

# GeneChip® Test3 Arrays

# **Intended Use**

The Affymetrix GeneChip® Test3 Arrays are designed to be used as assessment tools for determining target quality and labeling efficiency prior to utilizing genome array products. The arrays allow one to monitor the presence of a small subset of characterized genes from various organisms, including mammals, plants, and eubacteria. The arrays are intended to be used in conjunction with commercially available arrays or with custom arrays.

The Test3 Array is an ideal economical solution for standard expression applications for all Affymetrix catalog products. There may be conditions, such as assay customization, where testing may be most accurately done by matching probe array format and wash protocols. For these cases, Test3 arrays are available in three of our most widely used array formats — 49 (standard), 64, and 100 (midi) (Test3 Format 1, Test3 Format 2, and Test3 Format 3 respectively). The GeneChip Test3 Arrays contain probe sets representing genes from the following organisms:

Species/Organism	Common Name	Number of Gene Sequences
Arabidopsis thaliana	Thale Cress	5
Bacillus subtilis	Same	5
Bacteriophage P1	Same	1
Bos taurus	Cow	6
Caenorhabditis elegans	Worm	5
Canis familiaris	Dog	5
Drosophila melanogaster	Fruit Fly	4
Escherichia coli	Same	9
Glycine max	Soybean	6
Homo sapiens	Human	24
Lycopersicon esculentum	Tomato	5
Mus musculus	Mouse	10
Mycobacterium tuberculosis	Tuberculosis Bacteria	5
Oryza sativa	Rice	6
Pseudomonas aeruginosa	Same	7
Rattus norvegicus	Rat	6
Saccharomyces cerevisiae	Yeast	9
Staphylococcus aureus	Same	6
Streptococcus pneumoniae	Same	6
Sus scrofa	Pig	8
Triticum aestivum	Wheat	5
Human Immunodeficiency Virus	HIV	1
Zea mays	Corn	5

Additionally, the GeneChip Test3 Arrays contain a subset of human housekeeping/maintenance genes shown to be expressed early on in fetal development and throughout adulthood. (*Physiol Genomics 2*: 143-147, 2000). A smaller subset of mouse maintenance genes are also represented on the arrays.

Refer to the Affymetrix GeneChip® Expression Analysis Technical Manual (P/N 702232) for procedures for RNA target preparation, target hybridization, fluidics station setup, probe array scan, and data analysis instructions.

# Array Format

Product Name	Format
GeneChip® Test 3 Array	400 (micro)
GeneChip® Test 3 Format 1 Array	49 (standard)
GeneChip® Test 3 Format 2 Array	64
GeneChip® Test 3 Format 3 Array	100 (midi)

# Fluidics Protocols Required

Product Name	Fluidics Protocol
GeneChip® Test 3 Array	Micro_1v1
GeneChip® Test 3 Format 1 Array	EukGE-WS2
GeneChip® Test 3 Format 2 Array	EukGE-WS2
GeneChip® Test 3 Format 3 Array	Midi_Euk2

# Library Files Required

Product Name	Library Files
GeneChip® Test 3 Array	Test3.cif, Test3.cdf
GeneChip® Test 3 Format 1 Array	Test3_Format_1.cif, Test3_Format_1.cdf
GeneChip® Test 3 Format 2 Array	Test3_Format_2.cif, Test3_Format_2.cdf
GeneChip® Test 3 Format 3 Array	Test3_Format_3.cif, Test3_Format_3.cdf

#### **Ordering Information**

P/N	Product Name	Description		
Arrays				
900341 900342	GeneChip® Test 3 Array	5 Arrays 30 Arrays		
900474 900475	GeneChip® Test 3 Format 1 Array	5 Arrays 30 Arrays		
900473 900476	GeneChip <sup>®</sup> Test 3 Format 2 Array	5 Arrays 30 Arrays		
900472 900477	GeneChip® Test 3 Format 3 Array	5 Arrays 30 Arrays		
Supporting Products				
901228 901229	GeneChip® 3′ IVT Express Kit ¹	Sufficient for 10 Reactions Sufficient for 30 Reactions		
900720	GeneChip® Hybridization, Wash, and Stain Kit²	Sufficient for 30 Reactions		

- To avoid potential impact on array data Affymetrix recommends against switching reagent kits mid-study.
- Each kit contains one (1) Hybridization Module, one (1) Stain Module, three (3) bottles of Wash Buffer A and one (1) bottle of Wash Buffer B, sufficient for 30-reactions. Individual kit components may be ordered separately.

Affymetrix® products can be purchased directly from Affymetrix in the United States, and many European and Asian countries. For all other territories, please view a list of our distribution partners, which can be located at: www.affymetrix.com/site/contact/index.affx.

# **Instrumentation and Software Required**

- 1. GeneChip® Scanner 3000 enabled for High-Resolution Scanning\*
- 2. GeneChip® Command Console® Software (AGCC)
- 3. GeneChip® Fluidics Station

\*GeneChip Scanner 3000 High-Resolution Update is standard on all instruments shipped starting in September 2003 with serial number series 502. Previous versions, serial number series 501, will require the 00-0110 GeneChip Scanner 3000 High-Resolution Update to be installed.

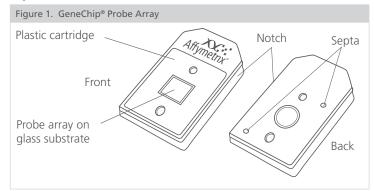
#### Precaution:

- GENECHIP PROBE ARRAYS ARE FOR RESEARCH USE ONLY; NOT FOR DIAGNOSTIC PROCEDURES.
- 2. Avoid microbial contamination, which may cause erroneous results.
- 3. WARNING: All biological specimens and materials with which they come into contact should be handled as if capable of transmitting infection and disposed of with proper precautions in accordance with federal, state, and local regulations. This includes adherence to the OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030) for blood-derived and other samples governed by this act. Never pipet by mouth. Avoid specimen contact with skin and mucous membranes.
- **4. CAUTION:** Exercise standard precautions when obtaining, handling, and disposing of potentially carcinogenic reagents.
- **5.** Exercise care to avoid cross-contamination of samples during all steps of this procedure, as this may lead to erroneous results.
- **6.** Use powder-free gloves whenever possible to minimize introduction of powder particles into sample or probe array cartridges.

# Storage, Handling and Stability

The probe array consists of a square glass substrate mounted in a plastic cartridge (Figure 1). The glass contains an array of oligonucleotides that, when mounted, is on the inner glass surface. A chamber in the plastic housing directly under the glass acts as a reservoir where hybridization and washing occur.

Although the inner glass surface of the probe array is protected, any contamination or scratches on the outer surface of the glass can compromise the accuracy of the scan. Avoid touching the surface of the glass with your fingers. Skin oils and other substances, such as lotions or ink, can fluoresce. If the surface of the glass is noticeably dirty, it can be carefully cleaned with a non-abrasive laboratory tissue.



The GeneChip® probe arrays should be stored at 2° to 8°C. Refer to the expiration date on the package label. Do not use probe arrays or reagents after the expiration date.

#### **Contact Information**

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# **Patents**

Products may be covered by one or more of the following patents: U.S. Patent Nos. 5,445,934; 5,744,305; 5,945,334; 6,140,044; 6,261,776; 6,291,183; 6,346,413; 6,399,365; 6,420,169; 6,551,817; 6,610,482; 6,733,977; 6,955,915 and D430,024 and other U.S. or foreign patents. Products are manufactured and sold under license from OGT under 5,700,637 and 6,054,270.

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