


PrimeView™ Human Genome U219 Array Strip

Catalog Number 901613

Doc. Part No. 702886 Pub. No. MAN0017941 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™ PrimeView™ Human Genome U219 Array Strip is designed for low and medium-throughput microarray expression analysis and enables researchers to perform studies with minimum hands-on processing time per sample. Each array strip consists of four microarrays and is offered as a part of the automated solution including array strip hybridization, washing, staining, and scanning on the GeneAtlas™ System.

The HG-U219 Array Strips were designed with only Perfect Match (PM) probes. Sequences that are used in the design of the array strips 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 HG-U219 Array Strips contain more than 530,000 probes covering over 36,000 transcripts and variants, which in turn, represent more than 20,000 genes that are mapped through UniGene or via RefSeq annotation.

The EST and mRNA sequences that are 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 selected to cover ALL the well-annotated genes and transcripts from RefSeq v36 (the NM_ accession type), and, by using all available EST and mRNA evidence that fall into the same clusters, to 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 (that is, contain full-length mRNAs or multiple ESTs that designate the same 3' end).

Most 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 strips contain the exact same 100 normalization control probe sets as U133 Array.

Identical to the cartridge array manufacturing process, the oligonucleotide probes on PrimeView™ Human Genome U219 Array Strip are synthesized *in situ* using Thermo Fisher Scientific's photolithographic process.

See our website for a complete list of supporting documentation for procedures regarding target preparation, target hybridization, washing, staining, and scanning.

Critical specifications

Item	Specification
Feature size	8 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> , and <i>thr</i>
Normalization controls	100 probe sets
Housekeeping/control genes	GAPDH, β-Actin
Hybridization volume	120 µL
Library files	HG-U219

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

- GeneAtlas™ Hybridization, Wash, and Stain Kit for 3' IVT Arrays
- GeneChip™ 3' IVT PLUS Reagent Kit
- GeneAtlas™ System

Ordering information

Product name	Description	Cat. No.
PrimeView™ Human Genome U219 Array Strip ^[1]	1 array strip kit 4 arrays	901613
PrimeView™ Human Genome U219 Array Strip and GeneChip™ 3' IVT PLUS Reagent Kit Bundle	5 array strip kits 10 rxns	902496
GeneChip™ 3' IVT PLUS Reagent Kit	10 rxn Sufficient for 20 rxns on the GeneAtlas™ System	902415
GeneAtlas™ Hybridization, Wash, and Stain Kit for 3' IVT Arrays	60 rxns	901531

^[1] Each Array Strip Kit contains: 1 Array Strip, 3 Hybridization Trays, 1 Imaging Tray, 1 Wash A Tray and 1 Wash B Tray for the GeneAtlas™ System

Storage, handling, and stability

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

When handling the array strip

Always remove the array strip from the pouch with gloved hands using caution not to damage or scratch the array surface.

Array strip consumables

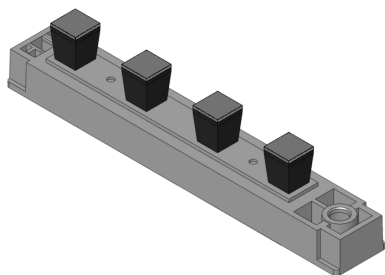


Fig. 1 Array strip.

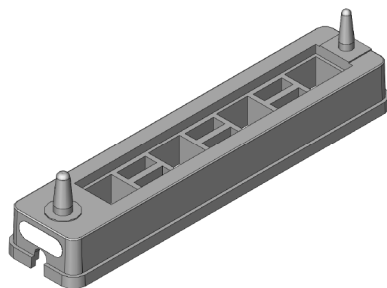


Fig. 4 GeneAtlas™ imaging tray.

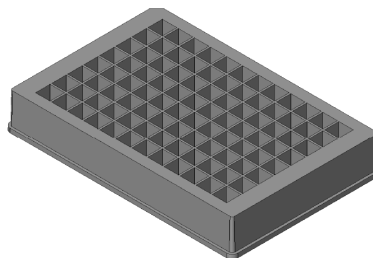


Fig. 5 GeneAtlas™ wash A and stain tray.

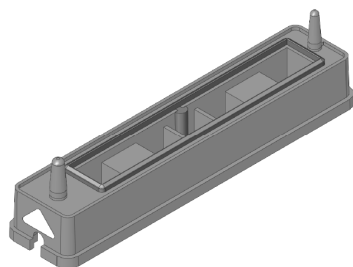


Fig. 2 GeneAtlas™ hybridization tray.

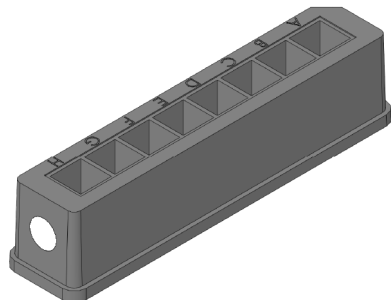


Fig. 3 GeneAtlas™ wash B tray.

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 history: Pub. No. MAN0017941

Revision	Date	Description
A.0	23 August 2018	Initial release in Thermo Fisher Scientific document control system. Supersedes legacy Affymetrix publication number 702886. Updated to the current document template, with associated updates to trademarks, logos, licensing, and warranty.

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