

Package Insert

GeneChip™ HT MG-430 PM Array Plate

Intended Use

The GeneChip™ HT MG-430 PM Array Plate is designed for medium and high-throughput microarray expression analysis and enables researchers to perform large-scale studies with minimum hands-on processing time per sample. Each plate consists of 16, 24 or 96 microarrays and is offered as a part of the complete automated solution from Thermo Fisher Scientific™ including target preparation, array washing, staining and scanning instrumentations.

Each microarray on the GeneChip HT MG-430 PM Array Plate contains the same number of probe sets as the industry-standard GeneChip™ Mouse Genome 430 2.0 cartridge array. This enables researchers to take a whole genome approach to expression profiling and smoothly scale up to process large numbers of samples.

One critical design change was introduced with the GeneChip HT MG-430 PM Array Plate: Only Perfect Match (PM) probes from the cartridge design were retained while Mismatch (MM) probes were removed.

For each plate, three configurations are offered:

- 16-Array Plate – 2 columns of 8 microarrays in each column for a total of 16 identical microarrays on the same plate
- 24-Array Plate – 3 columns of 8 microarrays in each column for a total of 24 identical microarrays on the same plate
- 96-Array Plate – 12 columns of 8 microarrays in each column for a total of 96 identical microarrays on the same plate

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).

Identical to the cartridge array manufacturing process, the oligonucleotide probes on GeneChip™ brand HT Array Plates are synthesized *in situ* using the photolithographic process. GeneChip™ probe arrays and plates are for research use only and not intended for use in diagnosis of disease. Visit our website for a list of supporting manuals for procedures regarding target preparation, target hybridization, washing, staining, and array plate scanning.

| Critical Specifications | |
|----------------------------|------------------------------|
| Feature Size | 8 µm |
| Probes/Sequence | 11 Perfect Match Probes |
| Hybridization Controls | <i>bioB, bioC, bioD, cre</i> |
| Poly-A Controls | <i>dap, lys, phe, thr</i> |
| Normalization Controls | 100 probe sets |
| Housekeeping/Control Genes | <i>GAPDH, beta-Actin</i> |
| Hybridization Volume | 90 µL |

Reagents, Instrumentation and Software Required

1. GeneChip™ HT 3' IVT Express Kit
2. GeneChip™ HT Hybridization, Wash, and Stain Kit
3. GeneTitan™ System
4. GeneChip™ Command Console™ Software

For a complete list of reagents and consumables required, refer to our web site for a list of supporting manuals for HT Array Plates.

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

For Research Use Only. Not for use in diagnostic procedures.

Ordering Information

GeneChip™ PM array plate kits include hybridization, scan, and stain trays for use with the GeneTitan™ Instrument. A separate consumables kit (P/N 901561) is available for use with the Beckman Coulter™ Biomek™ FX^P Target Prep Instrument.

| P/N | Product Name | Description |
|--------|--|---------------------------|
| 901434 | GeneChip™ HT MG 430 PM 16-Array Plate Kit | See Footnote ¹ |
| 901257 | GeneChip™ HT MG 430 PM 24-Array Plate Kit | See Footnote ¹ |
| 901258 | GeneChip™ HT MG 430 PM 96-Array Plate Kit | See Footnote ¹ |
| 901266 | GeneChip™ HT MG 430 PM 96-Array Plate Kit and GeneChip™ HT 3' IVT Express Kit Bundle | 96 Rxn ¹ |
| 901560 | GeneChip™ HT MG 430 PM 96-Array Plate Kit and GeneChip™ HT 3' IVT Express Kit Bundle | 4 x 24 Rxn |
| 901253 | GeneChip™ HT 3' IVT Express Kit | 96 Rxn |
| 901225 | GeneChip™ HT 3' IVT Express Kit | 4 x 24 Rxn |
| 901561 | Labware Kit for IVT Express Method on Beckman Coulter™ Biomek™ FX ^P Target Prep Instrument ² | See Footnote ² |

1. Each Array Plate Kit contains: 1 HT Array Plate, 1 HT Hybridization Tray, 1 HT Scan Tray, 3 HT Stain Trays for the GeneTitan Instrument, and 4 HT Stain Tray Covers for the GeneTitan Instrument.

2. The labware kit contains consumables sufficient for 4x24 or 4x96 rxn runs.

Precautions

- GENECHIP™ PROBE ARRAYS AND PLATES ARE FOR RESEARCH USE ONLY; NOT FOR DIAGNOSTIC PROCEDURES.
- Avoid microbial contamination, which may cause erroneous results.
- WARNING: All biological specimens and materials with which they come into contact should be handled as if capable of transmitting infection and disposed of with proper precautions in accordance with federal, state, and local regulations. This includes adherence to the OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030) for blood-derived and other samples governed by this act. Never pipet by mouth. Avoid specimen contact with skin and mucous membranes.
- CAUTION: Exercise standard precautions when obtaining, handling, and disposing of potentially carcinogenic reagents.
- Exercise care to avoid cross-contamination of samples during all steps of this procedure, as this may lead to erroneous results.
- Use powder-free gloves whenever possible to minimize introduction of powder particles into sample or probe array plates.
- CAUTION: Use care when handling the Scan Tray as it has protruding guiding posts that may be sharp and can stick out of the pouch if not handled carefully.

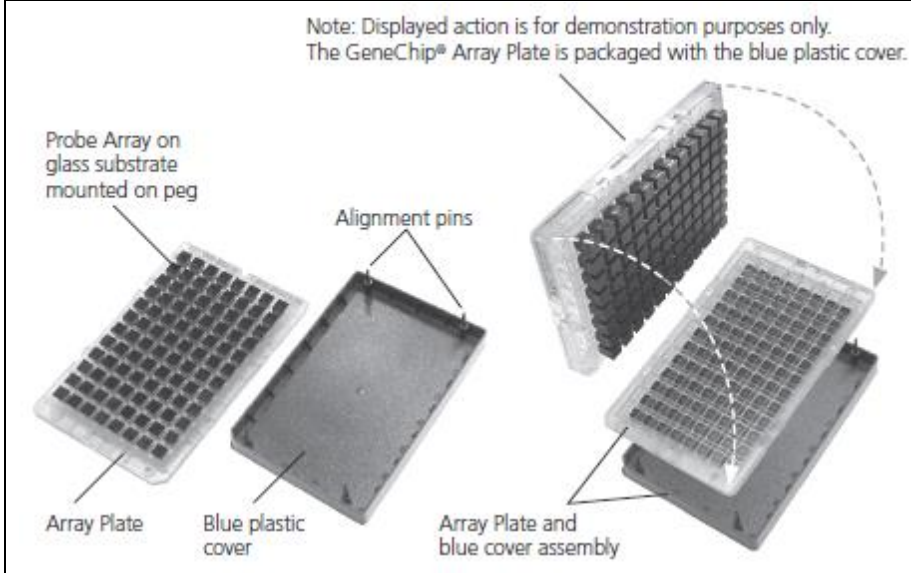
Storage, Handling and Stability

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

When Handling the Array Plate

Remove the array plate from the pouch with gloved hands. The array plate is packaged with a blue plastic cover (Figure 1). Do not remove the protective blue plastic cover from the array plate or touch the array plate directly. This protective cover should stay with the array plate at all times prior to being handled by the GeneTitan™ System.

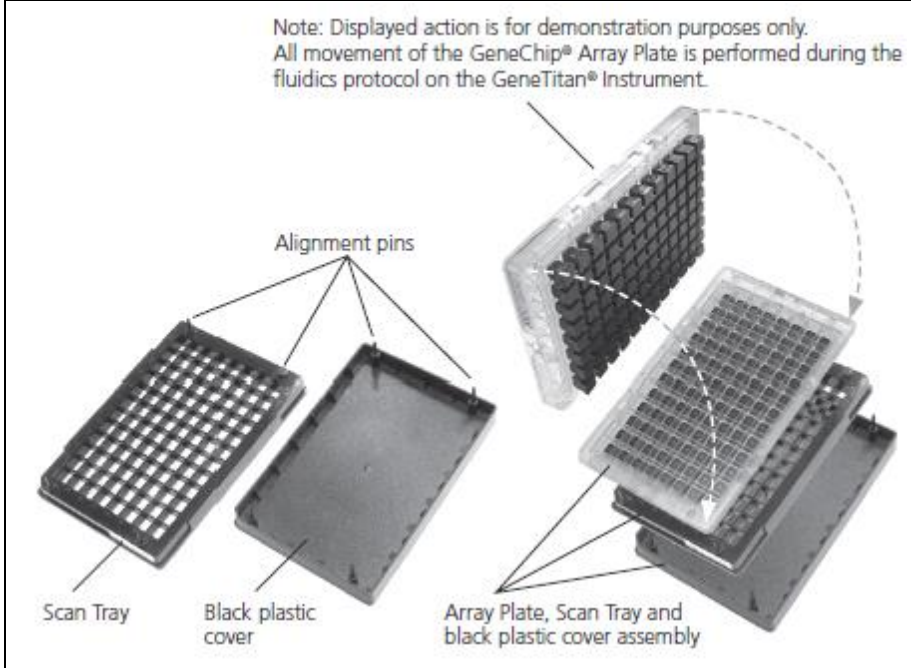
Figure 1. Array Plate Assembly



When Handling the HT Scan Tray

Remove the scan tray from the pouch with gloved hands. The scan tray is packaged with a black plastic cover (Figure 2). Do not remove the protective black plastic cover from the scan tray or touch the scan tray directly. This protective cover should stay with the scan tray at all times prior to loading into the GeneTitan™ System. In addition, 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.

Figure 2. Scan Tray Assembly



Documentation and support

Customer and technical support

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

- Worldwide contact telephone numbers
- Product support, including:
 - Product FAQs
 - Software, patches, and updates
- 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 thermofisher.com/support.

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.

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.

Corporate entity: Life Technologies | Carlsbad, CA 92008 USA | Toll Free in USA 1.800.955.6288

©2017 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 properties of their respective owners.

P/N 702720

For support visit thermofisher.com/support or email techsupport@lifetech.com

thermofisher.com

23 January 2017

ThermoFisher
SCIENTIFIC