# GeneChip™ Soybean Genome Array

Catalog Numbers 900525 and 900526

Doc. Part No. 701692 Pub. No. MAN0017683 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**.

#### Product use

The Applied Biosystems™ GeneChip™ Soybean Genome Array was designed in close collaboration with the Soybean Research Community as part of the GeneChip™ Consortia Program. The Soybean Array is an 11-probe pair, 11-micron feature size array, designed specifically to interrogate approximately 37,500 Glycine max (soybean) transcripts. This GeneChip™ Soybean Genome Array also contains transcripts for studying nematode and fungal pathogens important in soybean research, specifically the array includes approximately 15,800 *Phytophthora sojae* (a water mold that commonly attacks soybean crops) as well as 7,500 *Heterodera glycines* (cyst nematode pathogen) transcripts.

Sequence information for this array includes public content from GenBank $^{\mathbb{N}}$  and dbEST. Sequence clusters were created from UniGene Build 13 (November 5, 2003). Purchasers of the array will have access to detailed sequence information via CD library files and through the online NetAffx $^{\mathbb{N}}$  Analysis Center.

Oligonucleotide probes are synthesized *in situ* complementary to each corresponding sequence. Eleven pairs of oligonucleotide probes are used to measure the level of transcription of each sequence represented.

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.

#### Critical specifications

Item	Specification
Feature size	11 μm
Probe pairs/sequence	11
Array format	49
Hybridization controls	bioB, bioC, bioD, from E. coli, and cre from P1 bacteriophage
Poly-A controls	dap, lys, phe, thr, and trp from B. subtilis
Housekeeping/control genes	Soybean genes from the commercial GeneChip™ TEST3 Array, including 18S rRNA, Actin, GSTa, cytochrome P450, SBP, and Ubiquitin. Additionally, there are newly selected control probe sets for actin and GAPDH from <i>G. max</i> (soy), actin and GAPDH from <i>H. glycines</i> , and actin from <i>P. sojae</i> .
Hybridization volume	200 μL The total fill volume of the cartridge is 250 μL.
Fluidics protocol	EukGE-WS2v5 Fluidics Station 450/250 scripts are designated by the suffix "_450."
Library files	Soybean

### Restriction on use of sequence information

Customers may use the array and related sequence information for microarray expression analysis.

# Instrumentation and software required

- GeneChip<sup>™</sup> Scanner 3000 7G
- GeneChip<sup>™</sup> Fluidics Station 450
- GeneChip 

  Hybridzation Oven 645
- GeneChip<sup>™</sup> Command Console<sup>™</sup> (GCC) software

## 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.

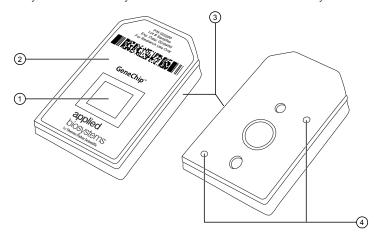


Fig. 1 Cartridge array.

- ① Probes on a glass substrate
- 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**. MLS: Fisher Scientific (**fisherscientific.com**) or other major laboratory supplier.

Product	Description	Cat. No.
GeneChip™ Soybean Genome Array	2 arrays	900525
	6 arrays	900526
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.

### **Customer and technical support**

Visit **thermofisher.com/support** for the latest in services and support, including:

- Worldwide contact telephone numbers
- Product support, including:
  - Product FAOs
  - 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. If you have any questions, please contact Life Technologies at www.thermofisher.com/support.



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

The information in this guide is subject to change without notice.

DISCLAIMER: TO THE EXTENT ALLOWED BY LAW, LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

Revision history: Pub. No. MAN0017683

Revision	Date	Description
A.0	04 April 2018	Initial release in Thermo Fisher Scientific document control system. Supersedes legacy Affymetrix publication number 701692.

Important Licensing Information: These products may be covered by one or more Limited Use Label Licenses. By use of these products, you accept the terms and conditions of all applicable Limited Use Label Licenses.

©2018 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. All other trademarks are the property of their respective owners.

