


GeneChip™ Hybridization, Wash, and Stain Kit

Catalog Numbers 900720

Pub. No. 701970 Rev. 7

 **WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from thermofisher.com/support.

Product use

This package insert provides information for the following products:

- GeneChip™ Hybridization, Wash, and Stain Kit (Cat. No. 900720)^[1] This kit consists of:
 - Part No. 900720-C: Hybridization and Stain Modules
 - Cat. No. 900721: GeneChip™ Wash Buffer A
 - Cat. No. 900722: GeneChip™ Wash Buffer B
- GeneChip™ Wash Buffer A (Cat. No. 900721)
- GeneChip™ Wash Buffer B (Cat. No. 900722)

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

- GeneChip™ Human Transcriptome Arrays 2.0
- GeneChip™ Gene ST Arrays in cartridge format
- GeneChip™ Exon ST Arrays in cartridge format
- GeneChip™ 3' IVT Arrays in cartridge format
- GeneChip™ Tiling Arrays in cartridge format
- GeneChip™ Promoter Arrays in cartridge format

Introduction

During the laboratory procedure for various GeneChip™ target labeling assays, biotin-labeled RNA or DNA fragments (known 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.

^[1] The GeneChip™ Hybridization, Wash, and Stain Kit (Cat. No. 900720) consists of Part No. 900720-C, and Cat. No. 900721 and 900722. Part Number 900720-C is not available for purchase separately.

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. Part No. 900720-C contains the Hybridization and Stain Modules. The Hybridization Module includes the solutions that are required for pre-hybridization of specific 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 Fluidics Station. GeneChip™ Wash Buffer A (Cat. No. 900721) and GeneChip™ Wash Buffer B (Cat. No. 900722) are required for processing of the arrays on the Fluidics Station. Additional bottles of Wash Buffers A and B are 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 during the specific GeneChip™ target labeling assay.

Note: Hybridization controls are required and must be bought separately. The GeneChip™ Hybridization, Wash, and Stain Kit includes the Control Oligonucleotide B2. The Control Oligonucleotide B2 is also available for individual purchase.

Instructions for use

Specific protocols and Fluidics Scripts are required for various GeneChip™ array applications when using the GeneChip™ Hybridization, Wash, and Stain Kit. See thermofisher.com for a list of supporting manuals, protocols, and additional information on the appropriate Fluidics Scripts for use with this kit.

Kit components

Part No./Cat. No.	Component	Volume
Part. No. 900720-C	Hybridization Module	
	Pre-Hybridization Mix	6 mL
	2X Hybridization Mix	4.5 mL
	DMSO	0.9 mL
	Nuclease-Free Water	4 mL
	Stain Module	
	Stain Cocktail 1	18 mL
Stain Cocktail 2	18 mL	
Array Holding Buffer	30 mL	
Cat. No. 900721	Wash Buffer A	3 bottles, 800 mL/bottle
Cat. No. 900722	Wash Buffer B	1 bottle, 600 mL/bottle

Ordering information

Cat. No.	Product name	Description
900720	GeneChip™ Hybridization, Wash, and Stain Kit ^[1]	30 reactions
900721	GeneChip™ Wash Buffer A	800 mL
900722	GeneChip™ Wash Buffer B	600 mL
900454	GeneChip™ Hybridization Control Kit	30 reactions
900457	GeneChip™ Hybridization Control Kit	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.

Storage

The GeneChip™ Hybridization, Wash, and Stain Kit must be kept at 4°C.


Note: DMSO solidifies when stored at 4°C. Ensure that the reagent is thawed before use. After the first use, it is recommended to store DMSO at room temperature.

Functional testing

Every lot is rigorously tested for performance.

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 www.thermofisher.com/support.

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Revision	Date	Description
7	02 August 2017	Updated document to current template.
6	05 Nov 2013	Baseline for revision history.

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