

Resource Summary Report

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V.4 - Direct wastewater RNA capture and purification via the "Sewage, Salt, Silica and SARS-CoV-2 (4S)" method

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Proper Citation

Oscar Whitney, Basem Al-Shayeb, Alex Crits-Cristoph, Mira Chaplin, Vinson Fan, Hannah Greenwald, Adrian Hinkle, Rose Kantor, Lauren Kennedy, Anna Maurer, Robert Tjian, Kara L. Nelson, UC Berkeley Wastewater-based epidemiology consortium 2020. V.4 - Direct wastewater RNA capture and purification via the "Sewage, Salt, Silica and SARS-CoV-2 (4S)" method. protocols.io dx.doi.org/10.17504/protocols.io.bpdfmi3n

Protocol Information

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Authors: Oscar Whitney, Basem Al-Shayeb, Alex Crits-Cristoph, Mira Chaplin, Vinson Fan, Hannah Greenwald, Adrian Hinkle, Rose Kantor, Lauren Kennedy, Anna Maurer, Robert Tjian, Kara L. Nelson, UC Berkeley Wastewater-based epidemiology consortium

Group: Coronavirus Method Development Community

Summary: This protocol describes the procedure of the "4S" (Sewage, Salt, Silica and SARS-CoV-2) method for SARS-CoV-2 RNA extraction from wastewater. Offering a highly efficient, modular and economical alternative to existing wastewater RNA purification methods, this procedure lowers the barrier to entry for SARS-CoV-2 wastewater-based epidemiology. This procedure is intended to be carried out in a BSL2+ laboratory space, with precautions when handling raw wastewater samples.

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