

Maximizing RNA extraction from Buccal Swabs for Covid-19 Testing

J.G. Finneran and Porvair Sciences are supporting customers in critical research and development of Covid-19 testing by offering Spin Column Homogenizers for RNA extraction from Buccal swabs. Current diagnostic tests rely on the detection of viral RNA by reverse transcriptase polymerase chain reaction (RT-PCR) from Buccal swabs obtained from patient samples.



Sample preparation of nasal and throat Buccal swabs is essential to ensure high yields and quality of viral RNA for detection and analysis. The Chromatrap® Homogenizer Spin Column is a quick and rapid method to ensure samples are sufficiently prepared prior to RNA extraction to maximize downstream detection of viral RNA.

Whether you are researching Covid-19 to understand the mechanisms of action or front line diagnostic testing the Homogenizer Spin Column is the first step in high quality RNA extraction. The dual frit design reduces lysate viscosity and captures insoluble debris by centrifugation, so the homogenized lysate sample is then ready for RNA extraction.

Collected Buccal swabs are placed in a Lysis/ Extraction Buffer and the lysate and swab transferred onto the Homogenizer Spin Column. After high speed centrifugation, the resulting eluent contains homogenous RNA-extraction ready lysates. The Chromatrap® Homogenizer Spin Column provides a faster homogenization compared to syringe and needles, while reducing waste and minimizing sample loss. Every sample has its own homogenizer column and collection tube, thus eliminating cross contamination between samples.

To get the best start to your experiments the Homogenizer Spin Column uses the following procedure for downstream RNA extraction in minutes. The Chromatrap® Homogenizer Spin Column is compatible with all manual RNA extraction procedures including the Qiagen RNeasy and PureLink RNA kits.

1. Position the Chromatrap® Homogenizer Spin Column in the collection tube provided.
2. Transfer up to 700µL cell or tissue lysate to the Chromatrap® Homogenizer Spin Column and close the cap.
3. Centrifuge at full speed for 2 minutes at room temperature.
4. Remove and discard the homogenizer spin column from the collection tube. Do not discard the supernatant, this contains the homogenized lysate.
5. Carefully aspirate the suspension from the collection tube using a pipette and transfer to a fresh clean 1.5mL microcentrifuge tube.
6. Sample is now ready for downstream processing (eg. RNA extraction).

Catalog No.	Description	Case Qty.
500289	Chromatrap® Homogenizer Spin Column	50