

Agilent Technologies in the Life Sciences

Agilent Technologies Life Sciences and Chemical Analysis (LSCA) is a leading provider of instrumentation, supplies, software and services to the life sciences. Agilent's 25,000+ customers range from global pharmaceutical corporations to biotech companies, government labs and academic researchers. With \$1.4 billion in revenue, Agilent LSCA has approximately 3,700 employees worldwide and provides global sales, support and manufacturing. LSCA's major sites are located in California, Delaware, Shanghai, Tokyo and Germany.

Agilent tools help scientists to understand complex biological processes, unlock the causes of disease and speed the discovery of new drugs. Agilent provides products and services for the entire pharmaceutical value chain from basic research to drug manufacturing.

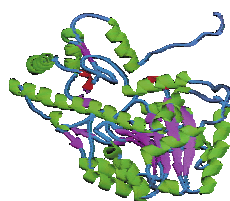


Agilent Life Science Markets

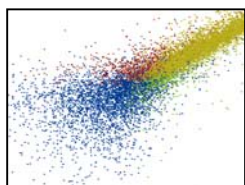
Agilent's life sciences business addresses the needs of four key markets: genomics, proteomics, informatics, and pharmaceutical analysis.



Genomics research enables scientists to compare the gene activity of diseased versus healthy cells, providing insight into the genetic causes of disease. Agilent is second leading provider of gene expression solutions with academic and commercial customers around the world.



Proteomics encompasses the large-scale study of proteins, including protein identification and characterization. Agilent provides complete liquid chromatography/mass spectrometry-based solutions for protein identification, from protein isolation through data analysis, as well as protein LabChips for protein quality assessment.



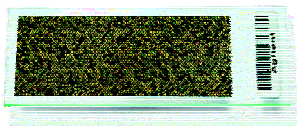
Informatics enables scientists to pull together disparate sets of biological data and analyze the information. Agilent offers a range of informatics solutions spanning applications in gene expression, genotyping and protein identification. The acquisition of Silicon Genetics positions Agilent as a market leader in this field.



Agilent is a market leader in **pharmaceutical analysis**, which focuses on the later stages of the pharmaceutical value chain including drug development, QA/QC and manufacturing. Agilent provides instrumentation, data systems and compliance services that are designed to meet the requirements of the regulated lab.

Agilent Life Science Technologies

Agilent offers five key technologies for the life sciences: microarrays, liquid chromatography, mass spectrometry, microfluidics and software. For each of these technology areas, Agilent also provides reagents, consumables, services and customer support.



Microarrays are 1" x 3" glass slides printed with thousands of DNA probes, each of which corresponds to a unique gene or transcript. As the basic tool of genomic research, microarrays measure the activity level of thousands of genes at one time. Agilent provides complete gene expression solution, featuring preprinted and custom microarrays, whole genome arrays, and a high-throughput scanner.



Liquid chromatography (LC) is a method of separating compounds within a liquid sample so they can be identified and quantified. The method has become one of the most important tools for the life sciences because of its ability to analyze large, fragile biomolecules such as proteins. Agilent's 1100 Series LC system (left) is the world's most popular LC system, with more than 60,000 sold.



Mass spectrometry (MS) is an analytical technique used to identify and quantify the compounds in a sample. A mass spectrometer breaks up the compounds in a sample and measures the molecular weight of the resulting fragments to identify them. Agilent is expanding its line of MS instruments and software.



Lab-on-a-chip technology is based on the principles of microfluidics, which enables the separation of minute amounts of liquid containing DNA, RNA protein, or cellular fragments. Agilent was the first company to commercialize a lab-on-a-chip system, the Agilent 2100 bioanalyzer (left). The bioanalyzer has quickly become the industry standard for RNA QA/QC. Other applications include protein manufacturing, screening for genetically modified food and detecting bioterrorism agents in the environment.



Agilent's families of **software** products support the complete lifecycle of a lab's analytical information. Agilent data systems, including OpenLab, ChemStation and Cerity, provide instrument control, data acquisition and data management capabilities to increase the productivity of the lab. Agilent's bioinformatics software helps researchers to analyze and assimilate different types of genomic and proteomic data, facilitating an integrative approach to biological research.