

■UFB発生数確認試験

1.UFB測定機器

Nano Sight NS300



2.試験方法・測定方法

①試験水による配管及びポンプ内の洗浄（洗浄方法として一晚（15時間）水道水（限外ろ過フィルタあり）による通水洗浄を行った後、採水し測定を実施、その後に水道水（限外ろ過フィルタあり）にて1時間通水洗浄を行った後に採水し測定を実施し2測定間の測定にて測定値に有意差が見られないことを確認しコンタミ除去の判断を行った。）

②水温：40℃

③採水方法：ブランク水（サンプル水と同経路におけるシャワーホース吐水部から採水）、サンプル水共に5Lの受け容器に3分間吐水し、容器内の水が複数回入れ替える。吐水後スターラーで攪拌する。採水用小ビンを洗浄後にスポイトでゆっくり採水する。

④測定機器内の残水を取り除いた後、測定する

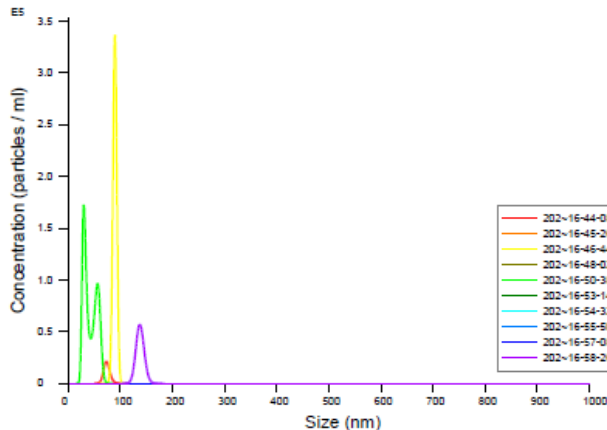
ネルクスUFBシャワーヘッド（NELX1-BK/SV）

測定日	2026/6/12
ブランク水個数濃度（個/cc）	923,000
ネルクスUFBシャワーヘッド個数濃度（個/cc）	8,720,000
ブランク水補正後個数濃度（個/cc）	7,797,000
平均粒径（nm）	164.3

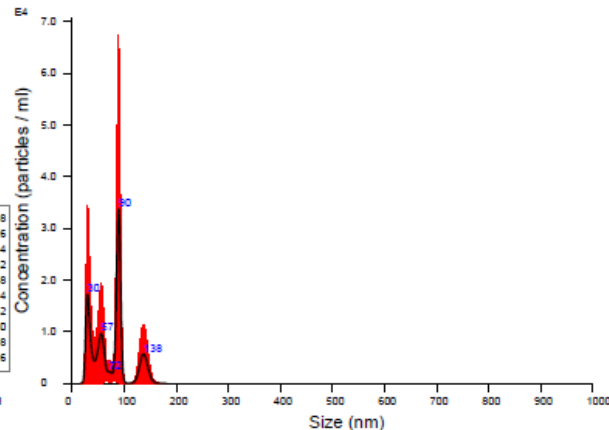
・ブランク水

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20260612-06-blank-25 2026-06-12 16-43-11



FTLA Concentration / Size graph for Experiment:
20260612-06-blank-25 2026-06-12 16-43-11



Averaged FTLA Concentration / Size for Experiment:
20260612-06-blank-25 2026-06-12 16-43-11
Error bars indicate + / - 1 standard error of the mean

Included Files

20260612-06-blank-25 2026-06-12 16-44-08, 20260612-06-blank-25
2026-06-12 16-45-26, 20260612-06-blank-25 2026-06-12 16-46-44,
20260612-06-blank-25 2026-06-12 16-48-02, 20260612-06-blank-25
2026-06-12 16-50-38, 20260612-06-blank-25 2026-06-12 16-53-14,
20260612-06-blank-25 2026-06-12 16-54-32, 20260612-06-blank-25
2026-06-12 16-55-50, 20260612-06-blank-25 2026-06-12 16-57-08,
Limited file list. Full list printed on Page 2.

Details

NTA Version: NTA 3.4 Build 3.4.003
Script Used: SOP Standard Measurement 04-43-11PM 12J~
Time Captured: 16:43:11 12/06/2026
Operator:
Pre-treatment:
Sample Name: 20260612-06-blank-25
Diluent:
Remarks:

Capture Settings

Camera Type: sCMOS
Laser Type: Blue405
Camera Level: 15
Slider Shutter: 1206
Slider Gain: 245
FPS: 25.0
Number of Frames: 1498
Temperature: 25.5 - 25.8 °C
Viscosity: (Water) 0.873 - 0.878 cP
Dilution factor: 1 x 10e0
Syringe Pump Speed: 25

Analysis Settings

Detect Threshold: 4
Blur Size: Auto
Max Jump Distance: Auto: 7.6 - 15.1 pix

Results

Stats: Merged Data

Mean: 74.9 nm
Mode: 89.4 nm
SD: 34.2 nm
D10: 30.2 nm
D50: 83.9 nm
D90: 132.8 nm

Stats: Mean +/- Standard Error

Mean: 34.3 +/- 15.8 nm
Mode: 32.9 +/- 15.7 nm
SD: 3.0 +/- 1.4 nm
D10: 30.6 +/- 14.6 nm
D50: 33.9 +/- 15.7 nm
D90: 38.3 +/- 17.1 nm

Concentration: 9.23e+05 +/- 4.24e+05 particles/ml
0.1 +/- 0.0 particles/frame
0.1 +/- 0.1 centres/frame

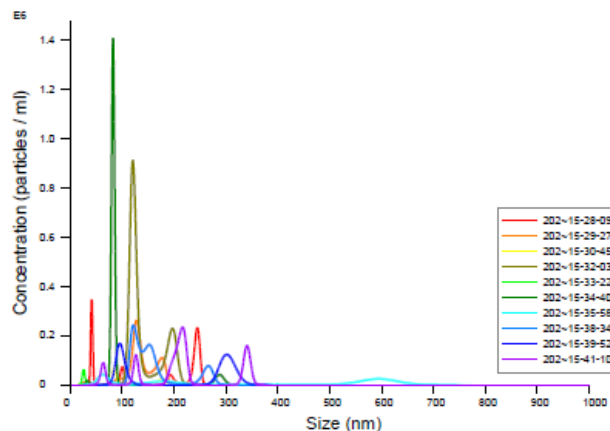
個数濃度 (個/cc) : 923,000 ± 424,000

ネルクスUFBシャワーヘッド (NELX1-BK/SV)

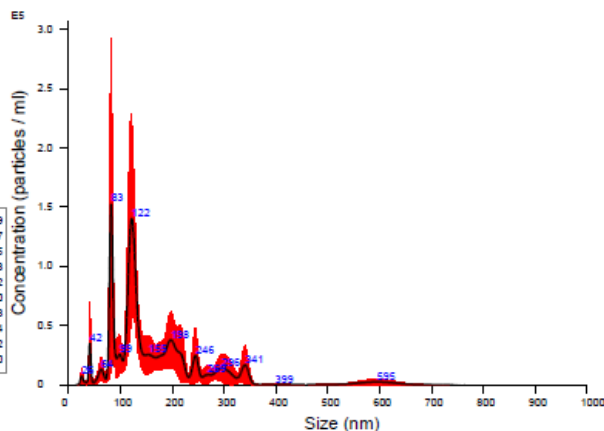
• NELX1-BK/SV

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20260612-05-shower-go2-25 2026-06-12 15-27-19



FTLA Concentration / Size graph for Experiment:
20260612-05-shower-go2-25 2026-06-12 15-27-19



Averaged FTLA Concentration / Size for Experiment:
20260612-05-shower-go2-25 2026-06-12 15-27-19
Error bars indicate + / - 1 standard error of the mean

Included Files	Results
20260612-05-shower-go2-25 2026-06-12 15-28-09, 20260612-05-shower-go2-25 2026-06-12 15-29-27, 20260612-05-shower-go2-25 2026-06-12 15-30-45, 20260612-05-shower-go2-25 2026-06-12 15-32-03, 20260612-05-shower-go2-25 2026-06-12 15-33-22, 20260612-05-shower-go2-25 2026-06-12 15-34-40, Limited file list. Full list printed on Page 2.	Stats: Merged Data Mean: 167.6 nm Mode: 82.4 nm SD: 99.9 nm D10: 81.5 nm D50: 131.5 nm D90: 293.7 nm
Details	Stats: Mean +/- Standard Error Mean: 164.3 +/- 27.5 nm Mode: 97.8 +/- 17.0 nm SD: 72.2 +/- 20.8 nm D10: 84.0 +/- 10.8 nm D50: 169.6 +/- 32.7 nm D90: 246.7 +/- 51.6 nm Concentration: 8.72e+06 +/- 2.01e+06 particles/ml 0.5 +/- 0.1 particles/frame 0.6 +/- 0.1 centres/frame
NTA Version: NTA 3.4 Build 3.4.003 Script Used: SOP Standard Measurement 03-27-19PM 12J~ Time Captured: 15:27:19 12/06/2026 Operator: Pre-treatment: Sample Name: 20260612-05-shower-go2-25 Diluent: Remarks:	
Capture Settings	
Camera Type: sCMOS Laser Type: Blue405 Camera Level: 15 Slider Shutter: 1206 Slider Gain: 245 FPS: 25.0 Number of Frames: 1498 Temperature: 25.4 - 25.7 °C Viscosity: (Water) 0.874 - 0.880 cP Dilution factor: 1 x 10e0 Syringe Pump Speed: 25	
Analysis Settings	
Detect Threshold: 4 Blur Size: Auto Max Jump Distance: Auto: 11.8 - 27.1 pix	

個数濃度 (個/cc) : 8,720,000 ± 2,010,000