

# PyroMark<sup>®</sup> Q96 HS Capillary Tips

For dispensing nucleotides in the PyroMark Q96 MD Instrument

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<b>PyroMark Q96 HS Capillary Tip (CDT)</b>	<b>(8)</b>
<b>Catalog no.</b>	<b>979104</b>
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## Product description

PyroMark Q96 HS Capillary Tips (CDT) are used with the PyroMark Q96 HS Capillary Tip Holder in the PyroMark Q96 MD Instrument. PyroMark Q96 HS Capillary Tips should be filled only with nucleotides provided with PyroMark Gold Q96 CDT Reagents (see ordering information).

## Symbols used on PyroMark Q96 HS Capillary Tips



Lot number



Temperature limitations

## Storage

PyroMark Q96 HS Capillary Tips (CDT) are stored at room temperature (15–25°C). Individual capillary tips should be stored in the PyroMark Q96 HS Tip Storage Box (cat. no. 9019074). When not being used in the instrument, the assembled PyroMark Q96 HS Capillary Tip Holder (cat. no. 9019076) can be stored in its box.

## Quality Control

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

## 24-hour emergency information

Emergency medical information in English, French, and German can be obtained 24 hours a day from:

Poison Information Center Mainz, Germany Tel: +49-6131-19240



## Safety Information

When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the appropriate material safety data sheets (MSDSs). These are available online in convenient and compact PDF format at [www.qiagen.com/support/MSDS.aspx](http://www.qiagen.com/support/MSDS.aspx) where you can find, view, and print the MSDS for each QIAGEN® kit and kit component.

## Important points before starting

- PyroMark Q96 HS Capillary Tips must be handled with care in order to maintain accuracy, prevent personal injury, and avoid damaging the needles.
- Each lot of PyroMark Q96 HS Capillary Tips requires specific pulse time settings, which correspond to the lot number printed on the tips. These settings are found under the User Support tab at [www.qiagen.com/Products/PyroMarkQ96MD.aspx](http://www.qiagen.com/Products/PyroMarkQ96MD.aspx). Refer to the *PyroMark Q96 MD User Manual* for detailed instructions for managing instrument parameters.
- Wear a lab coat and powder-free gloves when handling PyroMark HS Capillary Tips to prevent obstructing the tip heads with particles or fibers.
- **IMPORTANT:** We recommend using PyroMark Gold Q96 CDT Reagents (cat. no. 972824), as these include nucleotides at concentrations that are optimized for PyroMark Q96 HS Capillary Tips.

## Filling the PyroMark Q96 HS Capillary Tip Holder

1. Pull apart the springs on the PyroMark Q96 HS Capillary Tip Holder and insert 2 PyroMark Q96 HS Reagent Tips (RDT) and 4 PyroMark Q96 HS Capillary Tips (CDT). When you release the springs, the tips should be held in place.
2. Position the capillary tip holder with the 4 CDTs closest to you, and pipet Enzyme Mixture and Substrate Mixture into the corresponding RDT according to the volume information given in the PyroMark Q96 MD Software (see Figure 1).

**Note:** Pipet reagents into the narrow corners of the tips to avoid transferring bubbles.



**Figure 1: Illustration of the PyroMark Q96 Capillary Tip Holder seen from above.** The annotations correspond to the label on the reagent vials. **E:** Enzyme Mixture; **S:** Substrate Mixture; **A, C, G, T:** nucleotides.

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3. **Add double the volume of nucleotides indicated by the PyroMark Q96 MD Software into the corresponding CDTs.**

**Note:** Do not use filter tips for pipetting nucleotides.

4. **Insert the filled capillary tip holder into the dispensing unit of the PyroMark Q96 MD.**

**Note:** If necessary, transport the filled PyroMark Q96 HS Capillary Tip Holder in its box to avoid exposing the CDT needles and RDT tip heads to dust particles.

## Cleaning the PyroMark Q96 HS Capillary Tips

- **IMPORTANT:** Perform a dispensing test before a new run to ensure that the tips are functioning properly. Refer to the *PyroMark Q96 HS Reagent Tips Product Sheet* for details.
- To reuse within one hour, leave the capillary tip holder in the instrument with the dispensing unit cover closed. If needed, add more reagents before the next run.
- To reuse 1–24 hours later, clean the RDTs and store the capillary tip holder with CDTs in the instrument with the dispensing unit cover closed.
- For reuse more than 24 hours later, clean both RDTs and CDTs immediately after use.

### Procedure

1. **Leave the CDTs and RDTs in the capillary tip holder. Discard any solutions remaining in the CDTs and RDTs and rinse them 3 times with high-purity water\* (Milli-Q® 18.2 MΩ x cm or equivalent).**

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

2. **Completely fill the CDTs and RDTs with high-purity water and check for obstructions by firmly pressing with a finger on top of the large opening of each tip (wear gloves). A spray or droplet should form at the end of each needle and each tip head.**

If a needle or tip head is blocked, carefully wet the needle or tip head with a drop of high-purity water placed on a finger and then repeat step 2.

3. **Press several droplets through each needle and each tip head to ensure that they are clear, and then discard the remaining water.**

**Note:** If blockage of a needle or tip head persists, remove all clear tips from the capillary tip holder, fill the blocked tips with high-purity water, and then immerse the capillary tip holder in a beaker containing enough water to cover the tip heads and needle(s) for 1 h. Repeat steps 2 and 3.

4. **Remove the CDTs and RDTs from the capillary tip holder and leave the holder to dry.**

\* When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, consult the appropriate material safety data sheets (MSDSs), available from the product supplier.

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**5. To avoid contamination, leave the CDTs and RDTs to dry lying on a lint-free tissue in the PyroMark Q96 HS Tip Storage Box.**

Before using the tips, make sure that the needles and tip heads are completely dry. Remaining fluid will cause dispensing of incorrect volumes. Do not dry the needles with tissue as this may obstruct the needs and tip heads with fibers or particles.

## Ordering Information

Product	Contents	Cat. no.
PyroMark Q96 HS Capillary Tip (8)	For dispensing nucleotides; for use with the PyroMark Q96 HS Capillary Tip Holder	979104
<b>Related products</b>		
PyroMark Q96 HS Reagent Tip (4)	For dispensing reagents; use with PyroMark Q96 HS Dispensing Tip Holder or PyroMark Q96 HS Capillary Tip Holder	979102
PyroMark Gold Q96 CDT Reagents	Enzyme mixture, substrate mixture, and nucleotides for performing Pyrosequencing® reactions on the PyroMark Q96 MD using PyroMark Q96 HS Capillary Tips	972824
PyroMark Q96 HS Capillary Tip Holder	Reusable holder for capillary tips (CDT) and reagent tips (RDT); for use with the PyroMark Q96 MD	9019076
PyroMark Q96 HS Tip Storage Box	For dust-free and safe storage of tips in between runs; for use with the PyroMark Q96 MD	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](http://www.qiagen.com) or can be requested from QIAGEN Technical Services or your local distributor.

Trademarks: QIAGEN®, Pyrosequencing®, PyroMark® (QIAGEN Group); Milli-Q® (Millipore Corporation).

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