

GeneChip® HT 3' IVT Express Kit

P/N 901253 (96-Reaction Format)
P/N 901225 (4 x 24-Reaction Format)

Manufactured for Affymetrix, Inc., by Ambion, Inc.

Introduction

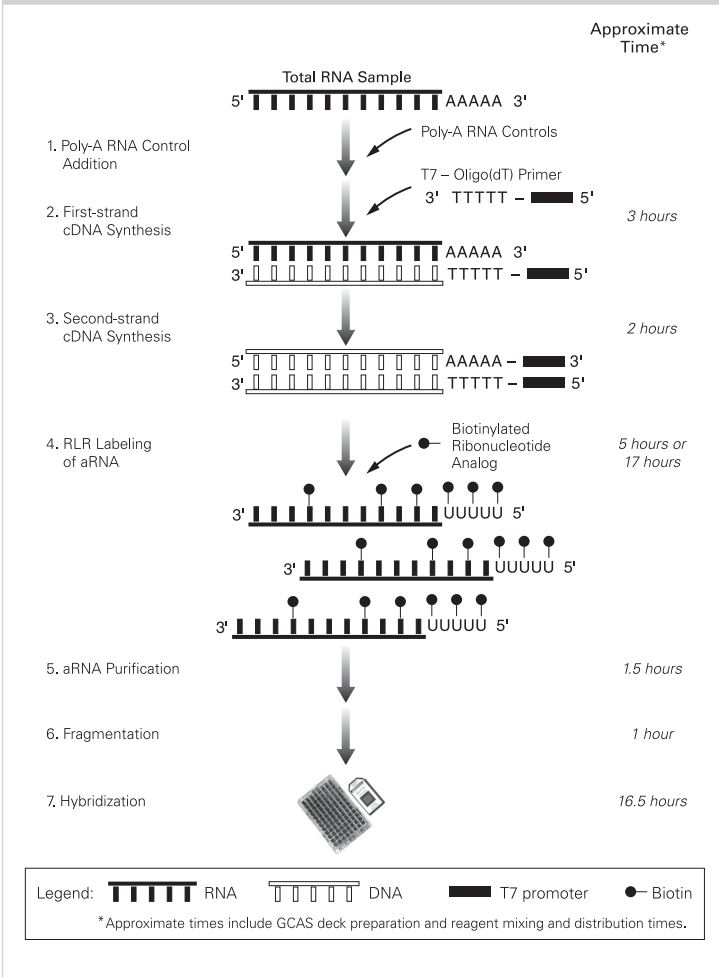
The GeneChip® HT 3' IVT Express Kit is the latest technology in RNA target preparation for microarray expression analysis. This kit features:

- Low RNA input requirements – from as little as 100 ng of total RNA for a single round of amplification.
- Streamlined workflow with the option to decrease target labeling time with appropriate inputs of total RNA.
- Master mixes and a simple protocol for ease of use, convenience and a high rate of success.
- A complete kit that includes Poly-A RNA controls and hybridization controls.

The GeneChip HT 3' IVT Express Kit is offered in two convenient configurations and generates target that can be hybridized to both cartridges and plates. There is a 96-reaction format, and a 4 x 24-reaction format. The 4 x 24-reaction format contains sufficient reagents for four separate runs of 24 samples each- the reagents are filled in separate tubes to remove freeze-thaw cycle impact. The 96-reaction format contains sufficient reagents for a single run of 96 samples. Please refer to www.affymetrix.com for a complete list of other automation providers supporting this assay.

Figure 1 depicts an overview of the GeneChip® HT 3' IVT Express Assay. Total RNA undergoes reverse transcription to synthesize first-strand cDNA. This cDNA is converted to double-stranded cDNA template during second-strand cDNA synthesis. *In vitro* transcription synthesizes aRNA that is then biotin incorporated and purified. Fragmentation of the biotin-labeled aRNA prepares the sample for hybridization onto GeneChip 3' expression arrays and plates. Detailed information is contained within the *GeneChip® HT 3' IVT Express Kit User Manual*, which can be found at www.affymetrix.com.

Figure 1. GeneChip® HT 3' IVT Express Labeling Assay



Kit Components

Table 1. GeneChip® HT 3' IVT Express Kit Components

| Component | 96 Rxn Format | 4 x 24 Rxn Format |
|--|-----------------|-------------------|
| Box 1 of 2 (See individual components for storage conditions) | | |
| aRNA Binding Buffer Concentrate | 7.2 mL | 1.8 mL, 4/box |
| RNA Binding Beads | 1.44 mL | 360 µL, 4/box |
| aRNA Wash Solution Concentrate | 25 mL | 7.5 mL, 4/box |
| aRNA Elution Solution | 20 mL | 5 mL, 4/box |
| 5X Array Fragmentation Buffer | 1.8 mL | 1.8 mL, 4/box |
| Box 2 of 2 (Store at -20°C) | | |
| First Strand Buffer Mix | 541 µL | 167 µL, 4/box |
| First Strand Enzyme Mix | 143 µL | 49 µL, 4/box |
| Second Strand Buffer Mix | 644 µL | 176 µL, 4/box |
| Second Strand Enzyme Mix | 264 µL | 76 µL, 4/box |
| IVT Labeling Buffer | 1,266 µL, 2/box | 661 µL, 4/box |
| IVT Enzyme Mix | 771 µL | 209 µL, 4/box |
| IVT Biotin Label | 517 µL | 143 µL, 4/box |
| Control RNA | 10 µL | 10 µL |
| Poly-A Control Stock | 16 µL | 16 µL |
| Poly-A Control Dilution Buffer | 3.8 mL | 3.8 mL |
| 20X Hybridization Controls | 1,125 µL, 2/box | 1,125 µL, 2/box |
| Control OligoB2 | 750 µL | 750 µL |

Ordering Information

Table 2. GeneChip® HT 3' IVT Express Labeling Assay Product Ordering

| P/N | Component | Size |
|------------------|--|--|
| 901253 901225 | GeneChip® HT 3' IVT Express Kit | 96 Reactions 4 x 24 Reactions |
| 900720 | GeneChip® Hybridization, Wash and Stain Kit | 30 Reactions |
| 901530 | GeneTitan® Hybridization, Wash and Stain Kit for 3' IVT Arrays | 96 Reactions |
| 901583 | GeneTitan® Wash Buffers A & B Module | Wash Buffer A = 1,045 mL Wash Buffer B = 450 mL |

Table 3. Other Products Bundled with the GeneChip® HT 3' IVT Express Kit

| P/N | Component | Size |
|--------|---|--------------|
| 901265 | GeneChip® HT HG-U133+ PM and GeneChip® HT 3'IVT Express Kit | 96 Reactions |
| 901266 | GeneChip® HT MG-430 PM and GeneChip® HT 3'IVT Express Kit | 96 Reactions |
| 901264 | GeneChip® HT RG-230 PM and GeneChip® HT 3'IVT Express Kit | 96 Reactions |

Affymetrix® products can be purchased directly from Affymetrix in the United States, and many European and Asian countries. For all other territories, please view a list of our distribution partners, which is located at: www.affymetrix.com/site/contact/index.affx.

Storage, Handling and Stability

The components of the GeneChip HT 3' IVT Express Kit are separated into two boxes with each box requiring separate storage conditions:

- Box 1 of 2 – please see individual components for storage conditions.
- Box 2 of 2 – must be kept at –20°C in a frost-free freezer.

Safety Information

A Material Safety Data Sheet(s) (MSDS) is available at www.affymetrix.com. The MSDS(s) are sent only on the first shipment, unless a substantial revision occurs. If the product is a kit or is supplied with more than one material, please refer to the MSDS for each component for hazard information.

Functional Testing

Every lot is rigorously tested for performance.

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.

ORIX Hamamatsucho Bldg, 7F
1-24-8 Hamamatsucho, Minato-ku
Tokyo 105-0013 Japan
E-mail: supportjapan@affymetrix.com
Tel: +81-3-6430-4020
Fax: +81-3-6430-4021

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

Limited License

Subject to the Affymetrix terms and conditions that govern your use of Affymetrix products, Affymetrix grants you a non-exclusive, non-transferable, non-sublicensable license to use this Affymetrix product only in accordance with the manual and written instructions provided by Affymetrix. You understand and agree that except as expressly set forth in the Affymetrix terms and conditions, that no right or license to any patent or other intellectual property owned or licensable by Affymetrix is conveyed or implied by this Affymetrix product. In particular, no right or license is conveyed or implied to use this Affymetrix product in combination with a product not provided, licensed or specifically recommended by Affymetrix for such use.

Patents

Use of this kit in accordance with these instructions in preparing targets for GeneChip® probe arrays may be covered by U.S. patent numbers 5,545,522; 5,716,785; 5,891,636 and 6,291,170. Those who do not use this kit to prepare targets for GeneChip® probe arrays may be required to obtain a license under these patents. Products may be covered by U.S. Patent No. 6,864,059.

Trademarks

Affymetrix®, GeneChip®, NetAffx®, Command Console®, GeneTitan®, DMET™, Powered by Affymetrix™, GeneChip-compatible™, Genotyping Console™, Axiom™, and GeneAtlas™ are trademarks or registered trademarks of Affymetrix, Inc. All other trademarks are the property of their respective owners.

Copyright

© 2008-2010 Affymetrix, Inc. All rights reserved.