The GeneChip® Human Genome U95 Set contains extensive transcript coverage of the human genome, enabling you to study the expression level of more than 60,000 human genes and ESTs using quantitative microarray technology.

Applications
The GeneChip® Human Genome U95 Set is a powerful tool for the analysis of human cells or tissues.

**DEFINE RELATIONSHIPS BETWEEN KNOWN GENES**
The first array in the set, the Human Genome U95Av2 Array (HG-U95Av2), contains primarily full-length genes. This single array represents ~12,000 sequences previously characterized in terms of function or disease association. This array can help you identify gene associations in a particular cell type or tissue, define key players in signaling pathways, and address many other exciting experimental questions.

**DISCOVER & DEFINE GENE FUNCTION**
Arrays B, C, D, and E of the Human Genome U95 Set (HG-U95B, HG-U95C, HG-U95D, and HG-U95E) contain probes interrogating ~50,000 clusters comprised solely of EST sequences. Arrays B, C, D, and E are available through the GeneChip Made-to-Order Program in whole-lot increments of 80 ±10 arrays. Use these arrays to discover gene function for undefined and uncharacterized gene sequences represented as expressed sequence tags (ESTs).

**BUILD QUANTITATIVE DATABASES**
GeneChip expression arrays allow for highly parallel, reproducible quantitation of gene expression levels. The GeneChip Human Genome U95 Set is an ideal tool for developing robust human expression databases.

Data Sets Profiled
The GeneChip Human Genome U95 Set is composed of five arrays and represents more than 60,000 full-length genes and EST clusters. Represented sequences are derived from sequence clusters in Build 95 of the UniGene database (sequences in UniGene Build 95 are from GenBank 113 and dbEST/10-02-99). UniGene clusters are represented by one or more consensus sequences derived directly from cluster members.

**RELATION TO OTHER GENECHIP® HUMAN EXPRESSION ARRAYS**
The GeneChip Human Genome U95 Set was the first major revision to the GeneChip human genome expression product line. This set of arrays was designed to include the genes represented on first-generation products, as well as sequence information available in the UniGene database, Build 95. All sequences represented on the GeneChip HuGeneFL Array are also represented on the HG-U95Av2 Array. Sequences represented on the GeneChip Hu35K Set are represented on the HG-U95B and HG-U95C Arrays. Due to the dynamic nature of public databases, probe sets for these sequences will not be identical, and in some cases, will be represented by a completely new probe set. As a result, data generated with different versions of the human arrays may not produce concordant results. Please contact Affymetrix technical support at 1-888-DNA-CHIP for more information.
**Critical Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Number of arrays in set</td>
<td>Five**</td>
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<tr>
<td>Array format</td>
<td>Standard format</td>
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<tr>
<td>Feature size</td>
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<td>Oligonucleotide probe length</td>
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<td>Probe pairs/sequence</td>
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<td>Detection sensitivity</td>
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<td>Control sequences included:</td>
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<td>Hybridization controls:</td>
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<td>Poly-A controls:</td>
<td>dap, lys, phe, thr and trp</td>
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<tr>
<td>Housekeeping/Control genes:</td>
<td>GAPDH, beta-Actin, Transferrin receptor and ISGF-3</td>
</tr>
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</table>

*As measured by detection in a comparative analysis between a complex target containing spiked control transcripts and a complex target with no spikes.

**Ordering Information**

**Human Genome U95 Set**

*GeneChip® Human Genome U95Av2*

**900303** Contains 5 *GeneChip® Human Genome U95Av2 Arrays***

**900304** Contains 30 *GeneChip® Human Genome U95Av2 Arrays***

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