



GeneChip® Rat Toxicology U34 Array

Intended Use

The GeneChip® Rat Toxicology U34 Array allows one to monitor the relative abundance of greater than 850 genes from mRNA transcripts and EST clusters. These transcripts were selected from the UniGene Build 34 (created from GenBank® 107) and the dbEST (from 11/18/98) databases. We also include full length additions from GenBank 110 (1/21/99 and 2/19/99).

Oligonucleotide probes are synthesized on the arrays that are complementary to a portion of each gene or exemplar. Approximately 20 pairs of oligonucleotide probes are used to measure the transcript level of each of the gene and EST clusters.

All probe sets from the Rat Toxicology U34 Array are also represented on the GeneChip® Rat Genome U34A Array (P/N 510338).

GeneChip brand probe arrays are for research use only and not intended for use in diagnosis of disease. Please visit www.affymetrix.com for a complete list of supporting documentation including procedures regarding target preparation, target hybridization, fluidics station setup, probe array scan, and data analysis.

Instrumentation and Software Required

1. GeneChip® Scanner 3000
2. Affymetrix® GeneChip® Command Console® Software (AGCC)
3. GeneChip® Fluidics Station

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.

Critical Specifications	
Feature Size	24 µm
Probe Pairs/Sequence	~20
Array Format	169
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> , and <i>trp</i>
Housekeeping/Control Genes	<i>actin</i> , <i>GAPDH</i> , <i>hexokinase</i>
Fluidics Protocol	Mini_euk2v3 <i>Fluidics Station 450/250 scripts are designated by the suffix "_450"</i>
Hybridization Volume	80 µL. The total fill volume of the cartridge is 100 µL.
Library Files	RT_U34

Ordering Information

P/N	Product Name	Description
Arrays		
510330	GeneChip® Rat Toxicology U34 Array	160 ± 5 Arrays
The GeneChip Rat Toxicology U34 Array is part of the Made-to-Order Program. Made-to-Order Arrays are ordered in whole lots. The lot size for the GeneChip Rat Toxicology U34 Array is 160 ± 5 arrays.		
Supporting Products		
901228	GeneChip® 3' IVT Express Kit	Sufficient for 10 Reactions
901229		Sufficient for 30 Reactions
900720	GeneChip® Hybridization, Wash, and Stain Kit ¹	Sufficient for 30 Reactions

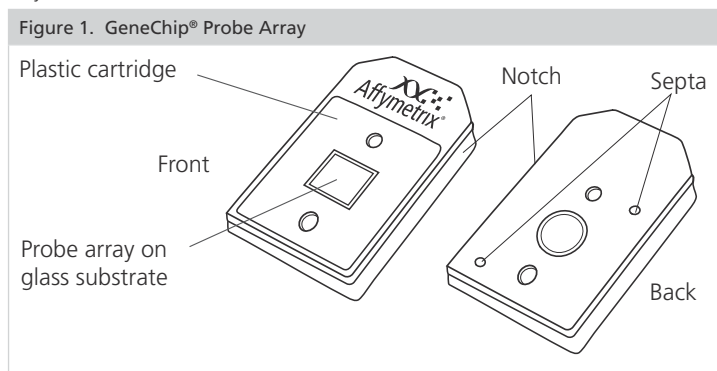
1. Each kit contains one (1) Hybridization Module, one (1) Stain Module, three (3) bottles of Wash Buffer A and one (1) bottle of Wash Buffer B, sufficient for 30 reactions. Individual kit components may be ordered separately.

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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.

Contact Information

Affymetrix, Inc.

3420 Central Expressway
Santa Clara, CA 95051 USA
E-mail: support@affymetrix.com
Tel: 1-888-362-2447 (1-888-DNA-CHIP)
Fax: 1-408-731-5441

Affymetrix UK Ltd

Voyager, Mercury Park,
Wycombe Lane, Wooburn Green,
High Wycombe HP10 0HH
United Kingdom
E-mail: supporteurope@affymetrix.com
UK and Others Tel: +44 (0) 1628 552550
France Tel: 0800919505
Germany Tel: 01803001334
Fax: +44 (0) 1628 552585

Affymetrix Japan, K. K.

Mita NN Bldg, 16 Floor
4-1-23 Shiba, Minato-ku
Tokyo 108-0014, Japan
E-mail: supportjapan@affymetrix.com
Tel: +81-(0)3-5730-8200
Fax: +81-(0)3-5730-8201

Please visit our web site for international distributor contact information.
www.affymetrix.com

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