


CytoScan™ Reagent Kit

Catalog Number 901808

Pub. No. 703033 Rev. 5

 **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.

Introduction

In the recent years, Chromosomal Microarray Analysis (CMA) has been adopted as the technology of choice to study chromosomal aberrations and their impact on human disease. CytoScan™ Cytogenetics Suite is the unrivaled standard in CMA due to its high-density probes, high resolution and future-proof design. These attributes allow the reliable detection of submicroscopic copy number changes and copy-neutral events across the genome. CytoScan™ Reagent Kit (Cat. No. 901808) is part of CytoScan Cytogenetics Suite. CytoScan Reagent Kit is used in conjunction with CytoScan™ Amplification Kit (Cat. No. 902975) and CytoScan™ HD Array Kit (Cat. No. 901833) or CytoScan™ 750K Array Kit (Cat. No. 901858) to run the CytoScan Assay.

Instructions for use

Please refer to the *CytoScan™ Assay User Guide* (Pub. No. 703323) or the *CytoScan™ Assay Automated Target Preparation on Affymetrix™ NIMBUS® User Guide* (Pub. No. 703330) for procedures on DNA target preparation, target hybridization, fluidics setup, array scanning, and data analysis instructions.

Storage, handling, and stability

The reagents contained in the CytoScan Reagent Kit are shipped at different temperatures and should be stored at the recommended condition.

The following should be stored at –25°C to –15°C:

- The CytoScan™ Module 1: Pre-Lab Restriction and Ligation as well as the CytoScan™ Module 3: Post-Lab Fragmentation, Labeling and Hybridization.

The following should be stored at 2°C to 8°C:

- The CytoScan™ Module 2: Pre-Lab TE Buffer and Water as well as the CytoScan™ Module 4: Post-Lab Stain, Holding Buffer, Beads and Water.

The following should be stored at 15°C to 30°C:

- The CytoScan™ Module 5: Post-Lab Elution Buffer and Purification Wash Buffer as well as the Wash Buffers A and B.

Refer to the expiration date on the package label. Do not use reagent components after the expiration date.

IMPORTANT! The reagent kits are separated into modules to support the recommended workflow and minimize the chance of contamination during use. Store the unopened kits and modules in rooms appropriate to the workflow.

Kit contents and storage

Cap color	Component	Part No.	Storage
	CytoScan™ Module 1: Pre-Lab Restriction and Ligation	904004	–25°C to –15°C
●	Nsp I	901718	
●	Nsp I Buffer	901719	
●	100X BSA	901720	
●	Adaptor, Nsp I	902702	
●	DNA Ligase buffer	901722	
●	DNA Ligase	901723	
○	REF DNA 103 (50 ng/μL)	900421	
○	PCR Primer	902674	
	CytoScan™ Module 2: Pre-Lab TE Buffer and Water	904001	2°C to 8°C
●	Low EDTA TE Buffer	902979	
●	Water, Nuclease-Free	902976	
	CytoScan™ Module 3: Post-Lab Fragmentation, Labeling and Hybridization	904002	–25°C to –15°C
●	Fragmentation Reagent	902428	
●	Fragmentation Buffer	903001	
●	TdT Enzyme	902675	
●	TdT Buffer	902676	
●	DNA Labeling Reagent	902677	
●	Oligo Control Reagent	902678	
●	Hyb. Buffer Part 1	901725	
●	Hyb. Buffer Part 2	901726	
●	Hyb. Buffer Part 3	901727	
●	Hyb. Buffer Part 4	901728	
	CytoScan™ Module 4: Post-Lab Stain, Holding Buffer, Beads and Water	904005	2°C to 8°C
●	Stain Buffer 1	901751	
●	Stain Buffer 2	901752	
●	Array Holding Buffer	901733	
○	Purification Beads	901807	
○	Water, Nuclease-Free	901781	
	CytoScan™ Module 5: Post-Lab Elution Buffer and Purification Wash Buffer	903000	15°C to 30°C
○	Elution Buffer	901738	
○	Purification Wash Buffer	901372	
○	Wash A	901680	15°C to 30°C
○	Wash B	901681	

Safety information

Caution:

The TdT Buffer contains cacodylic acid. **DANGER: Harmful if swallowed may cause cancer**  

The Hyb Buffer Part 1 contains Tetramethylammonium Chloride (TMAC). **Warning: Toxic if swallowed** 

The Stain Buffer 1, Stain Buffer 2, and Array Holding Buffer contain $\leq 0.1\%$ Sodium Azide.

The Nsp I Enzyme, 100X BSA, DNA Ligase, TDT Enzyme, and Fragmentation Reagent contain Glycerol. **Irritant**

Precautions

IMPORTANT! The CytoScan Reagent Kit contains active enzymes. The following precautions are recommended to ensure optimal activity:

- Store the CytoScan Reagents Module 1: Pre-Lab Restriction and Ligation, as well as CytoScan Reagents Module 3: Post-Lab Fragmentation, Labeling and Hybridization at -25°C to -15°C (do not store at -80°C).
- Store the CytoScan Reagents Module 2: Pre-Lab TE Buffer and Water; along with the CytoScan Reagents Module 4: Post-Lab Stain, Holding Buffer, Beads and Water at 2° to 8°C .
- Store the CytoScan Reagents Module 5: Post-Lab Elution Buffer and Purification Wash Buffer and the Wash A and B at 15° to 30°C .
- Minimize repeated exposure to temperatures $>0^{\circ}\text{C}$.
- Use a bench top cooler when handling the reagents.

1. THESE AFFYMETRIX REAGENTS ARE FOR RESEARCH USE ONLY; NOT FOR DIAGNOSTIC PROCEDURES.
2. Avoid microbial contamination, which may cause erroneous results.
3. **WARNING: All biological specimens and materials with which they come into contact should be handled as if capable of transmitting infection and disposed of with proper precautions in accordance with federal, state and local regulations. This includes adherence to the OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030) for blood and other potentially infectious materials governed by this act. Never pipet by mouth. Avoid specimen contact with skin and mucous membranes.**
4. CAUTION: Exercise standard precautions when obtaining, handling and disposing of potentially carcinogenic reagents.

5. Exercise care to avoid cross-contamination of samples during all steps of this procedure, as this may lead to erroneous results.
6. Use powder-free gloves whenever possible to minimize introduction of powder particles into sample.

Customer and technical support

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- 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

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The information in this guide is subject to change without notice.

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