

PyroMark[®] Q96 HS Nucleotide Tips

For dispensing nucleotides in the PyroMark Q96 MD Instrument

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PyroMark Q96 HS Nucleotide Tip (NDT)	(8)
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Product description

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

Symbols used on PyroMark Q96 HS Nucleotide Tips



Lot number



Temperature limitations

Storage

PyroMark Q96 HS Nucleotide tips (NDT) are stored at room temperature (15–25°C). Individual nucleotide 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 Dispensing Tip Holder (cat. no. 9019075) can be stored in its box.

Quality Control

In accordance with QIAGEN's ISO-certified Quality Management System, each lot of PyroMark Q96 HS Nucleotide 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 Nucleotide Tips must be handled with care in order to maintain accuracy.
- Each lot of PyroMark Q96 HS Nucleotide 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 HS Nucleotide Tips to prevent obstructing the tip heads with particles or fibers.
- Avoid exposing the tip heads to water as this can damage their hydrophobic coating.

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 dispensing 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 in 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 for pipetting 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 Nucleotide 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.
- For reuse more than 24 hours later, clean both NDTs and RDTs immediately after use.

Procedure

1. **Remove the PyroMark Q96 HS Reagent Tips, and place them in an empty dispensing tip holder. See the *PyroMark Q96 HS Reagent Tips Product Sheet* for cleaning instructions.**

2. **Discard any solutions remaining in the PyroMark Q96 HS Nucleotide Tips, 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.

3. **Remove the NDTs from the dispensing tip holder, and allow tips and dispensing tip holder to dry.**

Note: If a tip head comes in contact with water, gently press the tip head against the lint-free tissue at the bottom of the PyroMark Q96 HS Dispensing Tip Storage Box.

Note: NDTs should dry for at least 3 h lying on a lint-free tissue in the PyroMark Q96 HS Dispensing Tip Storage Box before reusing.

Dispensing test

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, re-filled, removed from the instrument, or left in the instrument without running for ≥ 1 hour. It 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 with reagents.**
2. **Insert the filled dispensing tip holder into the instrument's dispensing unit.**
3. **Cover a PyroMark Q96 HS Plate with transparent tape and load it into the instrument process chamber.**
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".**

* 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.

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 after the test. Discard any NDTs 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 Nucleotide Tip (8)	For dispensing nucleotides; for use with PyroMark Q96 HS Dispensing Tip Holder	979103
Related products		
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 Reagents (5 x 96)	Enzyme mixture, substrate mixture, and nucleotides for performing Pyrosequencing reactions on the PyroMark Q96 ID or PyroMark Q96 MD	972804
PyroMark Gold Q96 Reagents (50 x 96)	Enzyme mixture, substrate mixture, and nucleotides for performing Pyrosequencing reactions on the PyroMark Q96 MD or PyroMark Q96 MD Automated	972807
PyroMark Q96 HS Dispensing Tip Holder	Reusable holder for nucleotide tips (NDT) and reagent tips (RDT); for use with the PyroMark Q96 MD	9019075
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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