

# GeneChip™ *Arabidopsis* ATH1 Genome Array

Catalog Numbers 900385 and 900386

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**WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from [thermofisher.com/support](http://thermofisher.com/support).

## Product use

The Applied Biosystems™ GeneChip™ *Arabidopsis* ATH1 Genome Array contains more than 22,500 probe sets representing approximately 24,000 genes. Sequences used in the design were selected and clustered in collaboration with TIGR and were derived from TIGR's ATH1-121501 Database.

Oligonucleotide probes are synthesized *in situ* to each corresponding sequence. Eleven pairs of oligonucleotide probes are used to measure the level of transcription of each sequence represented on the GeneChip™ *Arabidopsis* ATH1 Genome Array. Most sequences represented on the previous generation GeneChip™ *Arabidopsis* ATH1 Genome Array are also represented on the ATH1 array. Due to the dynamic nature of public databases, probe sets for these sequences will not be identical and in some cases will be represented by a completely new probe set. As a result, data generated with different versions of the GeneChip™ *Arabidopsis* ATH1 Genome Array may not always produce concordant results.

Visit our website for a complete list of supporting documentation including procedures regarding target preparation, target hybridization, fluidics station setup, probe array scan, and data analysis.

## Instrumentation and software required

- GeneChip™ Scanner 3000 7G
- GeneChip™ Fluidics Station 450
- GeneChip™ Hybridization Oven 645
- GeneChip™ Command Console™ (GCC) software

## Critical specifications

Item	Specification
Feature size	18 µm
Oligonucleotide probe length	25-mer
Number of sequence represented	>24,000 gene sequences
Array format	49
Hybridization controls	<i>bioB</i> , <i>bioC</i> , <i>bioD</i> , <i>cre</i>
Poly-A controls	dap, lys, phe, thr
Housekeeping/control genes	GAPDH, Ubiquitin, and Actin
Hybridization volume	200 µL. The total fill volume of the cartridge is 250 µL.
Fluidics protocol	EukGE-WS2
Library files	ATH1-121501.cif, ATH1-121501.cdf

## Storage, handling, and stability

This cartridge array consists of a square glass substrate mounted in a plastic cartridge. 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 nonabrasive laboratory tissue.

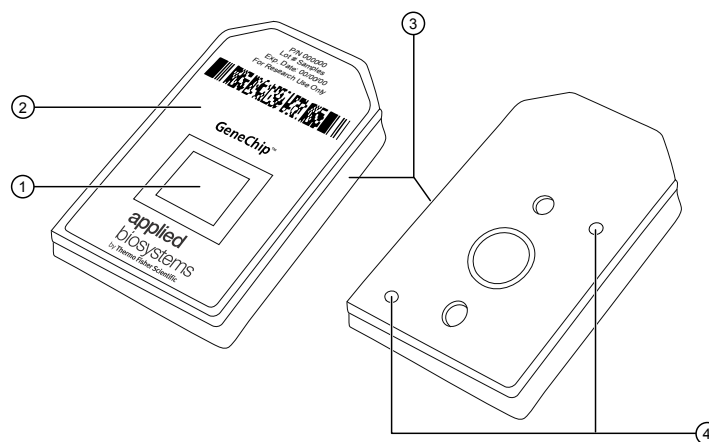


Fig. 1 Cartridge array.

- ① Probes on a glass substrate
- ② Plastic cartridge
- ③ Notch
- ④ Septa

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

## Ordering information

Unless otherwise indicated, all materials are available through [thermofisher.com](http://thermofisher.com). MLS: Fisher Scientific ([fisherscientific.com](http://fisherscientific.com)) or other major laboratory supplier.

Product	Description	Cat. No.
GeneChip™ <i>Arabidopsis</i> ATH1 Genome Array	5 arrays	900385
	30 arrays	900386
<b>Supporting products</b>		
GeneChip™ 3' IVT PLUS Reagent Kit	10 reactions	902415
	30 reactions	902416
GeneChip™ Hybridization, Wash, and Stain Kit <sup>[1]</sup>	30 reactions	900720

<sup>[1]</sup> Each kit contains 1 Hybridization Module, 1 Stain Module, 3 bottles of Wash Buffer A, and 1 bottle of Wash Buffer B, sufficient for 30 reactions. Individual kit components may be ordered separately.

## Customer and technical support

Visit [thermofisher.com/support](http://thermofisher.com/support) for the latest in services and support, including:

- Worldwide contact telephone numbers
- Product support, including:
  - Product FAQs
  - Software, patches, and updates
  - Training for many applications and instruments
- Order and web support
- Product documentation, including:
  - User guides, manuals, and protocols

- Certificates of Analysis
- Safety Data Sheets (SDSs; also known as MSDSs)

**Note:** For SDSs for reagents and chemicals from other manufacturers, contact the manufacturer.

### Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at [www.thermofisher.com/us/en/home/global/terms-and-conditions.html](http://www.thermofisher.com/us/en/home/global/terms-and-conditions.html). If you have any questions, please contact Life Technologies at [www.thermofisher.com/support](http://www.thermofisher.com/support).



Affymetrix Pte Ltd | 7 Gul Circle #2M-01 | Keppel Logistics Building | Singapore 629563

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**Revision history:** Pub. No. 701185

Revision	Date	Description
4	17 November 2017	Update document to current template.
3	20 April 2009	Baseline for revision history.

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