

# Axiom™ Array Plate

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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™ Axiom™ Array Plate is designed for the genotyping of single nucleotide polymorphisms (SNPs) and simple insertion/deletions (indels). This array plate, when used with the Axiom™ 2.0 Reagent Kit, enables researchers to perform large-scale genotyping studies with minimal hands-on processing per plate.

Each plate consists of 96 microarrays and is offered as a part of a complete automated solution that includes instrumentation for sample preparation, and array washing, staining, and scanning.

These markers are amplified using the Axiom™ 2.0 Reagent Kit and are present on short randomly generated fragments of genomic DNA (25–125 base pair) before array hybridization. The reagents for processing Axiom™ arrays are also included in this reagent kit.

Identical to the cartridge array manufacturing process, the oligonucleotide probes on Axiom™ Array Plates are synthesized *in situ* using the photolithographic process.

## Instructions for use

See the following documents for instructions on processing samples using the Axiom™ Genotyping Assay.

### Axiom 2.0 Assay

- *Axiom™ 2.0 Assay 96-Array Format Automated Workflow User Guide—Biomek™ FX<sup>P</sup>* (Pub. No. 702963, SPG Pub. No. 702984, QR Pub. No. 702962)
- *Axiom™ 2.0 Assay 96-Array Format Automated Workflow User Guide—Applied Biosystems™ NIMBUS™ Instrument* (Pub. No. 703349, SPG Pub. No. 703350, QR Pub. No. 703351)
- *Axiom™ 2.0 Assay 96-Array Format Manual Workflow User Guide* (Pub. No. 702990, SPG Pub. No. 702991, QR Pub. No. 702989)
- *Axiom™ 2.0 Assay 24-Array Format Manual Workflow User Guide* (Pub. No. 703335, SPG Pub. No. 703336, QR Pub. No. 703337)

### Related documentation

- *Axiom™ gDNA Sample Preparation Quick Reference* (Pub. No. 702987)
- *GeneTitan™ MC Protocol for Axiom™ 2.0 Array Plate Processing Quick Reference* (Pub. No. 702988)
- *GeneTitan™ Multi-Channel Instrument User Guide* (Pub. No. 08-0308, SPG Pub. No. 08-0305)
- *GeneChip™ Command Console™ User Guide* (Pub. No. 702569)
- *Axiom™ Analysis Suite User Guide* (Pub. No. 703307)
- *Axiom™ Genotyping Solution Data Analysis Guide* (Pub. No. 702961)

## 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.

## Reagents, instrumentation, and software required

1. Reagent kit:
  - Axiom™ 2.0 Reagent Kit
  - Axiom™ 2.0 Reagent Kit 4x24 Reactions
2. Automated workstation (optional):
  - Beckman Coulter™ Biomek™ FX<sup>P</sup> Target Prep Express
  - Applied Biosystems™ NIMBUS™ Target Preparation Instrument
3. GeneTitan™ Multi-Channel Instrument
4. GeneChip™ Command Console™ (GCC) software
5. Axiom™ Analysis Suite software

For a complete list of reagents and consumables required, see to the appropriate Axiom™ 2.0 Assay site preparation guide.

## Ordering information

| Product name                                     | Description   | Cat. No. |
|--|---|----------|
| Axiom™ Array Plate                               | One array plate, 96-array format or 24-array format                             | Varies   |
| Axiom™ 2.0 Reagent Kit                           | Sufficient for one 96-array plate   | 901758   |
| Axiom™ 2.0 Reagent Kit 4x24 Reactions            | Sufficient for four 24-array plates   | 902798   |
| Axiom™ GeneTitan™ Consumables Kit <sup>[1]</sup> | Contains all GeneTitan™ consumables required to process one Axiom™ array plate. | 901606   |

<sup>[1]</sup> One hybridization tray, one scan tray, and five stain trays with covers are included for use with each array plate. These consumables are required for processing Axiom™ Array Plates on the GeneTitan™ Multi-Channel Instrument.

## Storage, handling, and stability

The array plates should be stored at 2–8°C and must not be frozen. The array plates must be protected at all times from damage or exposure to dust. Refer to the expiration date on the package label. Do not use array plates or reagents after the expiration date.

### When handling the 96-plate scan tray

Remove the scan tray from the pouch with gloved hands. The scan tray is packaged with a black plastic base. Do not remove the protective black plastic base from the scan tray or touch the scan tray directly. This protective base should stay with the scan tray at all times prior to loading into the GeneTitan™ MC Instrument.

**CAUTION!** The scan tray has protruding guiding posts that may be sharp and can stick out of the pouch if not handled carefully; therefore, take precaution to prevent unnecessary injury.

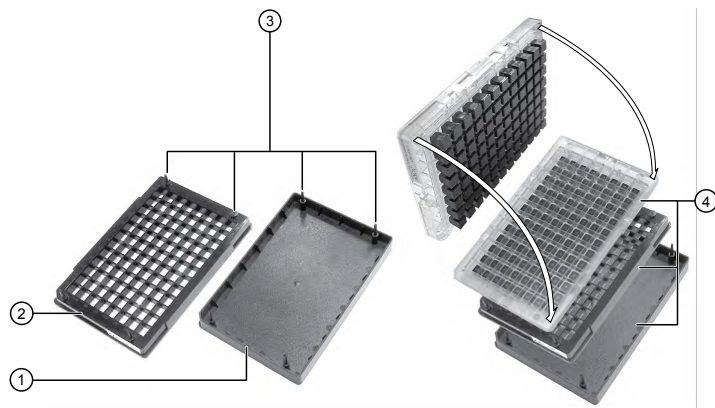


Fig. 1 Scan tray assembly.

- ① Black plastic base
- ② Scan tray
- ③ Alignment pins
- ④ Array plate, scan tray, and black plastic base assembly

**Note:** Displayed action is for demonstration purposes only. All movement of the array plate is performed during the fluidics protocol on the GeneTitan™ Instrument.

### When handling the 96-array plate

Remove the array plate from the pouch with gloved hands. The array plate is packaged with a blue plastic base. Do not remove the protective blue plastic base from the array plate or touch the array plate directly. Keep the array plate in the protective base at all times, including when placed on the GeneTitan™ MC Instrument.

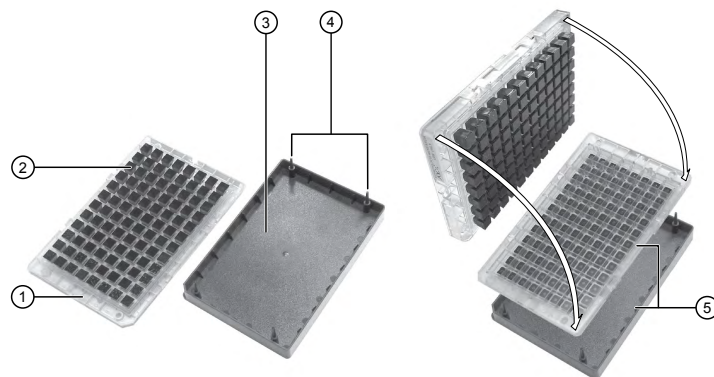


Fig. 2 Array plate assembly.

- ① Array plate
- ② Array on glass substrate that is mounted on a peg
- ③ Blue plastic base
- ④ Alignment pins
- ⑤ Array plate and blue base assembly

**Note:** Displayed action is for demonstration purposes only.

### 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. MAN0017712

| Revision | Date           | Description   |
|----------|----------------|---|
| A.0      | 24 August 2018 | Initial release in Thermo Fisher Scientific document control system.<br>Supersedes legacy Affymetrix publication number 703130.<br>Updated to the current document template, with associated updates to trademarks, logos, licensing, and warranty. |

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