



**Affordable**  
**Quality, Performance, Results**

## Phalanx Biotech miRNA OneArray Products

- 3 features per probe; 2 arrays per slide
- 100% satisfaction guarantee
- Up-to-date miRBase Annotation
- Easy & affordable packages

### miRNA OneArray Content

#### Human & Primate miRNA OneArray (PmiOA)

Each PmiOA microarray contains 3,228 total features. Each of the unique 1,040 miRNA probes is printed in triplicate on each array, and an additional 108 experimental control probes are also available.

Phalanx Biotech's Human & Primate miRNA OneArray is designed to contain 100% of miRBase Sequence Database Release 11.0. The human miRNA probe set has been updated to include 100% of miRBase Release 12.0. Included on the array are an additional 18 primate organism miRNA sequences (Table 1, right).

#### Mouse & Rat miRNA OneArray (RmiOA)

Each RmiOA contains 2,319 total features. Each of the unique 728 miRNA probes is printed in triplicate on each array with an additional 135 experimental control probes. RmiOA contains 100% of miRBase Sequence Database v12.0.

#### miRNA OneArray Control Features

Probes contain miRNA-specific sequences and a proprietary spacer designed to enhance the hybridization sensitivity to miRNAs. All miRNA OneArray products contain 108 control probes of 18 unique sequences. The sequences have been drawn from a variety of organisms to act as positive and negative controls. These include additional Phalanx Biotech spike-ins that can be used to monitor the hybridization.

**Table 1: PmiOA and RmiOA Probe Set Content**

Human and Primate miRNA OneArray		
Species Name	Common Name	miRBase Code
<i>Homo sapiens</i>	human	hsa
<i>Ateles geoffroyi</i>	spider monkey	age
<i>Lymphocryptovirus human herpesvirus 4</i>	epstein-barr virus, HHV-4	ebv
<i>Gorilla gorilla</i>	gorilla	ggo
<i>Cytomegalovirus human herpesvirus 5</i>	hcmv, human herpesvirus 5, HHV-5	hcmv
<i>Lentivirus human immunodeficiency virus 1</i>	hiv virus, HIV	hiv1
<i>Rhadinovirus Human herpesvirus 8</i>	Kaposi's sarcoma-associated herpesvirus, KSHV, HHV-8	kshv
<i>Lemur catta</i>	lemur	lca
<i>Lagothrix lagotricha</i>	brown woolly monkey	lla
<i>Macaca nemestrina</i>	macaca ape, pigtail macaque	mne
<i>Pygathrix bieti</i>	Yunnan Snub-nosed monkey	pbi
<i>Pan paniscus</i>	pygmy chimpanzee	ppa
<i>Pongo pygmaeus</i>	pongo	ppy
<i>Pan troglodytes</i>	chimpanzee	ptr
<i>Rhadinovirus Rhesus monkey rhadinovirus</i>	rhesus monkey rhadinovirus, RRV	rrv
<i>Saguinus labiatus</i>	white-lipped tamarin	sla
<i>Symphalangus syndactylus</i>	Gibbon	ssy
Mouse and Rat miRNA OneArray		
<i>Mus musculus</i>	mouse	mmu
<i>Rattus norvegicus</i>	rat	rno

# Array to array Consistency

Array to array consistency is essential for accurate comparison of various experimental samples. Using our patented non-contact printing technology, we have produced a miRNA product line with outstanding repeatability.

Sample data from PmiOA (Figure A, right) shows a log2 intensity  $R^2=0.991$  (raw signal intensity  $R^2=0.994$ ) was obtained, showing excellent reproducibility. PmiOA was tested using Ambion Liver Total RNA enriched and labeled using the Ambion miRvana isolation and labeling kits.

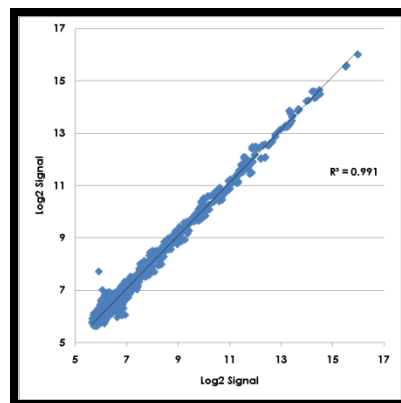


Figure A: Log2 signal Reproducibility of PmiOA

Table 2: Pair-wise Correlation of PmiOA

	A	B	C	D	E	F	G	H	I	J
A	1.000	0.991	0.986	0.993	0.988	0.987	0.990	0.977	0.990	0.990
B		1.000	0.986	0.992	0.987	0.986	0.987	0.975	0.991	0.990
C			1.000	0.989	0.981	0.984	0.983	0.969	0.989	0.986
D				1.000	0.986	0.994	0.991	0.975	0.996	0.993
E					1.000	0.980	0.983	0.971	0.985	0.985
F						1.000	0.989	0.973	0.992	0.990
G							1.000	0.976	0.988	0.989
H								1.000	0.972	0.973
I									1.000	0.993
J										1.000

Table 2 (above) shows pair-wise intensity correlation of comparing 10 arrays using the methods described in Figure A. The average raw signal  $R^2 = 0.988$ .

## Arrays in the microRNA OneArray Product Line

- Human & Primate miRNA OneArray**
  - 100% *Homo sapiens* miRBase v12.0 + 18 more primates
- Model Plant miRNA OneArray**
  - Commonly studied plants including rice, maize, and *Arabidopsis thaliana*
- Plant miRNA OneArray**
  - Contains all the remaining plants in Sanger miRBase v11.0
- Mouse & Rat miRNA OneArray**
  - 100% *Mus musculus* and *Rattus norvegicus* miRBase v12.0
- Model Organism miRNA OneArray**
  - Commonly studied organisms, including zebrafish, *Xenopus laevis*, and more
- Animal miRNA OneArray**
  - Contains all the remaining organisms in Sanger miRBase v11.0



Power of OneArray™