

# GeneChip® Hybridization, Wash, and Stain Kit

30 Reactions

## Intended Use

This package insert provides information for the following products:

- GeneChip® Hybridization, Wash, and Stain Kit (P/N 900720)\*
  - P/N 900720-C: Hybridization and Stain Modules
  - P/N 900720-A: Wash Buffers A and B
- GeneChip® Wash Buffer A (P/N 900721)
- GeneChip® Wash Buffer B (P/N 900722)

The GeneChip Hybridization, Wash, and Stain Kit includes all the necessary solutions for processing the following GeneChip® brand arrays:

- GeneChip® 3' Eukaryotic Arrays in cartridge format
- GeneChip® Prokaryotic Arrays in cartridge format
- GeneChip® Exon Arrays in cartridge format
- GeneChip® Tiling Arrays in cartridge format
- GeneChip® Gene 1.0 ST Arrays

*\*The GeneChip Hybridization, Wash, and Stain Kit (P/N 900720) consists of P/N 900720-A and 900720-C. Part Numbers 900720-A and 900720-C are not available for purchase separately.*

## Introduction

During the laboratory procedure for various GeneChip® target labeling assays, biotin-labeled RNA or DNA fragments (referred to as the “target”) are generated. After target preparation, arrays are processed in preparation for scanning. A hybridization cocktail is prepared including the labeled, fragmented target and hybridization controls. The target is then hybridized to the GeneChip array in cartridge format during a 16-hour incubation. Immediately following hybridization, the array is washed and stained with streptavidin phycoerythrin conjugate using an automated protocol on the GeneChip® Fluidics Station 450, followed by scanning on a GeneChip® Scanner .

The GeneChip Hybridization, Wash, and Stain Kit includes pre-formulated solutions to process 30 arrays on the Fluidics Station. For convenience, reagents necessary for each step of the hybridization, wash, and stain procedure are packaged as separate modules. The kit includes two boxes, and the modules are divided between the boxes as follows. P/N 900720-C contains the Hybridization and Stain Modules. The Hybridization Module includes the solutions required for pre-hybridization of certain GeneChip arrays and preparation of the hybridization cocktail containing the target. The Stain Module includes Stain Cocktails 1 and 2, and Array Holding Buffer. These solutions are used during the processing of the arrays in the GeneChip Fluidics Station. P/N 900720-A includes Wash Buffer A and Wash Buffer B, also required for the processing of the arrays in the Fluidics Station. Additional bottles of Wash Buffers A and B are also available for purchase individually.

The GeneChip Hybridization, Wash, and Stain Kit reagents are formulated into the fewest number of individual components possible, reducing preparation and handling steps. The Pre-Hybridization Mix, Stain Cocktails 1 and 2, Array Holding Buffer, and Wash Buffers A and B are ready-to-use solutions. The hybridization cocktail is prepared by combining the 2X Hybridization Mix, DMSO, and Nuclease-free Water with the target prepared by the user during the specific GeneChip target labeling assay.

**NOTE:** Hybridization controls are required and must be purchased separately. The GeneChip® Hybridization Control Kit includes the Control Oligonucleotide B2. The Control Oligonucleotide B2 is also available for individual purchase.

## Protocol Information

**IMPORTANT:** Specific protocols and Fluidics Scripts are required for various GeneChip array applications when using the GeneChip Hybridization, Wash, and Stain Kit. Please refer to [www.affymetrix.com](http://www.affymetrix.com) for a list of supporting manuals, protocols, and additional information on the appropriate Fluidics Scripts for use with this kit.

## Kit Components

Component	Volume
<b>P/N 900720-C</b>	
<b>HYBRIDIZATION MODULE</b>	
Pre-Hybridization Mix	6 mL
2X Hybridization Mix	4.5 mL
DMSO	0.9 mL
Nuclease-free water	4 mL
<b>STAIN MODULE</b>	
Stain Cocktail 1	18 mL
Stain Cocktail 2	18 mL
Array Holding Buffer	30 mL
<b>P/N 900720-A</b>	
Wash Buffer A	3 bottles, 800 mL/bottle
Wash Buffer B	1 bottle, 600 mL/bottle

## Ordering Information

P/N	Product Name	Description/Size
900720	GeneChip® Hybridization, Wash, and Stain Kit <sup>1</sup>	30 Reactions
900721	GeneChip® Wash Buffer A <sup>2</sup>	800 mL
900722	GeneChip® Wash Buffer B <sup>2</sup>	600 mL
900454	GeneChip® Hybridization Control Kit	30 Reactions
900457		150 Reactions
900301	GeneChip® Control Oligo B2, 3 nM	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.
2. Wash Buffer A and Wash Buffer B are available for purchase individually.

Additional Affymetrix® reagents are available for purchase separately. Please refer to [www.affymetrix.com](http://www.affymetrix.com) for related product ordering information.

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

## Storage

The GeneChip® Hybridization, Wash, and Stain Kit should be kept at 4°C.

**NOTE:** DMSO will solidify when stored at 4°C. Please ensure that the reagent is completely thawed prior to use. After the first use, it is recommended to store DMSO at room temperature.

## Functional Testing

Each lot of reagents is rigorously tested for performance.

## Safety Information

**WARNING!** 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 [www.affymetrix.com](http://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.

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