

# GeneChip™ Gene ST Array Strips

Doc. Part No. 703000 Pub. No. MAN0017708 Rev. A.0

**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

Applied Biosystems™ GeneChip™ Gene ST Array Strips for the GeneAtlas™ System offer the most advanced and cost-effective gene expression profiling option for whole-transcript coverage. Probes are distributed across the full length of the gene, providing a more complete and accurate picture of overall gene expression.

Discovery content, such as transcript regions supported by more speculative sources including Expressed Sequence Tags (ESTs) and gene predictions, are not interrogated by the GeneChip™ Gene ST Array Strips.

Oligonucleotide probes are synthesized *in situ* complementary to each corresponding sequence. For expression analysis, the samples are amplified, and the targets labeled in the sense orientation for hybridization to the arrays.

See our website for a complete list of available GeneChip™ Gene ST Array Strips, supporting documentation and procedures regarding target preparation, target hybridization, washing, staining, and scanning.

## Instructions for use

The following documentation is required for using the GeneChip™ WT PLUS Reagent Kit with Applied Biosystems™ whole-transcript array strips:

- *GeneChip™ WT PLUS Reagent Kit User Guide*, Pub. No. 703174

## Library files

Library files contain information about the probe array design characteristics, probe use and content, and scanning and analysis parameters. These files are unique for each probe array type, and must be installed prior to processing of the array strip in the GeneAtlas™ Instrument Control Software. To install library files on your GeneAtlas™ System:

From the GeneAtlas™ Instrument Control Software, Select **Utility Actions** ▶ **Download Library Files**.

Additional information can be located under the specific array product on our website.

## Instrumentation and software required

- GeneAtlas™ System
- GeneAtlas™ Instrument Control Software
- Expression Console™ Software
- Transcriptome Analysis Console (TAC)

## Reagents required

GeneChip™ Gene ST Array Strips are specifically designed for use with the GeneAtlas™ System. The following table lists the kits required to process an array strip.

| Product Name  | Description  | Cat. No. |
|---|--------------|----------|
| GeneChip™ WT PLUS Reagent Kit                                     | 10 reactions | 902280   |
| GeneChip™ WT PLUS Reagent Kit                                     | 30 reactions | 902281   |
| GeneAtlas™ Hybridization, Wash, and Stain Kit for WT Array Strips | 10 reactions | 901667   |

## Hybridization cocktail for single probe array

| Gene array information   | Amount | Final concentration                 |
|--|--------|-------------------------------------|
| Fragmented and labeled DNA   | 41 µL  | 23 ng/µL                            |
| 5X WT Hyb Add 1  | 30 µL  | 1X                                  |
| Control Oligonucleotide B2 (3mM)   | 1.5 µL | 50 mM                               |
| 20X eukaryotic hybridization controls ( <i>bioB</i> , <i>bioC</i> , <i>bioD</i> , <i>cre</i> ) | 7.5 µL | 1.5, 5, 25 and 100 µM, respectively |
| 15X WT Add 4   | 10 µL  | 1X                                  |
| 2.5X WT Hyb Add 6  | 60 µL  | 1X                                  |
| Total volume   | 150 µL |                                     |
| Hybridization volume   | 120 µL |                                     |

## Storage, handling, and stability

The array strips should be stored at 2°C to 8°C and must not be frozen. See the expiration date on the package label. Do not use probe arrays or reagents after the expiration date.

## When handling the array strip

Always remove the array strip from the pouch with gloved hands using caution not to damage or scratch the array surface.

## Array strip consumables

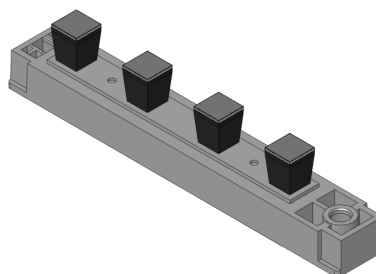


Fig. 1 Array strip.

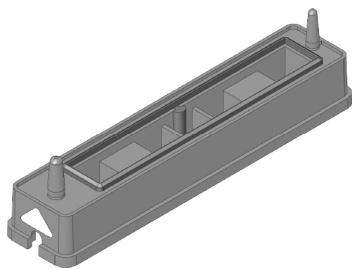


Fig. 2 GeneAtlas™ hybridization tray.

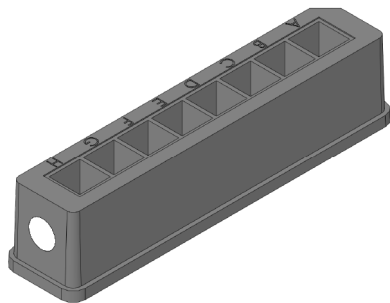


Fig. 3 GeneAtlas™ wash B tray.

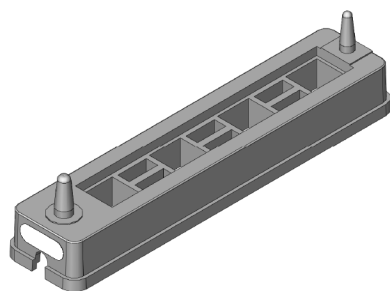


Fig. 4 GeneAtlas™ imaging tray.

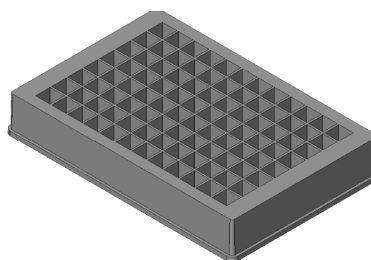


Fig. 5 GeneAtlas™ wash A and stain tray.

## 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).



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

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**Revision history:** Pub. No. MAN0017708

| Revision | Date           | Description   |
|----------|----------------|---|
| A.0      | 21 August 2018 | Initial release in Thermo Fisher Scientific document control system.<br>Supersedes legacy Affymetrix publication number 703000.<br>Updated to the current document template, with associated updates to trademarks, logos, licensing, and warranty. |

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