

Biomeme RNA Process Control (RPC)

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RNA Process Control (RPC)

Biomeme RNA Process Control (RPC) is a quantified RNA extraction and RT-PCR control (MS2 bacteriophage) in a lyophilized pellet format. It is designed to be resuspended and then added directly to the crude sample and undergo normal sample preparation and extraction. Each order contains 1 pellet which contains enough control for 250 sample extractions once resuspended.

RPC is supplied as a dry reagent to be reconstituted in our RPC Resuspension Buffer (included with every order). A proprietary freeze-drying process ensures the RPC pellet remains stable at ambient temperatures and does not require refrigeration for transport or storage. A single Biomeme RPC pellet resuspended with 5mL RPC Buffer contains MS2 bacteriophage at a concentration of **1e5 pfu**.

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).

Contents

CONTENTS	DESCRIPTION
1x small clear bag	Each clear bag contains: <ul style="list-style-type: none"> ● 1x small foil pouch with a 2mL screw cap tube containing a lyophilized pellet of quantified MS2 to be used as your RNA Process Control (RPC). ● 1x screw cap tube containing 5mL of pre-aliquoted RPC Buffer used to resuspend the lyophilized RPC pellet. 1x resuspended RPC is enough positive control for 250 sample extractions when adding 20uL to each extraction. ● 1x transfer pipette (1mL)

Example Protocol

1. Unscrew the 2mL tube containing a pellet of RPC (RNA Process Control).
2. Open the screw cap tube of 5mL pre-aliquoted RPC Buffer.
3. Use the 1mL transfer pipette to transfer approximately 0.5-0.75mL of the RPC buffer to the 2mL tube containing the RPC pellet.
4. Pipette up and down to thoroughly mix.
5. Using the same transfer pipette, transfer the entire contents of the 2mL tube to the 5mL tube of RPC buffer. Shake thoroughly to ensure proper mixing.
6. When extracting and purifying your sample, add a portion of the resuspended RPC directly to the crude sample (add 20uL directly into the **Red** chamber of the Biomeme M1 Sample Prep cartridge, if using a Biomeme prep).
7. Close the RPC Buffer tube.
 - a. *Once resuspended, the RPC Pellet can be refrigerated at 4 °C for up to one week. It can also be frozen at -20 °C but we caution against frequent freezing and re-thawing as it will degrade the control.*
8. Continue prep as usual.
9. Transfer prepped eluate (containing extracted MS2 RNA from RPC pellet) to the SARS-CoV-2 Go-Strips. 1 sample extraction for each well (not including any wells you may reserve for additional controls or replicates).
10. Transfer Go-Strips to the Franklin™ thermocycler.
11. Use the app to set-up and begin your run.

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>

Storage

Biomeme RNA Process Control (RPC) should be stored in its original packaging at 15-30°C. If opened in a highly humid environment, the dry reagent resists humidity for up to one hour. Once resuspended in the RNA Process Control Buffer, a pellet can be refrigerated at 4°C for up to one week. It can also be frozen at -20°C, but we caution against frequent freezing and re-thawing as this will degrade the control.

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.

Biomeme warrants every thermocycler to be free of defects in material and workmanship for one year from the date of shipment to buyer. All warranties are subject to our [Terms and Conditions and Privacy Policy](https://biomeme.com/privacy-policy-and-terms-of-use/) (<https://biomeme.com/privacy-policy-and-terms-of-use/>).

Biomeme, Inc.
1015 Chestnut Street, Suite 1401
Philadelphia, PA, USA 19107
support@biomeme.com

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