appliedbiosystems

Package Insert

GeneAtlas™ Hybridization, Wash, and Stain Kit for WT Array Strips

60 Reactions

Intended Use

This package insert provides information for the GeneAtlas™ Hybridization, Wash, and Stain Kit for WT Array Strips (P/N 901667). The kit is composed of two boxes:

- P/N 901668: GeneAtlas™ Hybridization Module for WT Array Strips – sufficient for 60 reactions.
- P/N 901625: GeneAtlas™ Wash Buffers A and B Module – sufficient for 60 array strips.

The GeneAtlas™ Hybridization, Wash, and Stain Kit for WT Array Strips includes all the necessary reagents for the hybridization, wash, and stain steps of the Ambion WT Expression Kit and GeneChip WT Terminal Labeling and Controls Kit using the Whole Transcript (WT) Array Strips.

Module Components

Component	Volume	Storage
GeneAtlas™ Hybridization Module for WT Array Strips (P/N 901668)		
5X WT Hyb Add 1 (P/N 901618)	3 x 925 µL	2°C to 8°C
15X WT Hyb Add 4 (P/N 901619)	3 x 355 µL	2°C to 8°C
2.5X WT Hyb Add 6 (P/N 901620)	3 x 1,525 µL	2°C to 8°C
Stain Cocktail 1 (P/N 901541)	52.5 mL	2°C to 8°C
Stain Cocktail 2 (P/N 901542)	26.3 mL	2°C to 8°C
Array Holding Buffer (P/N 901543)	15 mL	2°C to 8°C
GeneAtlas™ Wash Buffers A & B Module (P/N 901625)		
Wash Buffer A	519 mL	2°C to 8°C
Wash Buffer B	64 mL	2°C to 8°C

Note: The "WT Hyb Add" reagent names were created to match the order in which reagents are added. For example, WT Hyb Add 4 is the fourth component added during preparation of the Hybridization Mix. WT Hyb Add 2, 3 and 5 are not used and are not part of the Hybridization Modules.

Shipping Information

The components of the GeneAtlas™ Hybridization, Wash, and Stain Kit are shipped at different temperatures. The GeneAtlas™ Hybridization Module for WT Array Strips (P/N 901668) will be sent at 2°C to 8°C. The GeneAtlas™ Wash Buffers A & B Module (P/N 901625) will be sent at ambient temperature.

Safety Information

Warning! P/N 901668 contains Tetramethylammonium chloride (TMACl) and formamide, both of which are considered highly toxic. P/N 901668 contains Sodium Azide. May react with lead and copper plumbing to form highly explosive metal azides. A Material Safety Data Sheet(s) (MSDS) is available at our web site. 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

Each lot of reagents is rigorously tested for performance.

Ordering Information

P/N	Product Name	Description/Size
901667	GeneAtlas™ Hybridization, Wash, and Stain Kit for WT Array Strips	60 Rxn
Related Products		
4411973	Ambion™ WT Expression Kit	10 Rxns
900670	GeneChip™ WT Terminal Labeling Kit	10 Rxns

Hybridization Cocktail Preparation Instructions for Processing Gene 1.1 ST Array Strips using the GeneAtlas™ Instrument and the WT Assay

Quick Reference Guide

The Hybridization Mix described in this Quick Reference Guide was specifically formulated for use with the Ambion WT Expression Kit and the GeneChip WT Terminal Labeling and Controls Kit.

Note: The "WT Hyb Add" reagent names were created to match the order in which reagents are added. For example, WT Hyb Add 4 is the fourth component added during preparation of the Hybridization Mix. WT Hyb Add 2, 3 and 5 are not used and are not part of the Hybridization Modules.

1. Remove the vials labeled **5X WT Hyb Add 1, 15X WT Hyb Add 4 and 2.5X WT Hyb Add 6** from the GeneAtlas Hybridization Module for WT Array Strips, P/N 901668.
   a. Warm reagents to room temperature on the bench.
   b. Vortex the **5X WT Hyb Add 1, 15X WT Hyb Add 4** and **2.5X WT Hyb Add 6** to mix Centrifuge briefly (~5 sec) to collect liquid at the bottom of the tube.
2. Remove the GeneChip™ Hybridization Control Kit from –20°C freezer and thaw at room temperature.
   a. Vortex and centrifuge briefly (~5 sec) to collect liquid at the bottom of the tube.
   b. Keep on ice.
3. **WT Hybridization Master Mix**: A new hybridization mix has been formulated for the Ambion WT Expression Kit and the GeneChip™ WT Terminal Labeling and Controls Kit.
   a. Prepare the WT Hybridization Master Mix in the order as shown in Table 1. The **5X WT Hyb Add 1** solution is very viscous, pipet slowly to ensure addition of the correct volume. Mix well.

Table 1

Order to Add Reagents	Component	Volume per Array	4-Array Strip*	Final Concentration
1	5X WT Hyb Add 1	30 µL	132 µL	1X
2	Control Oligonucleotide B2 (3 nM)	1.5 µL	6.6 µL	30 pM
3	20X Eukaryotic Hybridization Controls (*bioB*, *bioC*, *bioD*, *cre*)	7.5 µL	33 µL	1.5, 5, 25 and 100 pM, respectively
4	15X WT Hyb Add 4	10 µL	44 µL	1X
Total Volume		**49 µL**	**215.6 µL**	

**Includes ~ 10% overage to cover pipetting error.*

   b. Aliquot 49 µL of the master mix prepared in Table 1 to each tube or well. Add the fragmented and labeled single-stranded DNA target generated from the *GeneAtlas™ WT Expression Kit User Manual* (P/N 702935) as shown in Table 2.

Table 2

Order to Add Reagents	Component	Volume per Array	Final Concentration
5	Fragmented and Labeled DNA	41 µL	~25 ng/µL
Total Volume		**90 µL**	

   c. Add the **2.5X WT Hyb Add 6** from the GeneAtlas Hybridization Module for WT Array Strips as shown in Table 3.

Table 3

Order to Add Reagents	Component	Volume per Array	Final Concentration
6	2.5X WT Hyb Add 6	60 µL	1X
Total Volume		**150 µL**	

   d. If you are using a plate: seal, vortex and centrifuge briefly (~5 sec) to collect liquid at the bottom of the well. If you are using 1.5 mL tubes: vortex and centrifuge briefly (~5 sec) to collect liquid at the bottom of the tube.
4. Denature the hybridization cocktail with target at 99°C (1.5 mL tubes) or 95°C (thermocycler plates) for 5 minutes, followed by 45°C for 5 minutes.

5. After denaturation, spin hybridization cocktail with target in a centrifuge to remove any insoluble material from the hybridization mixture. If you are using 1.5 mL tubes, use an Eppendorf 5417C centrifuge (or equivalent). If you are using thermocycler plates, use an Eppendorf 5804R centrifuge (or equivalent). Spin tubes or plates for 1 minute at 5000 RPM at room temperature.
6. Place 120 µL of the centrifuged supernatant hybridization cocktail with target into the appropriate well of the hybridization tray.
7. Refer to the *GeneAtlas™ System User's Guide* (P/N 08-0306) for details on the GeneAtlas™ hybridization setup.

Documentation and support

Customer and technical support

Visit thermofisher.com/support for the latest in services and support, including:

- Worldwide contact telephone numbers
- Product support, including:
  - Product FAQs
  - Software, patches, and updates
- 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-and-conditions.html. If you have any questions, please contact Life Technologies at thermofisher.com/support.

Corporate entity: Life Technologies | Carlsbad, CA 92008 USA | Toll Free in USA 1.800.955.6288

P/N 702939

For support visit **thermofisher.com/support** or email **techsupport@lifetech.com**

thermofisher.com

23 January 2017

ThermoFisher SCIENTIFIC