

Your One-Stop

# Genomic Solution Service Provider

【Array · NGS · qPCR · Bioinformatics】



**Phalanx**  
Biotech Group  
[www.OneArray.com](http://www.OneArray.com)

☎ Toll Free: 877-730-3887 Ext.109  
✉ [info@onearray.com](mailto:info@onearray.com)  
🏠 6150 Lusk Blvd, Suite B100, San Diego, CA 92121

Phalanx Biotech produces the high-quality OneArray® line of whole genome microarrays and miRNA microarrays. Our patented probe design techniques reduce the rate of cross-hybridization and improve detection sensitivity. Each microarray also contains control probes used to assess sample quality and labeling efficiency.

- ▶ Latest probe content
- ▶ Strong correlation with real-time PCR
- ▶ Excellent sensitivity and dynamic range
- ▶ Compatible with common microarray scanners
- ▶ Over **360 Scientific Publications** and counting

## Gene Expression Microarrays

Product	Total Probes	Gene Probes	Control Probes	Probe Length	Sequence Database
Human OneArray (HOA) v7	29,204	28,264	940	60 mer	RefSeq r70; Ensembl r80
Mouse OneArray (MOA) v2.1	27,307	26,423	884	60 mer	RefSeq r42; Ensembl r59
Rat OneArray (ROA) v2	21,707	20,715	992	60 mer	RefSeq r65; Ensembl r76
Yeast OneArray (YOA) v1.3	7,641	6,958	683	70 mer	AROS v1.1; YBOX v1.0
Rice OneArray (RIOA) v1.1	22,003	21,179	824	60 mer	RGAP v6.1; BGI (2008)

AROS: Operon Yeast Genome Array-Ready Oligo Set  
RGAP: Rice Genome Annotation Project

YBOX: Yeast Brown Lab Oligo Extension  
BGI: Beijing Genomics Institute

## miRNA Expression Microarrays

Product	Total Probes	Target miRNA	Control Probes	Probe Repeat	Sequence Database
Human miRNA OneArray (HmiOA) v7	7,768	2,588	124	3	Sanger miRBase r21
Mouse & Rat miRNA OneArray (MRmiOA) v7	6,871	Mouse 1,499 Rat 750	148	3	Sanger miRBase r21

## Custom Microarrays

Phalanx Biotech can manufacture custom microarrays at low, medium, or high densities according to your needs. Depending on the number of probes, we can print up to 8 microarrays per slide. Our low-cost custom microarray fabrication services include probe design, printing, and quality control. Please contact us for more details!

## Agilent Microarray Gene Expression Profiling Service

We provide gene expression profiling services using Agilent microarrays, which are available for numerous model species. We follow Agilent protocols for low-input amplification, labeling, and hybridization starting with as little as 250ng.

### 360+ Publications

Papers citing "Phalanx Biotech Group" featured in:



See more → <http://www.phalanxbiotech.com/info/publications.php>

Research Fields	Paper#
Molecular Cellular Biology	126
Cancer Research	72
Immunology	30
Development	26
Herbal Medicine	24
Safety Assessment	19
Cardiovascular Research	18

## OneArray® Gene Expression and miRNA Expression Lab Services

Phalanx Biotech offers gene expression and miRNA expression profiling services on the OneArray platform. Outsourcing to our Service Lab is a reliable and affordable way to obtain accurate expression data. Generating microarray data will be hassle-free, and your data will be simple to interpret. Just send us your RNA or your tissue/cell/serum samples, and we will do everything for you. You will receive your Data along with a Summary report containing Scatter Plots, Histograms, Volcano Plots, and a PCA Analysis. Overall, we make it very easy for you to publish your results.

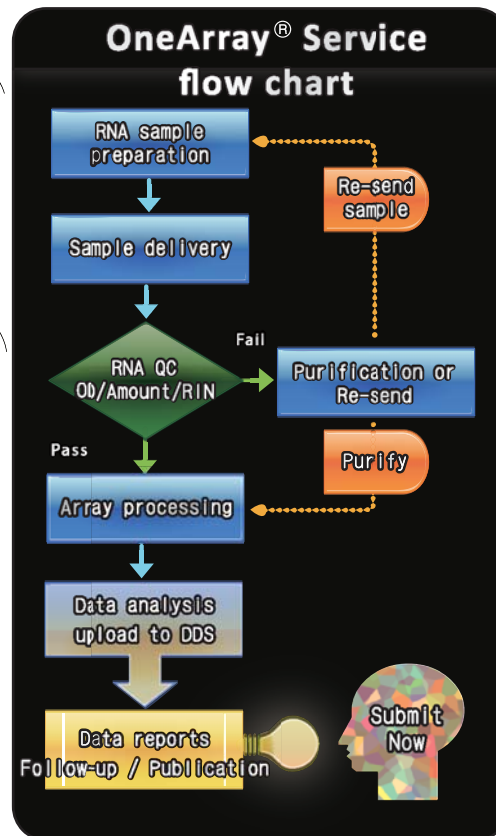
**RNA sample preparation:** Clients can send total RNA or samples that require RNA extraction.

**Sample delivery:** we require >3ug total RNA for OneArray gene or miRNA profiling; and >0.5ug for Agilent gene or miRNA profiling.

**RNA QC:** We test the RNA quality using the NanoDrop, the Agilent Bioanalyzer, and agarose gel electrophoresis.

If the RNA passes our QC analysis, then we will proceed to the microarray analysis. For gene expression profiling, mRNA will be amplified. For miRNA expression profiling, total RNA is used directly.

**Data analysis:** We use Rosetta Resolver® for gene expression profiling and R/Bioconductor packages for miRNA expression profiling. Data is uploaded to our Data Delivery System (DDS) within 30 days of receiving samples.



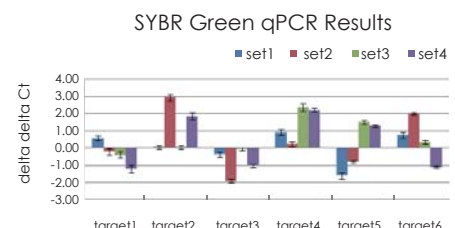
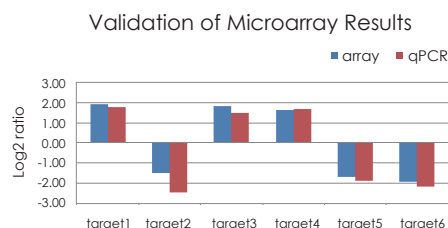
Re-sending samples will cause a delay in finishing the project.

We can re-purify samples that are contaminated with salt/chemicals and/or DNA. If the RNA is highly degraded, then customers are asked to re-send samples.

RNA samples can be re-purified by a de-salting column, or by DNase treatment followed by ethanol precipitation.

## qPCR (Quantitative Real-Time PCR)

- ▶ Microarray validation
- ▶ mRNA and miRNA targets
- ▶ SYBR Green or TaqMan
- ▶ SABiosciences qPCR arrays
- ▶ Custom primer design



## NGS (Next Generation Sequencing) Services

Phalanx Biotech offers Next Generation Sequencing on the Illumina HiSeq 2500 with the latest V4 chemistry, for throughput of up to 1 TB of data. We use the Illumina MiSeq for smaller projects, or ones that require longer read lengths. We can handle projects from one sample to thousands, based on your needs.

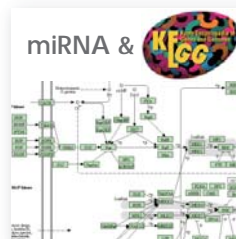
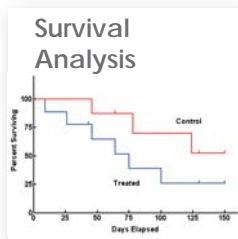
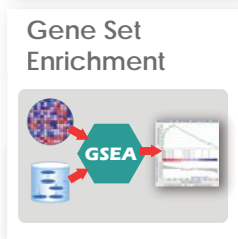
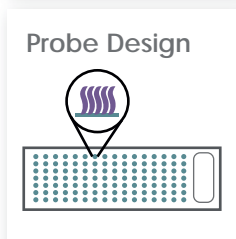
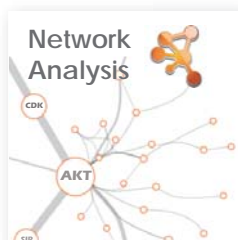
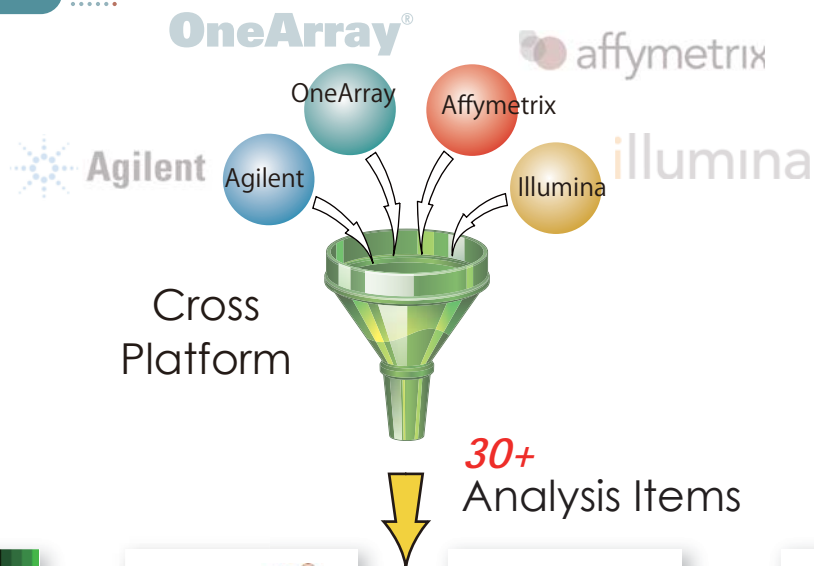
### NGS services offered:

- Whole Genome Sequencing
- RNA-Seq
- 16s Microbial Sequencing
- Bioinformatics
- Exome Sequencing
- Targeted Sequencing
- Small RNA sequencing

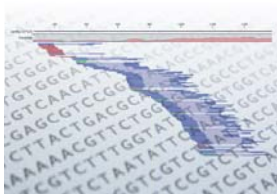
### Sequencing Platforms

- Illumina HiSeq 2500
- Illumina MiSeq





& Customized Analysis



## NGS Data Analysis

- ▶ SNP calling
- ▶ lncRNA
- ▶ ChIP-seq
- ▶ RNA-seq
- ▶ Metagenomics



**Advanced Analysis for NGS  
for the price of Basic Analysis**



※ Offer Ends 12/31/2017