



GeneChip® miRNA 2.0 Array

Intended Use

The GeneChip® miRNA 2.0 Array is a single GeneChip® brand array comprised of 15,632 mature microRNA sequences from the miRBASE (v.15). The GeneChip miRNA 2.0 Array also contains an additional 1,534 sequences of Human snoRNA and scaRNA from the Ensembl database and snoRNABase.

The oligonucleotide probes on GeneChip miRNA 2.0 Array are synthesized *in situ* using Affymetrix' patented photolithographic process. GeneChip probe arrays are for research use only and not intended for use in diagnosis of disease.

Accessory Files

Fluidics

The fluidics scripts and hybridization cocktail preparation vary depending on the labeling protocol. Refer to the package insert of the labeling kit that you will be using.

The fluidics scripts (when available) can be downloaded from:
www.affymetrix.com/support/technical/fluidics_scripts.affx.

Library Files

Library files contain information about the probe array design layout and other characteristics, probe use and content, and scanning and analysis parameters. These files are unique for each probe array type. The library files may be downloaded from: www.affymetrix.com/support/technical/libraryfilesmain.affx.

Instrumentation and Software Required

1. GeneChip® Scanner 3000 7G
2. GeneChip® Fluidics Station 450
3. GeneChip® Hybridization Oven 645
4. GeneChip® Command Console® Software (AGCC)
5. miRNA QCtool

Critical Specifications	
Array Format	169 arrays per wafer
Feature Size	11 µm
Probe Pairs/Sequence for miRNA in miRBase v.15	9 identical probes
Probe Pairs/Sequence for miRNA in miRBase v.11	4 identical probes
Probe Pairs/Sequence for sno/scaRNA	11 probes
Oligonucleotide Probe Length	25-mer; less, if the miRNA is less than 25
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)
Control Sequences	22 Control probe sets (10 probes/set)
Background Probes	95 antigenomic probe sets, binned by GC content (<= 94 probes/set)
Hybridization Volume	80 µL to 100 µL (depending on the assay used).
Library Files	miRNA_2_0
Fluidics Script	FS450_0003

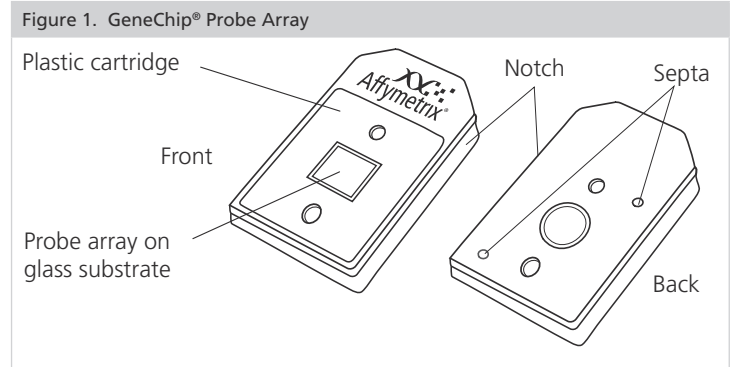
Precautions

1. GENECHIP® PROBE ARRAYS ARE FOR RESEARCH USE ONLY; NOT FOR DIAGNOSTIC PROCEDURES.
2. Avoid microbial contamination, which may cause erroneous results.
3. **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.**
4. **CAUTION:** Exercise standard precautions when obtaining, handling, and disposing of potentially carcinogenic reagents.
5. Exercise care to avoid cross-contamination of samples during all steps of this procedure, as this may lead to erroneous results.
6. Use powder-free gloves whenever possible to minimize introduction of powder particles into sample or probe array cartridges.

Storage, Handling and Stability

The probe array consists of a square glass substrate mounted in a plastic cartridge (Figure 1). 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 non-abrasive laboratory tissue.



The GeneChip® probe arrays should be stored at 2° to 8°C. Refer to the expiration date on the package label. Do not use probe arrays or reagents after the expiration date.

Ordering Information

P/N	Product Name	Description
Arrays		
901753	GeneChip® miRNA 2.0 Array	2 Arrays
901754	GeneChip® miRNA 2.0 Array	6 Arrays
901755	GeneChip® miRNA 2.0 Array	30 Arrays
Supporting Products		
900301	Control Oligo B2, 3nM	Sufficient for 30 Reactions
900720	GeneChip® Hybridization, Wash, and Stain Kit ¹	Sufficient for 30 Reactions
900721	Wash Buffer A	800 mL
900722	Wash Buffer B	600 mL

¹ Each kit contains one (1) Hybridization Module, one (1) Stain Module, three (3) bottles of Wash Buffer A and one (1) bottle of Wash Buffer B, sufficient for 30 reactions. Individual kit components may be ordered separately.

Affymetrix® products can be purchased directly from Affymetrix in the United States, and many European and Asian countries. For all other territories, please view a list of our distribution partners, which can be located at: www.affymetrix.com/site/contact/index.affx.

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