use and consists of three pre-assembled components: a gel nebulizer, a sample filter cup, and a collection micro-centrifuge tube. The modified, specially formulated TAE buffer contains one-tenth the standard EDTA concentration to minimize interference with downstream applications.

Millipore www.millipore.com

Software. BioPick is an automated solution for laboratories needing to build or manage bacterial libraries. It allows users to select subcloning, dual inoculation, or phage picking. The software allows users to set several critical parameters, such as dwell time and inoculation depth, and can operate unattended with complete plate-filling and lid-handling on board. It can pick from high-density source plates using a vision system that discriminates between blue/white, red/white, and clear plaques.

Apogent Discoveries www.apogentdiscoveries.com



pH meter. This instrument has a large LCD display and step-by-step procedure icons. The measuring ranges are -0.00 to 14.0 pH, -2000 to 2000 mV, and -170.0 to 199.90 °C. Temperature, drift, and direction are visible during measurement, and up to nine pairs of pH or mV-temperature values can be stored on demand, at selected time intervals, or when the reading is stable.

Brinkmann www.brinkmann.com

Benchtop synthesizer. The 2050 is a compact unit that enables process chemists to perform quick, exploratory, parallel reaction experiments at different temperatures. The 2050 offers independent temperature control over five reaction vessels, the option of using fewer than all of the vessels, and a cold reflux head to recycle volatile reagents back to the reaction mixture. It also

provides independent high-temperature reaction cutoffs for each vessel and a sealed reaction environment for inert-gas experiments, prevention of external condensation, and safety.

Argonaut Technologies www.argotech.com



Website/literature. This website and the 12-page booklet display more than 100 sterile, leak-proof, biologically tested packaging products, including PETG/PET media bottles, B3 media bags, HDPE narrow-mouth bottles, PETG serum vials, Biotainer bottles and carboys, and Micro Packaging Vials. Designed and manufactured in an ISO 9001-certified environment, the sterile-packaging product line is for pharmaceutical, biotechnology, cell culture, and diagnostic reagent packaging applications. Free samples can be ordered online.

Nalgene www.nalgene-packaging.com

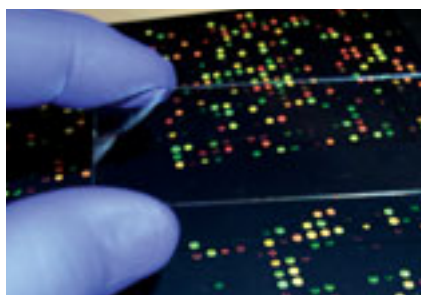


DNA screening. This tool for DNA sequencing is accurate and efficient, and it offers resolution directly comparable to that of conventional electrophoresis. It has low running costs and provides high-throughput automated analysis and high-quality data. Labeling or tagging by fluorescence is unnecessary, making the whole process economical. Each automated sample analysis takes only 15 min, and components can be accurately identified with precise temperature control and accurate solvent delivery.

Shimadzu www.shimadzu-biotech.net

Human genome database. This manually annotated database contains comprehensive automatic annotation and the results of extensive and consistent manual annotation. It can be used alone or as a content source for other applications. The database starts with publicly available sequence data. Genes are identified with the FGENESH++ gene modeling software. Automatic annotation is then performed using Analysis Suite software. Finally, each gene is verified using a systematic process of manual annotation.

Biomax www.biomax.com



Slides and reagents. OmniGrid units are equipped for optimized microarray experimentation to meet the increasingly stringent needs of researchers. Building on the existing line of OmniGrid microarrays, this product offers three substrate types (aldehyde, epoxy, and amine slides) and a full line of supporting reagents.

GeneMachines www.genemachines.com

MAPK detection. Fast Activated Cell-Based ELISA (FACE) Kits provide a simple, efficient method for monitoring protein phosphorylation. They enable modification-specific analysis directly within the cell, without the need for cell extracts or gels. FACE Kits are phospho-specific assays in which cells are grown, stimulated, and assayed in a single 96-well plate.

Active Motif www.activemotif.com

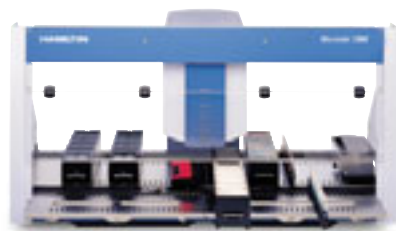
Liquid handling. The Evolution P³ is a 96- or 384-tip automated system that features 16 deck positions. Using disposable-tip technology, it offers accurate dispensing into 96-, 384-, and 1536-well, shallow- and deep-well microplates in volumes from 0.5 µL and up. The system has a wide range of liquid-handling applications, including plate com-

pression or expansion from 96-, 384-, or 1536-well microplates, plate replication and reagent additions, serial and plate-to-plate dilutions, primary and secondary screening, cell-based and ELISA assays, and pre- and post-PCR assays.

PerkinElmer www.perkinelmer.com

Trace kit. This kit is for the preparation of highly pure genomic DNA from small amounts of any tissue, cell, or forensic sample. The optimized shape of the funnel column combines the handling of large volumes (up to 8 mL) with simultaneously low elution volume (50–100 µL). Therefore, the funnel columns are suited for collecting traces of nucleic acids from dilute samples in forensic investigations. The DNA Trace kit allows purification of up to 20 µg of highly pure genomic DNA with typical recovery rates above 70% for amounts above 10 ng of DNA.

Macherey-Nagel www.macherey-nagel.com



Purification kit. This system is for downstream PCR-based applications as well as for use in genomic laboratories, pharmaceutical companies, and other laboratories that work with genomic material. The kit uses a purification plate design with a non-silica DNA-binding material that is embedded into the inside surface of the wells.

Hamilton www.hamiltoncompany.com

Protein crystal imaging. This fully integrated, computer-controlled, high-throughput, variable-zoom microscopy system is designed for detecting tiny crystals in large fields of view. The software enables the system to autoscan each well while capturing images (with annotation and time-date stamp) at a rate of 768 wells per hour. Customized program options include crystal discrimination and image analysis.

TriTek www.tritek.com