

GeneChip™ miRNA Array

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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.

Product use

The Applied Biosystems™ GeneChip™ miRNA arrays contain probe sets designed to interrogate small non-coding RNA transcripts. Information on the content including types and data sources that are used to design the array can be obtained by visiting our website. All probe sets are PM (perfect match only).

Visit our website for a complete list of available GeneChip™ miRNA arrays, supporting documentation and procedures regarding target preparation, target hybridization, washing, staining, and scanning.

Critical specifications

Item	Critical Specifications
Array format	100 format
Feature size	11 μm
Oligonucleotide probe length	25-mer; less, if the miRNA is less than 25 nucleotides
Hybridization controls	<i>bioB</i> , <i>bioC</i> , <i>bioD</i> , and <i>cre</i>
Housekeeping controls	1 Human 5.8s rRNA probe set (11 probes/set)
Spike In labeling control sequences	spike in-control-2_st spike in control-23_st spike in control-29_st spike in control-31_st spike in control-36_st
Background probes	95 antigenomic probe sets, binned by GC content (≤94prob es/set)
Hybridization volume	130 μL
Fluidics script	FS450_0002

Instructions for use

Instructions for using the FlashTag™ Biotin HSR RNA Labeling Kit can be downloaded from our website.

Table 1 Hybridization cocktail for single probe array

Component	Volume	Concentration
Biotin-labeled sample	21.5 μL	
2X Hybridization Mix	66 μL	1X
27.5% formamide (Vial 12)	19.2 μL	4%
DMSO	12.8 μL	9.70%
20X Hybridization Controls	6.6 μL	1X
Control Oligo B2, 3nM	2.2 μL	50 pM
Nuclease-free water	3.7 μL	
Total volume	132 μL	

Instrumentation and software required

- GeneChip™ Scanner 3000 7G
- GeneChip™ Fluidics Station 450
- GeneChip™ Hybridization Oven 645
- GeneChip™ Command Console™ (GCC) software
- Expression Console™ software (EC)

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

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.

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.

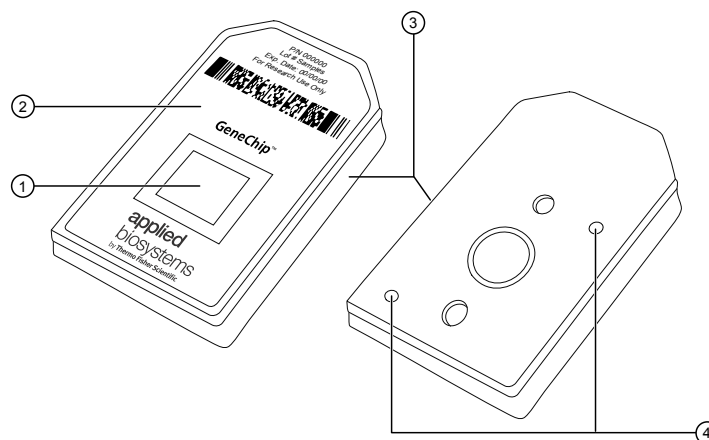


Fig. 1 Cartridge array.

- 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.

Ordering information

Product	Description	Cat. No.
Arrays		
Visit our website for a complete list of available GeneChip™ miRNA arrays.		
Supporting products		
FlashTag™ Biotin HSR RNA Labeling Kit	10 reactions 30 reactions	901910 901911
GeneChip™ Hybridization Control Kit	30 reactions 150 reactions	900454 900457
GeneChip™ Hybridization, Wash, and Stain Kit ^[1]	30 reactions	900720
GeneChip™ Wash Buffer A	800 mL	900721
GeneChip™ Wash Buffer B	600 mL	900722

^[1] 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 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. If you have any questions, please contact Life Technologies at www.thermofisher.com/support.



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Revision	Date	Description
A.0	09 July 2018	Initial release in Thermo Fisher Scientific document control system. Supersedes legacy Affymetrix publication number 703081. Updated to the current document template, with associated updates to trademarks, logos, licensing, and warranty.

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