Mission Statement

To invent and support tools that lead genetic and proteomic research
To use proprietary processes to empower a healthcare revolution
To improve the quality of life through early diagnostic microarrays

Business Overview

Arrayit Corporation emerged from the Biotech Division of TeleChem International Inc., which was founded by Executive Vice President Todd Martinsky and CEO Rene Schena in 1993. In 1995, Dr. Mark Schena introduced the world to the new scientific technology of microarrays in his paper in *Science*. Microarray technology has since become the necessary tool to conduct genomic and proteomic research on a variety of organisms that are vitally important to understanding and improving the quality of life.

Arrayit is leading the microarray industry in developing, manufacturing, and marketing life science tools and integrated systems for the analysis of genetic variation, biological function, and diagnostics. Arrayit provides its specialized tools and services to over 10,000 research centers, pharmaceutical companies, academic institutions, clinical research organizations, government agencies, and biotechnology companies globally.

Arrayit offers microarray instruments and reagents, and diagnostic microarrays, as well as custom printing and analysis of microarrays for research. Products include microarray printers, microarray scanners, DNA, protein and small molecule microarrays, patented printing technology, labeling and purification kits, buffers and solutions, microarray clean rooms, microarray substrates and slides, microarray instruments, books, comparative genomic hybridization microarrays, microarray processing tools, buffers and solutions, software, and microarray platforms.

We are dedicated to providing the highest quality microarray products and services to our loyal customers. We thank you for continuing to buy and use Arrayit brand products everyday!

Sincerely,

Rene Schena  
Chief Executive Officer  
Arrayit Corporation  
524 East Weddell Drive  
Sunnyvale, CA 94089  
renes@arrayit.com

Arrayit trades on the Over the Counter Bulletin Board (OTC.BB) under the ticker symbol ARYC.
SpotBot® is the affordable automated personal microarrayer with over 339 installations worldwide! It prints one 384 well plate in triplicate on 14 substrates in less than 2 hours - the perfect complement to a microarray core facility and ideal personal microarrayer.

NEW! SpotBot® 3 Personal Microarrayer updates include: heavy duty gantry, professional series printhead*, new software and vision system. SpotBot® 3 is equipped with everything needed to print microarrays, including peristaltic pump, wash station and software. Options include megasonic wash station and platen cooling.

Microarrays printed with the SpotBot® 3 are compatible with all microarray detection platforms using standard (25 x 76 mm) glass substrates.

Features:
- Repeatability ±10μm
- 14 glass substrates
  (25 x 76 mm), optional preprints
- Single 384-well microplate capacity
  with manual plate changes
- Up to 5 replicates per sample
- Capable of high-density printing
  (50,000+ spots per substrate)

Features (cont):
- Maximum printable area of 20 x 70 mm
- Sensors for user safety
- Compatible with Windows XP and 7
- Compact size: 22 x 30 x 30 cm
  (only about 1 square foot)
- Weight: 6.4 Kg (14 lbs) including
  vacuum and peristaltic pumps

Available soon: SpotBot® Turbo
  with 48 Pro Pins and 120 Slide Platen...

SpotBot® 3 Personal Microarray Robot...........#SPA3
SpotBot® 3 Personal Microarray Robot - Protein Edition (above)...........#SPA3PRO

arrayit.com  (408) 744-1331 USA
NanoPrint™ Microarrayers are enterprise level systems for research and diagnostic microarray manufacturing of any biomolecule type.

NanoPrint™ Microarrayers print sub-nanoliter volumes and move in 500 nanometer steps. Sophisticated Warp1 controllers and linear drive technology on all three axes combine to afford sub-micron positional control on the entire line of NanoPrint™ Microarrayers. Systems are available in 60 and 210 substrate slide configurations using patented Arrayit high throughput Professional, 946 and 192 Pin Printing Devices. Options include microplate stacker, environmental controls and and custom platens to accommodate any substrate format.

Features include:
- User and version control management
- Auto calibration of substrate and microplate positions
- Complete sample tracking software
- Support of input / output data files
- Custom microarray and automatic method validation
- Speed profiles and wash protocols
- Runtime sample, spotting views, simulation mode
- Easy to use graphical re-print wizard

Linear servo motors provide:
- Nanometer scale positional movement
- Quiet operation, no vibration
- Low heat generation, no motor dust
- Superior accuracy, low maintenance
- High load capacity
- High user safety

NanoPrint™ 60.............................#LM60
NanoPrint™ 60 Protein Edition......#LM60PRO
NanoPrint™ 210.............................#LM210
NanoPrint™ 210 Protein Edition...#LM210PRO

Pictured is a NanoPrint Pro
Printhead with 192 Technology. This device holds 192 pins at 2.25 mm centers in a 8 x 24 pattern to load samples from 1536 well plates.
Patented (U.S.6,101,946)
NEW! Arrayit® InnoScan® 900 microarray scanners are the only 0.5 μm and 1.0 μm resolution substrate slide scanners on the market. Dynamic auto focusing ensures high uniform scanning across the entire substrate surface. Dual detection channels allow two-color scanning of an entire substrate in 3 minutes. Scanning resolution is adjustable from 0.5-40 μm, making the InnoScan® 900 ideal for all types of microarrays containing DNA, proteins, and other molecules.

The InnoScan® 900AL contains a 24 substrate slide autoloder while InnoScan® 710 and 710AL are affordable 3 μm systems. InnoScan® Scanners are compatible with content microarrays from every open-platform provider.

A high-speed computer and Mapix® Software are bundled with every scanner offering microarray image analysis that is intuitive, easy to use and combines imaging and analysis for superior performance. Mapix® achieves real-time adjustment of scanning intensity, easy channel balancing, data quantitation and data export. Mapix® Software insures rapid and effective feature gridding through automatic spot searching and optimal grid alignment. These network compatible Windows and Linux systems are compact and weighs just 17 kg.

Microarray scanners with 0.5 μm and 1.0 μm resolution!

Use with Arrayit’s Ozone Free Box!

Arrayit® InnoScan® 900 Microarray Scanner...#900A (shown)

arrayit.com  (408) 744-1331 USA
Dr. Schena first introduced the use of microarrays as diagnostic tools in July of 2000. Microarray Dx is now on pace to become the most widely used form of microarray technology! We created the Personal Microarray Laboratory to serve this important emerging market segment!

**Personal Microarray Laboratory** for microarray manufacturing, processing and analysis.

This open platform system enables the printing and scanning of microarrays containing DNA, RNA, proteins, peptides, antibodies, patient samples and other biomolecules.

Personal Microarray Laboratory...#PML
Personal Microarray Laboratory, Protein Edition...#PMLP

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**Testimonial**

“We have built a successful Microarray Diagnostic Screening business around the SpotBot Microarray Robot and ArrayIt tools and reagents. Our microarray business is the most successful part of a very successful company. We see no limit to the number and kinds of assays we can convert to the microarray format. Thank-you ArrayIt for making this possible with your cutting-edge, affordable products.”

J. Talfen
President, BioVend Inc.

arrayit.com (408) 744-1331 USA
NEW! Arrayit Professional Series printing pins and printheads meet the most demanding needs of microarray manufacturing. Contoured pin apertures reduce friction by 66% and tighten pin clearance to 2.5 μm for increased durability and accuracy. Professional technology is essential equipment for all professional microarray manufacturing applications including research, genomics, proteomics and diagnostics.*

Figure 1. Pictured is the Arrayit Professional Series Printhead 48 (Cat. PROPH48) with forty eight Pro Series Pins (Cat. PRO3). Pro Printhead has ultra high-precision contoured pin apertures and 2.5 μm printhead-pin spacing for greater durability and printing precision. The Pro Series Microarray Printing Pin features a 75 μm wide tip and a 0.25 μl sample channel. Pro Series pins are constructed from Arrayit’s proprietary RM101 alloy, which is 10- times more durable than stainless steel, ensuring 10 million printing cycles and faster printing speeds. Pin points are concentric to ±2.5 μm which allows perfect subgrid (‘block’) alignment and faster data analysis.

The patented Micro Spotting Devices, PRO, 946, Stealth and ChipMaker, are the most widely used microarray manufacturing technologies in the world. A full line of stock and custom Printheads are available to fit any robot. Micro Spotting Pins produce spot sizes ranging from 50-1000 μm, depending on the tip size. Over 60 different interchangeable pin styles are available with three different loading volumes, 0.25, 0.60 and 1.25 μl - producing 200,600 and 1200 spots per sample uptake (See Figure 2. below center). Custom pin loading volumes and tip styles are available by special request. Pint cells with Whole Cell Microarray Printing Pins.

Micro Spotting Pins do not require a tapping force to expel the sample, they utilize a surface tension printing mechanism. Printing relies on light contact between the pin, sample, and surface. The pins and printheads are durable for millions of printing cycles.

**Superior Design:**
- Surface tension printing mechanism
- Defined sample loading volume
- 60 different interchangeable styles
- Printheads to fit any robot

**Superior Performance:**
- 0.125, 0.25, 0.60 & 1.25 μl uptake
- 50-600 μm diameter spots
- Up to 1200 spots with one uptake
- Durable for millions of cycles

**The Industry Standard:**
- >3,500 installations worldwide
- “Zero” mechanical variation
- Award winning customer support
- Popular line of supporting products
- Used in thousands of publications

**Pricing:**
- Printing Pins.............see price list
- Printheads..................see price list

*Diagnostic applications require license.
The **Pro, 946** and **Stealth Microarray Printing Technology Printheads** are available in 4, 32, 48 and 64 Pin configurations. They accommodate the complete line of **Pro, 946** and **Stealth Micro Spotting Pins**.

**NEW!** The **Pro Printhead** is compatible with all motion control systems. Its lightweight design and tighter tolerances are an industry first!

**Pro Printhead (48 Pins)...**#PROPH48

**Custom Printheads** designed for any microarray robot including Genetix, Genomic Solutions, IAS, PerkinElmer, QBOT and Robodesign.

Pictured is Genetix Stealth 48 Pin...#GSPH48L

**NEW! Professional Series Printing Technology.**

**Pro Pins** extended collar design permits easy handling with our new manual **Pin Tool**. Pro Pins are interchangeable with **946** and **Stealth**. Pro Pins deliver greater durability, precision and accuracy. All Pins come in sixty tip sizes with three sample loading volumes.

"Safety box" packaging insures safe and pristine delivery.

**Microarray 946 Printing Technology** - precision, reduced weight and extended collar design.

**946 Micro Spotting Pins...**#946

**Professional 48 Pin Printhead** for NanoPrint.

NanoPrint Printhead 48 Pin...#PRONPPH48

Stealth Micro Spotting Pins, sixty tip sizes, 0.25, 0.6 and 1.25μl loading volumes. Stealth Microarray Printing Pins...#SMP

Pins and printheads protected by U.S. Patent #6,101,946.
Magical Microarray Substrates

- Polished to atomic flatness
- Cleanroom manufacturing
- Stable surface chemistries
- Extended shelf life
- Free of DNAses, RNases and proteases
- Chamfer orientation
- Covalent, electrostatic, and hydrophobic binding
- Genomics, proteomics, drug discovery & diagnostics

arrayit.com

SuperClean 2 - Premium Microarray Substrates
Polished, atomically smooth, clean and ready for chemistry.
SuperClean 2 (Box of 25)...#SMC2
SuperClean 2 Barcoded (Box of 25)...#SMC2BC
All Substrates available Barcoded.

NEW! Super Microarray Substrate 3 Series
A sophisticated ultra-clear, ultra-transparent silicon dioxide glass surface possessing the highest coupling efficiency and lowest intrinsic fluorescence on the market.
SuperClean, Amine, Aldehyde and Epoxy

SuperAmine 2 - Premium Microarray Substrates
Electrostatic coupling of biomolecules. Very popular!
Immobilize long oligonucleotides and cDNAs.
SuperAmine 2 (Box of 25)...#SMM2

SuperStreptavidin - streptavidin activated to bind biotinylated biomolecules.
SuperStreptavidin (Box of 25)...#SMS

SuperAldehyde 2 - Premium Microarray Substrates
Covalent DNA and protein coupling via primary amines. Ideal for amino modified oligos, amino modified cDNAs, proteins, cells, and tissues.
SuperAldehyde 2 (Box of 25)...#SMA2

SuperNitro - Immobilize various biomolecules including proteins, carbohydrates and DNA!
Higher binding capacity (2 μg/mm²) than any protein microarray surface available.
SuperNitro (Box of 25)...#SMN

SuperEpoxy 2 - Premium Microarray Substrates
Covalent binding via amines, thiols, and hydroxyls. Immobilize amino modified and unmodified oligos and cDNAs, immobilize proteins, peptides, cells, tissues etc...
SuperEpoxy 2 (Box of 25)...#SME2

Substrate Specifications:
- Polished - atomically smooth glass
- Class 100 cleanroom manufacturing
- Stable reactive surfaces, clear or mirrored
- Long shelf life at room temperature
- Free of DNAses, RNases and proteases
- Chamfer for unambiguous orientation
- Optional standard or custom barcode
- Covalent, electrostatic, hydrophobic binding
- Genomics, proteomics, diagnostics, drug discovery and other microarray applications

arrayit.com (408) 744-1331 USA
Atomic Force Microscopy (AFM) reveals how glass surface topology affects microarray spot morphology.

Super Microarray Slide Substrates are homogeneous. The smooth surface enables even deposition of surface chemistries and perfect spot morphology. Atomic Force Microscopy (AFM) analysis reveals average flatness of 2.0 nm or 20 angstroms, equal to 10 silicon dioxide bonds. All ArrayIt® Super Microarray Slide Substrates utilize this pristine, atomically flat glass surface, the only flat polished glass slide substrates available in the field.

Competitor’s Brands Conventional Slide Surfaces are heterogeneous. The rough surface topology results in uneven deposition of biomolecules with clustering, accretion and pooling, causing poor spot morphology. Atomic Force Microscopy (AFM) analysis reveals poor surface topology. The surface shows roughness and bumps, that cannot be cleaned or removed. Conventional glass slides are raw and unpolished.

All Substrates are available with chemical-resistant barcodes. Custom Processes include Ink Screen, Teflon Mask, Chrome Lithography, and Laser Ablation. Create designs to 5 micron accuracy for fiducials, gaskets, alignment marks, numerals or logo artwork.

Custom Processes, request quote...#CCSL Barcoded...see price list.

Quality Control:
Super Microarray Substrates are manufactured in state-of-the-art class 100 cleanrooms with air, humidity, temperature and lighting controls. Rigorous monitoring of each individual substrate including confocal laser scans and contact angle testing guarantees the highest quality product!

NEW! Ask for glass and surface chemistries in custom sizes!
Custom glass coverslips, microfluidic biochip devices, prisms and unique shapes. Clean or with any surface chemistry. Thickness from 0.05mm to 150mm.

Glass Specifications:
Slide format (25 mm x 76 mm x 0.960 mm)
Smoothness (<50 angstroms over entire surface)
Refractive index of 1.52 (400 - 700 nm)
Tolerances (25±0.2 mm x 76±0.3 mm x 0.96±0.025 mm)
INSTRUMENTS

NEW VERSION! SpotLight™ Fluorescent Microarray Scanners, superior performance and efficiency compared to laser scanners. Uses new "cool" excitation technology, sensitive deep-space imaging detectors, high numerical aperture lenses and custom filter sets to capture more signal than other microarray scanners. Excellent field uniformity and rapid scan speed. Scan 1.0 cm² regions anywhere on the glass substrate (25 x 76 mm). Perfect SpotBot® companion, ideal for diagnostics - affordable!

Features:
- "Cool" excitation
- Superior detectors
- High signal to noise ratio
- 10 micron resolution
- 16 bit data
- Low fluorescence background
- Cyanine 3 & Cyanine 5 detection

Custom modules:
- Fluorescein analogs
- TRITC (Rhodamine)
- APC
- Ethidium Bromide
- Alexa Fluors
- GFP

SpotLight...#SLMS

SpotWare™ Colorimetric Microarray Scanners, complete software and hardware solutions. Leverages alkaline phosphatase (AP) and horseradish peroxidase (HRP) labels. Works with membrane based slides, plates and microfluidics.

Flexible:
- High-speed colorimetric scanning
- Adjustable gain
- 5, 10, 20 and 50 μm scanning resolution
- Accommodates 12 microarray substrates
- For research and diagnostic applications

SpotWare Scanners...#SPW110

Pin and Printhead Cleaning Kit guarantees performance of Micro Spotting Devices. Ultrasonics and newly formulated cleaning agents remove contaminants at the atomic level.

Pin and Printhead Cleaning Kit...#PPCK80UB

Microarray High-Speed Centrifuge
Remove wash buffer and dry microarray slide substrates in seconds.
#MHC110V or #MHC220V

arrayit.com (408) 744-1331 USA
Hybridization Cassettes designed to facilitate coverslip biochemical reactions of DNA, protein and peptide microarrays. Accommodates 25 x 76 mm substrate.

Microarray Hybridization Cassettes 1x24, 1x16, 4x24, 4x16
The AHC1X24 (right) has a well size of 7.5 mm x 6.5 mm with 75 - 100 μl reaction volumes. The 3 x 8 format with 9 mm center-to-center well spacing enables loading by multi-channel pipettes or automated robots.
Hybridization Cassette...#AHC

24 Well Hybridization Cassette (below) allows submersible temperature controlled reactions without sample evaporation.

Substrates available see page 6.

High Throughput Wash Station, for 25 microarray slides, works with aqueous based buffers and any magnetic stir plate.
High Throughput Wash Station...#HTW

24 Well Features
• Multiplexed 24 well format
• 9 mm center to center spacing
• Reaction volume 50 μl per well
• Pristine reaction environment
• Durable gasket can be reused many times

24 Well Multiplexed Hybridization Cassette...#RC1x24
Hybl Hybridization Solution 1.25X, 1 ml.................#HHS
UniHyb Hybridization Solution 1.25X, 1 ml...........#UHS
Hybl 2 Hybridization Solution 1.25X, 1 ml...........#HHS2
Micro Spotting Solution 2X, 50 ml..........................#MSS
Micro Spotting Plus 2X, 50 ml..............................#MSP

Micro Spotting Solution Plus 4X, 50 ml..............#MSP4
Micro Spotting Solution 2X, 50 ml.....................#MSP2
Micro Cleaning Solution 20X, 50 ml....................#MCS
Protein Printing Buffer 2X, 50 ml......................#PPB
BlockIt™ Microarray Blocking Buffer.................#BKT
SpotBot® 3
Complete Protein Microarray Manufacturing System

- Compact and affordable
- Desktop microarray printing
- Cooling to 4°C
- DNA, RNA, proteins, peptides, antibodies, patient samples and other biomolecules

Get one today!

Arrayit
CORPORATION

www.arrayit.com, USA (408) 744-1331, arrayit@arrayit.com

OTC: ARYC

Arrayit® has been developing Protein Microarray technology since 1997. As leaders in the field, we have created the essential tools, kits, reagents, instruments, and content necessary for protein microarray analysis. Key components of the Arrayit® protein microarray platform are the SpotBot® and NanoPrint™ Protein Edition microarrays with cooling capabilities, protein spotting buffers, protein microarray substrates and surface chemistries, and pre-printed protein microarrays. Arrayit® also offers contract protein, peptide and small molecule microarray manufacturing through our Microarray Services Division.

Arrayit® microarray technology empowers the manufacture and analysis of many different types of protein microarrays including those representing the proteome. Target proteins are printed onto derivatized or membrane-coated glass substrates using patented contact printing technology (U.S. 6,101,946) and a suitable motion control system. The printed protein microarrays are processed and reacted with protein probe mixtures derived from cell lysates, serum samples or other sources. Fluorescent, colorimetric, chemiluminescent and unlabeled protein probe molecules are detected using standard microarray scanners, surface plasmon resonance, or mass spectrometry. The full gamut of protein biochemistry questions can be addressed with our protein microarray platforms.

Protein microarray applications include:

- Expression profiling
- Serum-based diagnostics
- Protein-protein binding assays
- Drug-target binding
- Receptor-epitope binding

The inherent multiplexing and miniaturization of Arrayit® microarray technology allows the analysis of tens of thousands of proteins in a single binding step. Important assays include drug binding, structural studies, enzyme analyses, and pathway elucidation. Microarrays are excellent tools for discovering novel proteins key to understanding disease progression and safe and affordable drug development.

Pharmaceutical and biotechnology companies employ our protein microarray technology to streamline drug target identification, validation and toxicity testing.
Overview of Arrayit® Protein Microarray Services, Instrumentation and Slide Substrates.

Protein, Peptide and Small Molecule Microarray Manufacturing Services

Custom Microarray Manufacturing consistent with FDA MicroArray Quality Control (MAQC-I, II) standards for research and research diagnostics. Sample preparation, tracking and micro spotting preformed in class 100 cleanrooms with linear drive motion control robotics. Performed confidentially under NDA. Pilot studies to high throughput manufacturing. Call for quote.

Protein Edition Microarrays: 60-210 Slide beds

NanoPrint™ prints sub-nanoliter volumes. Linear drive motion control moves in 500 nanometer steps. Ideal for core facilities and high throughput microarray manufacturing centers.

Microarray Protein NanoPrint™ 60.... CAT# LM60PRO
Microarray Protein NanoPrint™ 210.... CAT# LM210PRO

Personal Affordable Protein Microarrayer

Protein Microarray SpotBot®3 is the perfect adjunct to Core facilities. For individuals seeking total control over their microarray experiments and absolute confidentiality. Over 330 sold and referenced in 150 scientific publications. Four (4) Pro micro spotting pins, 16 slide platen.

Protein Microarray SpotBot® 3....CAT# SPA3PRO

Protein Microarray Fluorescence Scanners

SpotLight: High performance and cost efficient. Cyanine 3 and Cyanine 5 detection, plus custom wavelengths. High signal to noise ratio, 10 micron resolution, 16 bit data. Scan any 1.0 cm² region over an entire microarray slide (25 x 76 mm). Useful adjunct to core facilities. Good for those seeking confidentiality and control over their experiments. One of 12 products named “product of the year” in The Scientist. Ideal companion to SpotBot® 3.

SpotLight,Two Color....CAT# SLMS

Protein Microarray Slides

SuperAldehyde 2, SuperEpoxy 2, SuperNitro and SuperProtein: Glass engineered for microarrays - maintains the five essential qualities:

Features
- polished surface
- flatness
- parallelism
- durability
- low intrinsic fluorescence.

SuperEpoxy 2 (Box of 25)...#SME2
Single Tube, 96-well & 384-well PCR Purification Kits allow high-throughput purification of PCR products for DNA microarrays, sequencing, and other applications.

Using sophisticated membrane separation technology, these kits remove unwanted salts, enzymes, primers, unincorporated nucleotides, and other contaminants from PCR products. Arrayit® kits increase the quality of microarray data, labeled probes and sequencing products! More affordable than competitor’s kits!

Superior Purification Kits:
- Reduce background and improve signal intensity
- Increase coupling efficiency
- Supports native and modified PCR products
- Work on 2D and 3D microarray surfaces
- Filter chemistry provides >99% PCR purity
- > 90% yield (versus 25-75% other brands)
- No glass fiber contamination
- Purifies 50-10,000 bp PCR products
- 0.2 μm-filtered for optimal performance
- Designed for manual or automated use

PCR Purification Kit 96-well for 100 μl PCR Samples... #PCR96100
PCR Binding Buffer............ #PCRBIND
PCR Wash Buffer............... #PCRWASH

Fluorescent Probe Purification kits utilize sophisticated separation buffers in a convenient single column kit. Works with amino allyl labeling dyes from any vendor.

Fluorescent Probe Purification, 50 Single Columns............................... #FPP
1 x 384-Well Microplate Format..... #FPP384

Dye Terminator Clean Up Kits 1 x 96 and 1 x 384-Well Microplate Format. For high throughput DNA sequencing!
96-Well Kit... #DTC96
384-Well Kit... #DTC384
Arrayit® Microarrays are the best quality available. Extraordinary resources are devoted to each chip. See SERVICES page for information on Arrayit® Microarray Manufacturing.

H25K
Whole Human Genome Microarray

H25K is the world’s first human genome microarray based on the completely sequenced human genome and derived from a fully annotated set of 25,509 human genes. This next generation microarray represents a significant advance over competing products consisting of collections of expressed sequences tags (ESTs) from poorly annotated sequence databases.

H25K is a multi-purpose microarray containing 26,304 long oligonucleotides designed to maximize studies of the entire human genome in a single biochemical reaction. Researchers can utilize samples prepared from genomic DNA, mRNA and protein to study problems ranging from karyotyping and gene expression profiling to chromatin structure and protein-DNA interactions. For gene expression users, this revolutionary one spot-one gene™ design allows the quantitative measurement of >300,000 human transcripts in a single hybridization reaction. The most advanced bioinformatics, oligonucleotide manufacturing, microarray printing and surface chemistry provide streamlined data analysis and mining. Fully compatible with an installed base of >10,000 microarray substrate slide scanners, H25K sets a new standard for human genome microarrays.

The H25K microarray contains a single set of gene-specific identifiers capable of examining the entire human genome. It is the only whole human genome chip in the world to provide this capability.

H25K Whole Human Genome Microarray...#H25K
Biomarker Discovery and Validation Services...#BMR1 - BMR5
Discover™ Chips offer an opportunity to examine 380 popular, well studied genes from four important organisms: Arabidopsis, Human, Mouse and Rat.

Discover™ Chip oligonucleotide microarrays contain 380 genes selected from 30 major functional groups, providing broad coverage of physiological and transcriptional information. The highly optimized and melting temperature-matched 70-mers were synthesized and printed in class 100 microarray cleanrooms. Discover™ Chips yield outstanding microarray data!

Four negative controls are included with the gene sequences. The control oligos are designed for uniqueness computationally by "crunching" the sequences against the public sequence databases to avoid cross-hybridization.

Arabidopsis...#DCA
Human...#DCH
Mouse.........#DCM
Rat...........#DCR

CheckIt™ Chips Kit

CheckIt™ Chips Kits contain microarrays and fluorescent probes for test hybridization and quality control experiments.

Each kit contains 5 printed microarrays, 8 glass coverslips, plus aliquots of Seelt™ Universal probe and Hyblt™ buffer.

Hybridize Seelt™ probe to test for microarray element attachment.
CheckIt™ Chips microarray elements are custom 70-mer oligos, in both sense and antisense orientations.
Easy to read 300 µm spots are printed in duplicate as two 10 x 10 grids.

Great for practice experiments!
CheckIt™ Chips Kit...#CHK
Microarray Manufacturing Services deliver the highest quality custom microarrays available for any biomolecule. Expert sample preparation, meticulous handling, data tracking and the highest specification precision manufacturing - all in class 100 cleanrooms with state-of-the-art robotics - guarantee production of the world’s best microarrays. Performed confidentially under strict NDA.

Manufactured Chip Specifications:
- Any sequence, any biomolecule, any application!
- Robotics with ± 0.5 μm positional accuracy.
- Arrayit’s patented printing technology (U.S. 6,101,946)
- Triplicate* spotting assures high data precision and low CVs.
- Proprietary, covalent coupling chemistries - stable to 100°C.
- Provide substrate or use Arrayit Super Microarray Substrates.
- Arrayit substrates are pristine, atomically smooth glass surfaces.
- Barcoding allows automated chip identification.
- Substrates can be plates, microfluidic chips or custom formats.
- Manufactured in state-of-the-art class 100 cleanrooms - designed and custom built for microarrays.
- Low reaction volumes (1-15 μl) speed kinetics, maximize signals.
- Wide range of parallel analysis applications.
- Develop new assays, discover, patent and publish results.
- Turnaround time of 2-4 weeks.

* Replicates specified by the customer.

Flex Chips:
Provide any sample and Arrayit prints microarrays!
- Customer provides the samples in 384 well microplates
- Microarrays of cDNAs, oligos, PNAes, small molecules, peptides, receptors carbohydrates, BACS, proteins or any biomolecules.
- Rapid turnaround time of 2-4 weeks.

Oligo & Peptide Design Services
Provide data and Arrayit designs gene-specific oligos or peptides that are uniquely present in the genome or proteome.

Oligo Design Directive
- The oligos map to 1,000 nucleotides of the 3’ end.
- Sequence repeats and long stretches of poly A, G, C and T, are avoided.
- Melting temperatures of the oligos are matched within a selected range.

eChips:
Provide oligo or peptide sequence, Arrayit prints microarrays!
- Customer provides sequence information.
- Internet services allow electronic design and ordering.
- Reasonable turnaround time of 2-4 weeks (large orders with oligo design and synthesis may take longer).

Oligo & Peptide Synthesis
Arrayit provides professional oligonucleotides or peptides for your specific needs.
- Premium oligonucleotides & peptides
- Testing conducted to establish concentration and stability
- Arrayit coordinates time table
- Arrayit protocol for handling and shipping samples.

For pricing and quote email arrayit@arrayit.com
Dr. Mark Schena's top selling Text!
Microarray Analysis Textbook...#WMA

Cutting-edge technology compendium.
Protein Microarray Textbook...#PMB

The publisher's best selling book.
The Arrayit® microarray cleanroom is on the cover!
Microarray Biochip Technology...#BMB

From "the Father of Microarrays"
DNA Microarrays...#SMB

arrayit.com (408) 744-1331 USA
NEW PRODUCTS

Arrayit Founder Todd Martinsky envisioned the need for microarray products in 1995 - since then a great variety of products have been introduced. Featured here are ideal products suitable for any microarray laboratory.

PlasmaScan™ Antibody Microarrays
PlasmaScan™80 / PlasmaScan™380 antibody arrays contain 80 and 380 (respectively) different mABs printed in single or multiple copies on planar substrates. PlasmaScan™ is the only microarray that contains non-redundant mABs raised exclusively against NATIVE human plasma proteins. Raising antibodies against native proteins ensures that they recognize naturally occurring post-translational modifications and folding to allow the correct detection of glycosylation and other modifications that are known to be highly antigenic.

The antibodies are selected based solely on strict technical criteria in an open, hypothesis-free manner. PlasmaScan antibodies have high binding affinity, which increases signal strength and binding specificity in microarray applications. Suitable for biomarker discovery by human plasma profiling.

Arrayit® PlasmaScan™ Antibody Microarray...#PS80 and...#PS380

Protein Microarray Buffer Kit
ArrayIt’s kit is the first complete protein microarray buffer system on the market. Kit includes activation buffer, reaction buffer, wash buffer and rinse buffer.

Supports all protein microarrays. Buffers are 0.1 μm-filtered, pre-mixed and ready to use. Buffers increase signal strength and reduce background. Highly recommended for peptide, antibody, antigen, reverse phase and PlasmaScan™ Microarrays.

Protein Microarray Buffer Kit...#PMBK

ArrayIt® TrayMix™ S4 Automated Hybridization Station
Micro-mixing system based on patented chaotic advection for hybridization of microarrays. Great results are obtained by homogeneous dispersion of molecules throughout the computer controlled 21mm x 60mm chemical resistant hybridization area.

TrayMix4 significantly reduces hybridization time while offering reproducible and robust results from one experiment to the next, using as little as 5 pmole of biological target. Achieve greater specificity of hybridization while reducing the coefficients of variation. Enhance the analysis of your results of gene expression, detection of mutations, microarray comparative genomic hybridization, genotyping, FISH, and more.

ArrayIt® TrayMix™ S4 Automated Hybridization Station...#TMHS4

arrayit.com   (408) 744-1331 USA
Arrayit Corporation possesses an important portfolio of patented, patent pending and trade secret technologies, products and methods, for population wide screening and diagnostics, available for license or purchase.

**Variation Identification Platform (VIP) License** Arrayit Corporation has developed and patented (U.S. 6,913,879) Microarray Screening technology, a revolutionary approach for human disease screening, blood typing, parentage testing, forensics, human leukocyte antigen (HLA) analysis, and infectious disease diagnosis.

Different from oligonucleotide microarrays, these microarrays attach segments of patient DNA to the chip. This multi-patient single nucleotide polymorphism and allele screening method provides a massively parallel format allowing up to 100,000 patients and many diseases to be scored on a single microarray with a single hybridization reaction.

VIP technology can be used to screen 10 to 100,000 patients for genetic diseases, neonatal disorders, and infectious diseases in a single experiment. Tests have been designed to diagnose cystic fibrosis, sickle cell anemia, and dozens of serious diseases that are treatable by early detection.

This approach can also be used to identify disease carriers and for forensics, food safety testing, parentage testing, HLA screening, blood typing and anti-terrorism analysis. Access to VIP technology will allow the licensee to develop genetic screening and diagnostic tests that are fast, highly affordable, and completely safe.

VIP Technology Diagnostic License...#VIPL

The **multi-patient genotyping method** can utilize DNA samples from large numbers of patients. Specific genomic segments containing disease markers are amplified by PCR and printed into microarrays - with each spot containing DNA segments from a patient. The microarrays are hybridized with fluorescent oligonucleotides representing the disease, then processed and scanned. The fluorescent signal of each spot allows assignment of normal (green), carrier (yellow) and disease (red) genotypes for each patient. This massively parallel multi-patient genotyping format allows the genotyping of tens of thousands of patients on a single microarray (see Figure 1).

**Figure 1.** One embodiment of VIP methods.
Why is Arrayit’s Microarray Platform the most Popular?

- Compact, affordable tools
- Microarray printing & scanning
- Desktop processing & analysis
- Print DNAs, RNAs, proteins, peptides, antibodies, patient samples and other biomolecules

Arrayit’s Variation Identification Platform (VIP) offers infinite possibilities. Use this massively parallel and multiplexed microarray screening method for human disease analysis, blood typing, parentage testing, forensics, HLA analysis, and infectious disease diagnostics. Test up to 100,000 samples per microarray.

PlasmaScan™ monoclonal antibody microarrays explore and identify novel biomarkers in the human plasma proteome. It is the market’s only microarray containing monoclonal antibodies generated against native human plasma proteins.*

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