

PyroMark® Q96 HS Reagent Tips

For dispensing reagents in the PyroMark Q96 MD Instrument

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Catalog no.	979102
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Product description

PyroMark Q96 HS Reagent Tips (RDT) are used to dispense Enzyme Mixture and Substrate Mixture provided with PyroMark Gold Q96 Reagents in the PyroMark Q96 MD Instrument. They are used together with PyroMark Q96 HS Nucleotide Tips (NDT) or PyroMark Q96 HS Capillary Tips (CDT). Refer to the *PyroMark Q96 HS Capillary Tips Product Sheet* for instructions on using capillary tips.

Symbols used on PyroMark Q96 HS Reagent Tips



Lot number



Temperature limitations

Storage

PyroMark Q96 HS Reagent tips (RDT) are stored at room temperature (15–25°C). Individual reagent tips should be stored in the PyroMark Q96 HS Tip Storage Box (cat. no. 9019074). When not being used, the assembled PyroMark Q96 HS Dispensing Tip Holder (cat. no. 9019075) or PyroMark Q96 HS Capillary Tip Holder (cat. no. 9019076) can be stored in their respective boxes.

Quality Control

In accordance with QIAGEN's ISO-certified Quality Management System, each lot of PyroMark Q96 HS Reagent 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 where you can find, view, and print the MSDS for each QIAGEN® kit and kit component.

Important points before starting

- PyroMark Q96 HS Reagent 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 Reagent 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. 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 Q96 HS Reagent Tips to avoid obstructing the tip heads with particles or fibers.
- If using the PyroMark Q96 HS Capillary Tip Holder, see the *PyroMark Q96 HS Capillary Tips Product Sheet* for filling instructions.

Filling the PyroMark Q96 HS Dispensing Tip Holder

1. Pull apart the springs on the PyroMark Q96 HS Dispensing Tip Holder and insert 2 PyroMark Q96 HS Reagent Tips (RDT) and 4 PyroMark Q96 HS Nucleotide Tips (NDT). When you release the springs, the tips should be held in place.
2. Position the dispensing tip holder with the 4 NDTs closest to you, and pipet reagents into the corresponding tips (Figure 1). Add nucleotides, Enzyme Mixture, and Substrate Mixture according to the volumes given by the PyroMark Q96 MD Software.

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

Note: Do not use filter tips to pipet nucleotides.

3. Insert the filled dispensing tip holder into the dispensing unit of the PyroMark Q96 MD.

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

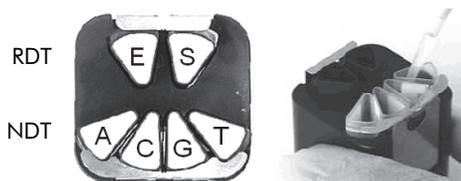


Figure 1: Illustration of the PyroMark Q96 HS Dispensing Tip Holder seen from above. The annotations correspond to the label on the reagent vials. **E:** Enzyme Mixture; **S:** Substrate Mixture; **A, C, G, T:** nucleotides.

Cleaning the PyroMark Q96 HS Reagent Tips

- To reuse within one hour, leave the dispensing tip holder in its box or in the instrument at room temperature (15–25°C). Add more reagents before the next run, and perform a dispensing test to ensure that the tips are functioning properly.
- To reuse 1–24 hours later, clean the RDTs and store the dispensing tip holder with the PyroMark Q96 HS Nucleotide Tips (NDT) in the box of the dispensing tip holder at 4°C.
- To reuse more than 24 hours later, clean both RDTs and NDTs immediately after use.

Standard cleaning procedure

1. **Place the used PyroMark Q96 HS Reagent Tips (RDT) in an empty dispensing tip holder.**
2. **Discard any solutions remaining in the RDTs, and rinse 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.

3. **Completely fill the 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 tip head.**

If a tip head is blocked, carefully wet it with a drop of water placed on a finger and repeat step 3.

4. **Press several droplets through each tip head to ensure that they are clear, and then discard the remaining water.**
5. **Remove the RDTs from the dispensing tip holder, and leave the holder to dry.**
6. **To avoid contamination, leave the RDTs to dry lying on a lint-free tissue in the PyroMark Q96 HS Dispensing Tip Storage Box.**

Note: Make sure that the tip heads are dry on the outside before using the RDTs.

Thorough cleaning procedure

If reagents have been left in the RDTs for more than 24 hours, a thorough cleaning is needed.

1. **Place the RDTs in an empty dispensing tip holder.**
2. **Discard any solutions remaining in the RDTs and rinse 3 times with high-purity water.**
3. **Fill the RDTs with high-purity water, and immerse the dispensing tip holder in a beaker containing enough water to cover the tip heads for 1 hour.**
4. **Proceed to the standard cleaning procedure, beginning with step 2.**

Dispensing test

To quickly check that RDTs are functioning properly, perform step 3 of the standard cleaning.

IMPORTANT: Do not use this method to check PyroMark Q96 HS Nucleotide Tips (NDT).

The PyroMark Q96 MD Instrument can also be used to test the tips. We recommend performing this test prior to a run, whenever tips have been filled, refilled, removed from the instrument, or left in

* 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.

the instrument without running for ≥ 1 hour. The test can also be performed during a stacker run by pausing the run. Refer to the *PyroMark Q96 MD User Manual* for more detailed instructions.

Procedure

1. **Fill the RDTs and NDTs (or CDTs if using the capillary tip holder) with reagents.**
2. **Insert the filled dispensing tip holder or capillary tip holder into the instrument's dispensing unit.**
3. **Cover a PyroMark Q96 HS Plate with transparent tape and load it into the instrument.**
4. **In the software main menu, choose "Instrument" and select the instrument for the test. Click "Test".**
5. **Confirm that a plate has been inserted and click "OK". The instrument will dispense fluid from each dispensing tip. When the test run is done, click "OK".**
6. **Remove the test plate. If droplets are missing on the tape surface, replace the corresponding tip(s) and repeat the test. Otherwise, proceed to step 7.**

IMPORTANT: Make sure that there is no fluid on the outside of NDT tip heads or CDT needles after the test. Discard any NDTs/CDTs with fluid on the outside.

7. **If the test is OK, insert the PyroMark Q96 HS Plate with the samples to be analyzed into the process chamber and proceed with the Pyrosequencing® run.**

Ordering Information

Product	Contents	Cat. no.
PyroMark Q96 HS Reagent Tips (4)	For dispensing reagents; use with PyroMark Q96 HS Dispensing Tip Holder or PyroMark Q96 HS Capillary Tip Holder	979102
Related products		
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 or can be requested from QIAGEN Technical Services or your local distributor.

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Italy = 800-787980

Japan = 03-6890-7300

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