

MAR 16, 2023

Viral purification from faecal sample

sarah.schulz^{1,2}

¹EMBL; ²NFDI4Microbiota



sarah.schulz

ABSTRACT

Protocol for the purification of viral particles from a faecal sample

MATERIALS

SM Buffer, 0.2 µm syringe filter, 100-kDa-molecular-mass Amicon Ultra-15 Centrifugal Filter, DNase I , RNase

OPEN ACCESS

DOI:

dx.doi.org/10.17504/protocol s.io.81wgbywbovpk/v1

Protocol Citation: sarah.sch ulz 2023. Viral purification from faecal sample. **protocols.io**

https://dx.doi.org/10.17504/protocols.io.81wgbywbovpk/v1

License: This is an open access protocol distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

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

Created: Mar 15, 2023

Last Modified: Mar 16, 2023

PROTOCOL integer ID:

78833

1 Homogenise 200 mg of faecal sample in 30 ml of SM buffer (50 mM Tris-HCl pH 7.5, 100 mM NaCl, 8 mM MgSO4)

2 Centrifuge sample at 4000 rpm for 20 min, then filter through a 0.2 µm filter 3 Add filtrate to a 100-kDa-molecular-mass Amicon Ultra-15 Centrifugal Filter 4 Centrifuge filter tube at 4000 rpm for 3 min to concentrate sample 5 Repeat centrifugation until the entire diluted filtrate has been passed through the filter tube 6 Dilute filtrate with 30 ml SM buffer 7 Add diluted filtrate to a fresh 100-kDa-molecular-mass Amicon Ultra-15 Centrifugal Filter 8 Repeat centrifugation until a filtrate volume of at least 500 µl is reached 9 Add 10 U of DNase I and 10 U of RNase to the filtrate and incubate at 37°C for 30 min 10 Incubate samples at 65°C for 15 min to inactivate enzymes

11 Store at 4°C