# PyroMark® Q96 Cartridge

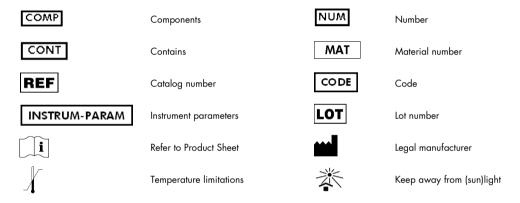
## For dispensing reagents in the PyroMark Q96 ID Instrument

The PyroMark Q96 Cartridge is used in the dispensing unit of the PyroMark Q96 ID instrument. The cartridge is divided into compartments that are to be filled with PyroMark Gold Q96 Reagents.

#### **Contents**

PyroMark Q96 Cartridge(3)		
Catalog no.	979004	
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## Symbols used on the PyroMark Q96 Cartridge



#### **Storage**

PyroMark Q96 Cartridges should be stored at room temperature (15–25°C). We recommend storing cartridges in the PyroMark Q96 HS Tip Holder Box (cat. no. 9019074) to protect them from dust and sunlight.

# **Quality control**

In accordance with QIAGEN's ISO-certified Quality Management System, each lot of PyroMark Q96 Cartridges is tested against predetermined specifications to ensure consistent product quality.



### **Safety information**

When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the appropriate safety data sheets (SDSs). These are available online in convenient and compact PDF format at <a href="https://www.qiagen.com/safety">www.qiagen.com/safety</a> where you can find, view, and print the SDS for each QIAGEN kit and kit component.



#### WARNING: Sharp needles

Do not touch the needles at the bottom of the reagent cartridge.

# 24-hour emergency information

Chemical emergency or accident assistance is available 24 hours a day from: CHEMTREC

USA & Canada: 1-800-424-9300

Outside USA & Canada: +1-703-527-3887 (collect calls accepted)

### Important points before starting

- PyroMark Q96 Cartridges must be handled with care to avoid personal injury and damage to the needles.
- Handled correctly, a PyroMark Q96 Cartridge retains accuracy for a total of 20 runs.
- For protection, PyroMark Q96 Cartridges are shipped with needles capped. Remove the cap before using the cartridge for the first time. We do not recommend recapping the needles since replacing and removing the cap may damage the needles.
- We recommend cleaning the PyroMark Q96 Cartridge before using it for the first time, and also if it has not been used in 4 weeks or longer, to remove any particles that may have accumulated.

# Equipment and reagents to be supplied by user

- PyroMark Q96 ID (cat. no. 9001525)\*
- High-purity water (Milli-Q<sup>®</sup> 18.2 MΩ x cm or equivalent)
- Lint-free tissue
- PyroMark Q96 HS Tip Holder Box (cat. no. 9019074)

# Filling the PyroMark Q96 Cartridge

- Allow reagents and cartridge to reach ambient temperature (20-25°C).
- Reconstitute the Enzyme and Substrate Mixtures, as described in the PyroMark Gold Q96 Reagents Handbook.
- 3. Position the PyroMark Q96 Cartridge with the label facing you.

<sup>\*</sup> Ensure that the instrument has been checked and calibrated according to QIAGEN's recommendations.

4. Pipet the reagents into the PyroMark Q96 Cartridge according to Figure 1.

Make sure that no air bubbles are transferred from the pipet to the cartridge.



Figure 1. Illustration of the PyroMark Q96 Cartridge seen from above. Add enzyme mixture (E), substrate mixture (S), and nucleotides (A, T, C, G) according to the volume information given by the PyroMark Q96 ID Software, during run setup.

### Starting a Pyrosequencing® run

 Under "Instrument Parameters", choose the code for the cartridge to be used. See Section 5.3.2 "Managing instrument parameters" of the PyroMark Q96 ID User Manual.

Note: The code number printed on the cartridge label corresponds to specific settings provided at <a href="https://www.giagen.com/PyroMarkInstrumentMethods">www.giagen.com/PyroMarkInstrumentMethods</a>.

- Before placing the filled reagent cartridge into the PyroMark Q96 ID, ensure that there is no liquid on the outside of the needles as this will result in incorrect reagent volumes being dispensed.
- Place the cartridge and the PyroMark Q96 ID Plate Low with the samples to be analyzed into the PyroMark Q96 ID Instrument and start the run (see the PyroMark Q96 ID User Manual).

# Cleaning the PyroMark Q96 Cartridge

If the cartridge is to be reused, it must be cleaned immediately after use.

- 1. Discard solutions remaining in the PyroMark Q96 Cartridge.
- 2. Rinse the PyroMark Q96 Cartridge 4 times with high-purity water.\*
- 3. Spray the outside of the needles with high-purity water.
- 4. Check that the cartridge needles are not blocked or damaged. Completely fill the compartments with high-purity water. Hold the cartridge over a sink or beaker while pressing firmly on top of each compartment with a finger (wear powder-free gloves). A jet of water should come straight out of the tip of each needle.
- If a needle is blocked, follow step 5a. If the jet of water comes out of a needle at an angle, instead of parallel to the direction of the needle, follow step 5b. If all needles are working properly, proceed to step 6.
- 5a. If a needle is blocked (for example, if the reagent cartridge was left overnight without cleaning), fill the compartments with high-purity water and immerse the PyroMark Q96 Cartridge in a beaker with enough high-purity water to cover the needles. Leave the cartridge in the beaker for 1 h, then rinse, and repeat step 4. Proceed to step 6.

5b. If the jet of water comes out at an angle, refill the compartment with water and repeat step 4. If the water still comes out at an angle, discard the PyroMark Q96 Cartridge. Otherwise, proceed to step 6.

Observe all federal, state, and local environmental regulations for disposal of laboratory waste.

When all needles have been rinsed and checked, discard any remaining water and let the PyroMark Q96 Cartridge dry on a lint-free tissue.

Before using the cartridge, ensure that the needles are dry. Do not dry the needles with tissue. Liquid droplets, lint, or particles remaining on the needle tips will affect cartridge performance.

7. Once dry, store the PyroMark Q96 Cartridge in the PyroMark Q96 HS Tip Holder Box.

### **Ordering Information**

Product	Contents	Cat. no.
PyroMark Q96 Cartridge (3)	Cartridge for dispensing nucleotides and reagents	979004
Related Products		
PyroMark Gold Q96 Reagents (5 x 96)	Enzyme mixture, substrate mixture, nucleotides	972804
PyroMark Gold Q96 SQA Reagents (1 x 96)	Enzyme mixture, substrate mixture, nucleotides	972812
PyroMark Q96 HS Tip Holder Box	Storage box for PyroMark tips and cartridges	9019074

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

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