# GeneChip<sup>™</sup> RG-230 PM Array Strip

Catalog Number 901571

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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<sup>™</sup> GeneChip<sup>™</sup> RG-230 PM 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 our automated solution including array strip hybridization, washing, staining, and scanning on the GeneAtlas<sup>™</sup> System.

Each microarray on the GeneChip<sup>™</sup> RG-230 PM Array Strip contains the same number of probe sets as the industry-standard GeneChip<sup>™</sup> Rat Genome 230 2.0 Array 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 is found on the GeneChip<sup>™</sup> RG-230 PM Array Strip: Only Perfect Match (PM) probes from the cartridge design were retained while Mismatch (MM) probes were removed.

Sequences used in the design of the array were selected from GenBank<sup>™</sup>, dbEST, and RefSeq. The sequence clusters were created from the UniGene database (Build 99, June 2002) and then refined by analysis and comparison with the publicly available draft assembly of the rat genome from the Baylor College of Medicine Human Genome Sequencing Center (June 2002).

Identical to the cartridge array manufacturing process, the oligonucleotide probes on GeneChip<sup>™</sup> RG-230 PM Array Strip are synthesized *in situ* using our photolithographic process.

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

### Reagents, instrumentation, and software required

- GeneChip<sup>™</sup> 3' IVT Express Kit
- GeneAtlas<sup>™</sup> Hybridization, Wash, and Stain Kit for 3' IVT Array Strips
- GeneAtlas<sup>™</sup> System

## **Critical specifications**

ltem	Specifications
Feature size	8 µm
Probes/sequence	11 Perfect Match Probes
Hybridization controls	<i>bioB, bioC, bioD</i> , and <i>cre</i>
Poly-A controls	<i>dap, lys, phe</i> , and <i>thr</i>
Normalization controls	100 probe sets
Housekeeping/control genes	GAPDH, ß-Actin
Hybridization volume	120 μL

## 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.

## **Ordering information**

Unless otherwise indicated, all materials are available through **thermofisher.com**. MLS: Fisher Scientific (**fisherscientific.com**) or other major laboratory supplier.

Product name	Description	Cat. No.
GeneChip <sup>™</sup> RG-230 PM Array Strip Kit <sup>[1]</sup>	1 Array Strip Kit	901571
	4 arrays	
GeneChip <sup>™</sup> 3' IVT PLUS Reagent Kit	10 rxn	902415
	Sufficient for	
	20 rxns on the	
	GeneAtlas™	
	System	
GeneAtlas™ Hybridization, Wash, and Stain Kit for 3' IVT Array Strips	60 rxns	901531

 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<sup>™</sup> System.

## Storage, handling, and stability

The array strips should be stored at 2–8°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 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 (clear plastic).





Fig. 2 GeneAtlas™ hybridization tray (clear plastic).



#### Fig. 3 GeneAtlas™ wash B tray (clear plastic).

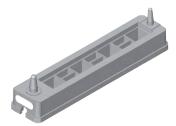


Fig. 4 GeneAtlas™ imaging tray (black plastic).

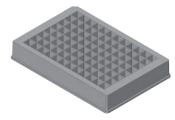


Fig. 5 GeneAtlas™ wash A and stain tray (clear plastic).

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#### Revision history: Pub. No. MAN0017691

Revision	Date	Description
A.0	30 April 2018	Initial release in Thermo Fisher Scientific document control system.
		Supersedes legacy Affymetrix publication number 702840.
		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-andconditions.html**. If you have any questions, please contact Life Technologies at **www.thermofisher.com/support**.



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