The detection of norovirus is most famous in the virus detection using ultracentrifuge and electron microscope. Norovirus (formerly “Norwalk agent”) is an RNA virus (taxonomic family Caliciviridae) that caused approximately 90% of epidemic nonbacterial outbreaks of gastroenteritis around the world. Norovirus has approximately 7,500 bases and its size is 30–38 nm of a regular icosahedron, Norovirus is rapidly inactivated by either sufficient heating or by chlorine-based disinfectants, but the virus is less susceptible to alcohols and detergents, because it does not have a lipid envelope.

Following is our new technique that can perform the detection of the norovirus in the sample of only 100µL.

### Description

- **Rotor:** S100AT3 fixed angle rotor (20 tubes of 0.23 ml)
- **Speed:** 60,000 rpm (Max. centrifugal force: 157,000 xg)
- **Time:** 30 min.
- **Temperature:** 4°C
- **Acceleration:** 7 (Rather slowly)
- **Deceleration:** 7 (Rather slowly)
- **Centrifuge tube:** 0.23 PC tube
- **Sample volume:** 100-150µL
- **Adaptor:**
  - **Name:** 0.23 adaptor
  - **Material:** Polyacetal (Polyoxymethylene) resin

Cupper sheet mesh (Diameter: 4mm) (Nisshin EM Co., Ltd. Tokyo):
There are two types of ultracentrifuges: the floor type (CS-FNX series, CS-GXII series, CS-GXL series and CS-GX series) and the desktop type (CS150NX). You can use either type.

Detector: Transmission electron microscope

Observation example by a transmission electron microscope

Machine appearance

CS-FNX Series  S100AT3 fixed angle rotor  CS150NX

If you have any inquiry of this application or products, please contact us through our web site.
http://www.hitachi-koki.com/himac/

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