


# GeneChip™ Mouse Genome 430 2.0 Array

Catalog Numbers 900495, 900496, and 900497

Doc. Part No. 701539 Pub. No. MAN0017694 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

The Applied Biosystems™ GeneChip™ Mouse Genome 430 2.0 Array (Mouse 430 2.0) is a single GeneChip™ brand array comprised of over 45,000 probe sets representing over 34,000 well-substantiated mouse genes. All probe sets represented on the GeneChip™ Mouse Expression Set 430 are identically replicated on the GeneChip™ Mouse Genome 430 2.0 Array. Sequences used in the design of the array were selected from GenBank™, dbEST, and RefSeq. The sequence clusters were created from the UniGene database (Build 107, June 2002) and then refined by analysis and comparison with the publicly available draft assembly of the mouse genome from the Whitehead Institute Center for Genome Research (MGSC, April 2002).

Oligonucleotide probes are synthesized *in situ* on the arrays. Eleven pairs of oligonucleotide probes are used to measure the level of transcription of each sequence represented on the GeneChip™ Mouse Genome 430 2.0 Array.

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	11 µm
Probe pairs/sequence	11
Array format	49
Hybridization controls	<i>bioB</i> , <i>bioC</i> , <i>bioD</i> , and <i>cre</i>
Poly-A controls	<i>dap</i> , <i>lys</i> , <i>phe</i> , and <i>thr</i>
Normalization controls	100 probe sets
Housekeeping controls	GAPDH, β-Actin, transferrin receptor, pyruvate carboxylase
Hybridization volume	200 µL The total fill volume of the cartridge is 250 µL.
Library files	Mouse430_2

## Accessory files

### Fluidics scripts

The fluidics script used depends on the array type, labeling protocol, and reagents used for cartridge processing. Refer to the GeneChip Fluidics Station Scripts support page to determine which fluidics script is appropriate for your application. The fluidics scripts can be downloaded from our website.

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

### Mask files

The GeneChip™ Mouse Genome 430 2.0 Array includes a set of mouse maintenance genes to facilitate the normalization and scaling of array experiments. This set of genes serves as a tool to normalize or scale your data prior to performing data comparison. This set of normalization genes shows consistent levels of expression over a diverse set of tissues. Mask files enabling the use of these probe sets for normalization and scaling are available on our website.

### Comparison spreadsheets

Comparison spreadsheets are designed to help in understanding the relationship between the data that are generated using different, but related, GeneChip™ expression probe arrays. Because the content of the GeneChip™ Mouse Genome 430 2.0 Array is the same as the Mouse Expression Set 430, the existing comparison spreadsheet can be used. Comparison spreadsheets are available on our website.

## 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™ Mouse Genome 430 2.0 Array	2 arrays	900495
	6 arrays	900496
	30 arrays	900497
Supporting products		
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.

## 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.

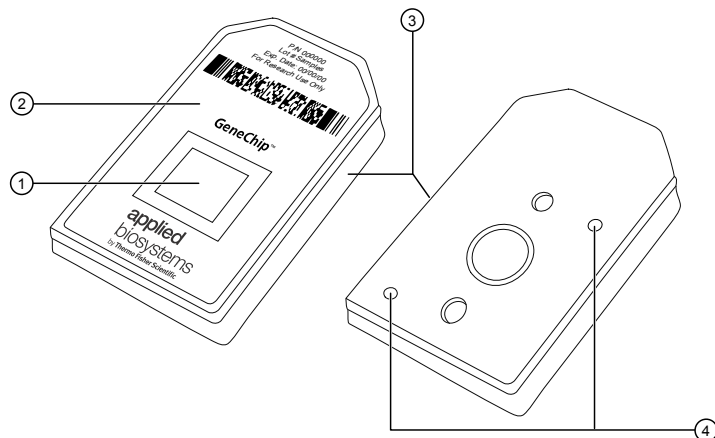


Fig. 1 Cartridge array.

- 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.

## 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. MAN0017694

Revision	Date	Description
A.0	30 April 2018	Initial release in Thermo Fisher Scientific document control system. Supersedes legacy Affymetrix publication number 701539. Updated to the current document template, with associated updates to trademarks, logos, licensing, and warranty.

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