

PRODUCT SHEET



Biomeme

DNA/RNA M1

Sample Prep

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Version 1.0



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DNA/RNA M1 Sample Prep

The Biomeme DNA/RNA M1 Sample Prep Cartridge is a mobile solution for the extraction of purified nucleic acids from a variety of different sample types including but not limited to smaller volume liquids (e.g. whole blood) and direct swabs.

This kit requires no lab equipment, refrigeration, electricity, incubation, alcohol precipitation or phenol chloroform extraction. Instead, it utilizes a filtration-based method in which nucleic acids selectively bind to the silica membrane inside Biomeme's proprietary M1 Sample Prep Columns. Subsequent washes through a sequence of specially formulated buffers yields purified nucleic acids upon elution.

Safety Warning: When working with our products, always wear appropriate personal protective equipment (PPE) (e.g. lab coat, disposable gloves with adequate chemical resistance, mouth/face protection, goggles, etc.). For more information, please review the product's safety data sheet(s) (SDS).

= [f 5a` fWfe

ITEM	QUANTITY
<p>6@3!D@3 5SfdVWw` fS [` Y4[a_ W W >kefe 4gXX/4>4fi BchVW I SeZ/4BI fi I SeZ 4gXX/4I 4fi 6dk` YI SeZ /46I fiS` V 7gfa` 4gXX/474fi</p>	+(x)
<p>E ` YWgeW#_ > ekd` YW</p>	+(j)
<p>4[a_ W WES_ b^W3_5a^g_`</p>	+(j)

Technical Specifications

SPECIFICATION	VALUE
<p>ES_ b^W3_ ag` f</p>	<p>Varies by sample type</p>
<p>Processing</p>	<p>Manual</p>
<p>Elution Volume</p>	<p>0.85mL</p>
<p>Time Per Prep</p>	<p>2-5 minutes</p>

Sample Extraction Protocol

Samples are lysed by mixing in Biomeme Lysis Buffer (BLB). The lysed sample is then passed through the M1 Sample Prep Column by use of the provided 1 mL luer lock syringe, binding RNA to the silica membrane inside of the column.

Subsequent washes remove unwanted material and salts. Finally, purified nucleic acids are eluted off the column into the provided buffer.

Buffers come pre-aliquoted in the provided sample prep cartridges for ease-of-use and the extraction method is designed to be completed in a few simple steps. But, before beginning the sample extraction process, please take a moment to read [these important tips](#):

- Clean your work area between each RNA extraction to avoid contamination between samples.
- Puncture 2 holes in each section of the M1 Sample Prep Cartridge as you move through each step to minimize liquid splatter (except Air Dry step).
- Pump slowly, except during the Air Dry step where rapid pumping is required, to not only minimize liquid splatter but to also improve binding to the sample prep column.
- **Note:** For additional tips, How-To videos, and best practices for our Sample Prep system, please visit our Biomeme Sample Prep Guide, available at: <https://help.biomeme.com/sample-prep-guide>

1. Sample Collection

1. Secure the Sample Prep Column to the 1mL syringe and puncture the first **red** hole of the Sample Prep Cartridge, labeled “START”. Set aside the syringe.

● 6. Air Dry (20+ pumps)

1. Move the 1mL syringe with the attached Sample Prep Column to the **blue** section of the Sample Prep Cartridge and pierce through the foil to remove excess buffer.
2. Draw air up through the syringe and quickly pump back out. Repeat pumping vigorously 20 or more times until the Sample Prep Column appears dry and does not spray fluid droplets.

● 7. Elution (5 pumps)

1. Move the 1mL syringe with the attached Sample Prep Column to the **green** section of the Sample Prep Cartridge (Biomeme Elution Buffer - BEB) and pierce through the foil.
2. Elute by drawing the BEB fluid all the way up through the syringe and **slowly** pump back out for a total of 5 pumps.
3. That's it! Transfer 20 μ L of elution from the green section of the Sample Prep Cartridge into each of your PCR reactions.

Note: If you wish to store your eluted RNA for later use, transfer all of the eluate to a clean microcentrifuge tube.

We recommend placing the absorbent material supplied in the sample prep pouch onto the top of the used cartridge and placing everything back into the open

pouch. These should then be placed into a separate larger sealed container or bag prior to disposal.

Always dispose of potentially biohazardous solutions according to your local, regional or national waste-disposal guidelines. DO NOT add bleach or acidic solutions directly to the buffers contained in Biomeme's M1 Sample Prep cartridges.

Storage

All components of the Biomeme DNA/RNA M1 Sample Prep cartridge should be stored in a dry place, at room temperature (15-30°C).

Disclaimer

For Research Use Only. Not for use in human or veterinary diagnostics. The performance characteristics of this product have not been established.

Biomeme products may not be transferred to third parties, resold, modified for resale or used to manufacture commercial products or to provide a service to third parties without written approval of Biomeme, Inc.

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