

## INSTRUCTIONS FOR USE

### INTENDED USE

Ceres Nanotrap<sup>®</sup> Microbiome A Particles are intended for use in capturing and concentrating intact viruses and associated viral nucleic acids contained in samples for use in downstream isolation and/or analysis. These particles have a broad affinity for a variety of microorganisms, including the SARS-CoV-2 virus that is known to cause COVID-19.

### SUMMARY AND PRINCIPLES

Nanotrap Microbiome A Particles utilize a unique hydrogel polymer coupled to affinity bait to attract, capture, and concentrate intact viruses and virus-like particles present in low abundance in many sample types. The microbes captured by these Nanotrap particles can be used in downstream RNA extraction, purification, and analysis. Nanotrap Microbiome A particles are compatible with many commercial nucleic acid extraction kits or can be used without a nucleic acid extraction kit.

### PRECAUTIONS

1. **For Research Use Only. Not for use in diagnostic procedures.**
2. Nanotrap Microbiome A Particles and Enhancement Reagents are for Research Use Only. Not for use in diagnostic procedures.
3. SDS can be obtained at [streck.com](https://www.streck.com), by calling 800-843-0912 or by calling your local supplier.

### STORAGE AND STABILITY

1. Nanotrap Microbiome A Particles and Enhancement Reagents should be stored at 2 °C to 25 °C. **DO NOT FREEZE.**
2. When stored at the proper temperature range, product contents are stable through the expiration date.

### INDICATIONS OF PRODUCT DETERIORATION

1. If Nanotrap Microbiome A Particles have previously been frozen, large visible aggregates may form once the material is thawed. If aggregates are present, product should not be used.
2. If frozen, **DO NOT USE.**

### VIRAL CAPTURE PROTOCOL

Please refer to the protocols listed on [streck.com](https://www.streck.com) for specific viral capture and concentration instructions optimized for different viral extraction and purification methodologies.

#### Example Manual Viral Capture Protocol for Wastewater Samples

1. Shake the wastewater bottle to mix. After shaking, let it sit on a flat surface for 45 seconds at room temperature.
2. Pipette 10ml of wastewater sample from the wastewater bottle into a clean 15ml conical tube.
3. **Optional Step:** To each sample add 100µl of Nanotrap Enhancement Reagent (ER1 or ER2, depending on subsequent extraction procedure), vortex for several seconds to mix thoroughly.
  - a. **Note:** Using ER1 improves viral detection by 1-2 Ct values when used with Nanotrap Microbiome A Particles, but it is ok to skip addition of ER and proceed to step 4.
4. Add 150µl of Nanotrap Microbiome A Particles to the sample. Put the cap onto the tube and invert 2-3 times to mix the particles.
5. Incubate samples with Nanotrap Microbiome A Particles at room temperature for 10 minutes. Invert 2-3 times to mix the particles at the 5-minute mark.
6. Use the magnetic rack that is compatible with the 15ml tube to separate the Nanotrap Microbiome A Particles from the sample.
7. Using a pipette, discard the supernatant carefully without disturbing the Nanotrap Microbiome A Particles pellet.
8. Add 1.0ml of molecular grade water to the tube and re-suspend the Nanotrap Microbiome A Particles pellet using a pipette. Optional: For maximum yield, use 1.0ml of Nanotrap Buffer 2 in place of water.
9. Transfer the Nanotrap Microbiome A Particles and the molecular grade water to a clean 1.5ml microcentrifuge tube for easier handling.
10. Use the magnetic rack that is compatible with the 1.5ml tube to separate the Nanotrap Microbiome A Particles from the sample.
11. Using a pipette, discard the supernatant carefully without disturbing the pellet.
12. If any small amount of liquid is still present, use a smaller pipette to remove all the supernatant from the bottom of the tube.

Automated Virus Capture protocols are platform specific. Automated protocols can be found at [streck.com/products/molecular](https://www.streck.com/products/molecular).

### ORDERING INFORMATION

Please call our Customer Service Department at 800-228-6090 for assistance. Additional information can be found online at [streck.com](https://www.streck.com).

### TECHNICAL SUPPORT

Please contact Streck Technical Services at +1-402-691-7510 (outside the United States and Canada), 800-843-0912 (United States and Canada) or [technicalservices@streck.com](mailto:technicalservices@streck.com).

### GLOSSARY OF SYMBOLS

See the Instructions (IFU) tab under Resources on the product page at [streck.com](https://www.streck.com).

See [streck.com/patents](https://www.streck.com/patents) for patents that may be applicable to this product.

