


GeneChip™ PrimeView™ Human Gene Expression Array

Catalog Numbers 901837 and 901838

Doc. Part No. 703036 Pub. No. MAN0017681 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™ PrimeView™ Human Gene Expression Array is a single GeneChip™-brand array comprised of more than 530,000 probes covering over 36,000 transcripts and variants, which, in turn, represent more than 20,000 genes mapped through UniGene or via RefSeq annotation.

Sequences used in the design of the array were selected from the UniGene database 219 (build date March 30, 2009), RefSeq version 36 (13 July 2009) and full-length human mRNA's from GenBank™ (downloaded May 12, 2009).

The EST and mRNA sequences used in the design were clustered and assembled to create consensus sequences that represent alternative splice forms, and each assembly was then analyzed for orientation and alternative 3' end evidence. Content was chosen to cover ALL the well-annotated genes and transcripts from RefSeq v36 (the NM_ accession type), and, by leveraging all available EST and mRNA evidence that fall into the same clusters, to rigorously detect alternate 3' ends of those well-annotated genes. In addition, over 1,000 probe sets represent transcripts that have no official gene symbol in UniGene, but are based on predicted RefSeq sequences and UniGene clusters with good evidence of actual transcription (i.e., contain full-length mRNA's or multiple EST's that designate the same 3' end).

The majority of the content (over 43,000 probe sets) directly covers RefSeq "NM_" sequences with 11 probes per set, and the remainder of probe sets contain 9 probes. The array contains the exact same 100 normalization control probe sets as U133.

The oligonucleotide probes on the GeneChip™ PrimeView™ Human Gene Expression Array are synthesized *in situ* using our photolithographic process.

Visit our website for a list of supporting manuals for procedures regarding target preparation, target hybridization, washing, staining, and array scanning.

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.

Instrumentation and software required

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

Critical specifications

Item	Specification
Feature size	11 µm
Probes/sequence	9 to 11 Perfect Match probes
Hybridization controls	<i>bioB</i> , <i>bioC</i> , <i>bioD</i> , and <i>cre</i>
Poly-A controls	<i>dap</i> , <i>lys</i> , <i>phe</i> , <i>thr</i>
Normalization controls	100 probe sets
Housekeeping/control genes	GAPDH, β-Actin
Hybridization volume	130 µL
Library files	PrimeView
Fluidics script	FS450_0002

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.

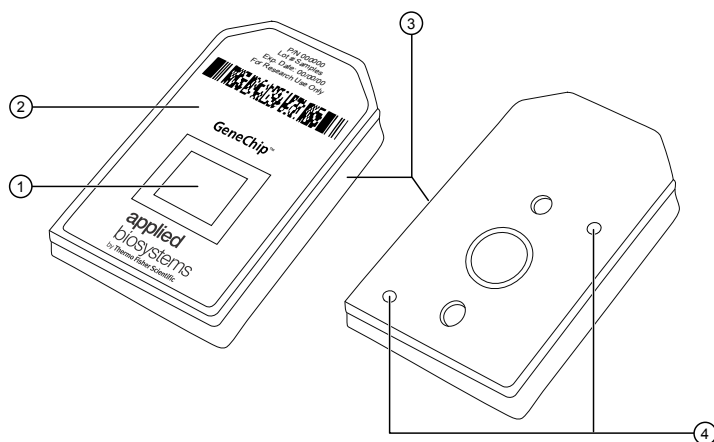


Fig. 1 Cartridge array.

- 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

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™ PrimeView™ Human Gene Expression Array	10 arrays	901837
	30 arrays	901838
Supporting products		
GeneChip™ 3' IVT PLUS Reagent Kit	10 reactions	902415
	30 reactions	902416
GeneChip™ Hybridization Control Kit	30 reactions	900454
	150 reactions	900457
GeneChip™ Control Oligo B2, 3 nM (included in the GeneChip™ Hybridization Control Kit)	30 reactions	900301
GeneChip™ Hybridization, Wash, and Stain Kit ^[1]	30 reactions	900720

^[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.

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Revision history: Pub. No. MAN0017681

Revision	Date	Description
A.0	22 April 2018	Initial release in Thermo Fisher Scientific document control system. Supersedes legacy Affymetrix publication number 703036. Updated to the current document template, with associated updates to trademarks, logos, licensing, and warranty.

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- 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.