



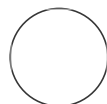
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## 🌐 Elution of nasal lining fluid collected via nasosorption

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ConCord-19



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### ABSTRACT

This procedure outlines the materials and processes for eluting nasal lining fluid collected using a Mucosal Diagnostics FX-i nasosorption device. This protocol has been successfully used to elute nasal lining fluid for both DNA extraction for 16s rRNA sequencing & metagenomics, and for proteomics using the SomaScan assay.

### GUIDELINES

This protocol should be performed in a sterile environment to reduce cross contamination between nasosorption devices, to enable metagenomic DNA extraction and analyses

### MATERIALS

- Phosphate Buffered Saline (PBS) (#10010023)
- Tween 20 (Sigma, #P9416-50ML)
- Corning SpinX columns (Sigma, #CLS9301)
- 2mL Corning microfuge tubes (Sigma, #CLS3213)
- Sterile forceps (two pairs per swab)
- 1.6mL sterile microfuge tubes

OPEN ACCESS



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**Protocol status:** Working  
 We use this protocol and it's working

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## Making elution buffer

- 1 Add **[M] 0.05 % volume** of Tween20 to PBS in a sterile environment to reduce cross-contamination
- 2 Store at **4 °C** until required

## Elution of nasal lining fluid

30m 30s

- 3 Thaw nasosorption device in cryotube on ice
- 4 Add **300 µL** of elution buffer to a labelled 2mL microcentrifuge tube and place on ice
- 5 Remove the synthetic absorptive matrix (SAM) from the nasosorption device using sterile forceps by tearing it from the handle and place in the microcentrifuge tube containing elution buffer
- 6 Vortex the microcentrifuge tube for **00:00:30** 30s
- 7 Using a new pair of sterile forceps, remove the SAM from the elution buffer, and place into a spinX column on a new 2mL microcentrifuge tube

- 8 Add the elution buffer from the first tube onto the SAM in the spinX column
- 9 Centrifuge the SAM and spinX column at  16000 x g for  00:30:00 at  4 °C 30m
- 10 Discard the spinX column and SAM
- 11 Aliquot the eluate into labelled microtubes, and measure total protein concentration using the assay of your choice (Pierce BCA assay, Qubit protein assay etc)