

Size Distribution Report by Intensity

v2.2



Sample Details

Sample Name: AgNPs20-3 1
SOP Name: mansettings.nano
General Notes:

File Name: 20170823.dts
Record Number: 7
Material RI: 1.59
Material Absorbtion: 0.010
Dispersant Name: citrate buffer
Dispersant RI: 1.330
Viscosity (cP): 0.8878

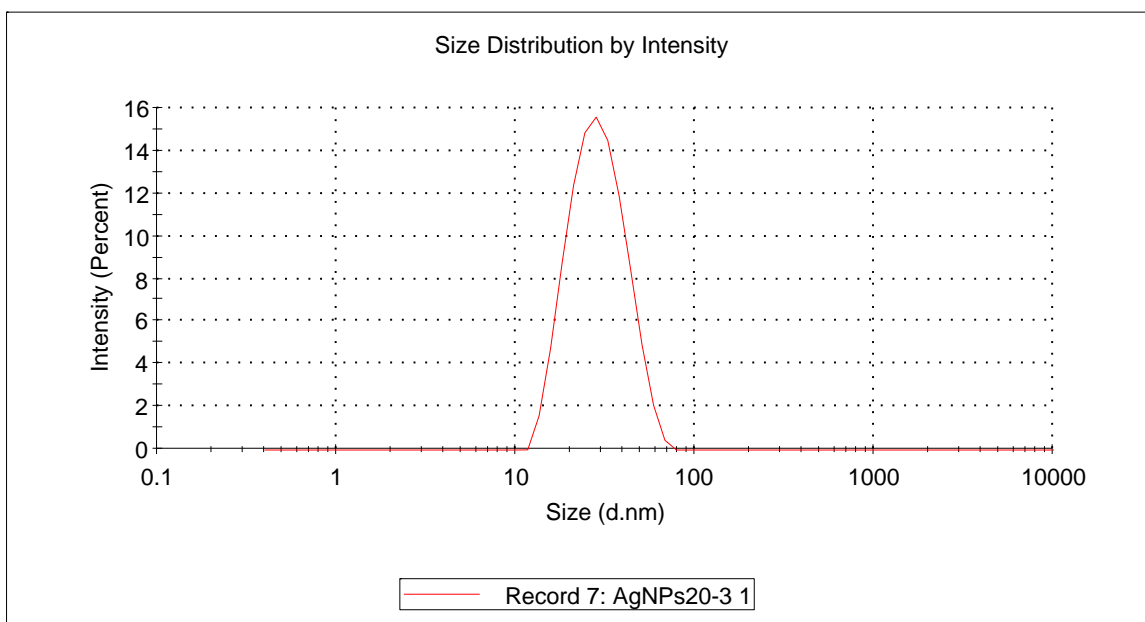
System

Temperature (°C): 25.0
Count Rate (kcps): 273.9
Cell Description: Disposable sizing cuvette
Duration Used (s): 60
Measurement Position (mm): 4.65
Attenuator: 6

Results

| | Size (d.n... | % Intensity: | St Dev (d.n... |
|--------------------------------|----------------------|--------------|----------------|
| Z-Average (d.nm): 26.40 | Peak 1: 30.08 | 100.0 | 10.53 |
| Pdl: 0.125 | Peak 2: 0.000 | 0.0 | 0.000 |
| Intercept: 0.906 | Peak 3: 0.000 | 0.0 | 0.000 |

Result quality **Good**



Size Distribution Report by Intensity

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Sample Details

Sample Name: AgNPs20-3 2

SOP Name: mansettings.nano

General Notes:

File Name: 20170823.dts
Record Number: 8
Material RI: 1.59
Material Absorbtion: 0.010

Dispersant Name: citrate buffer
Dispersant RI: 1.330
Viscosity (cP): 0.8878

System

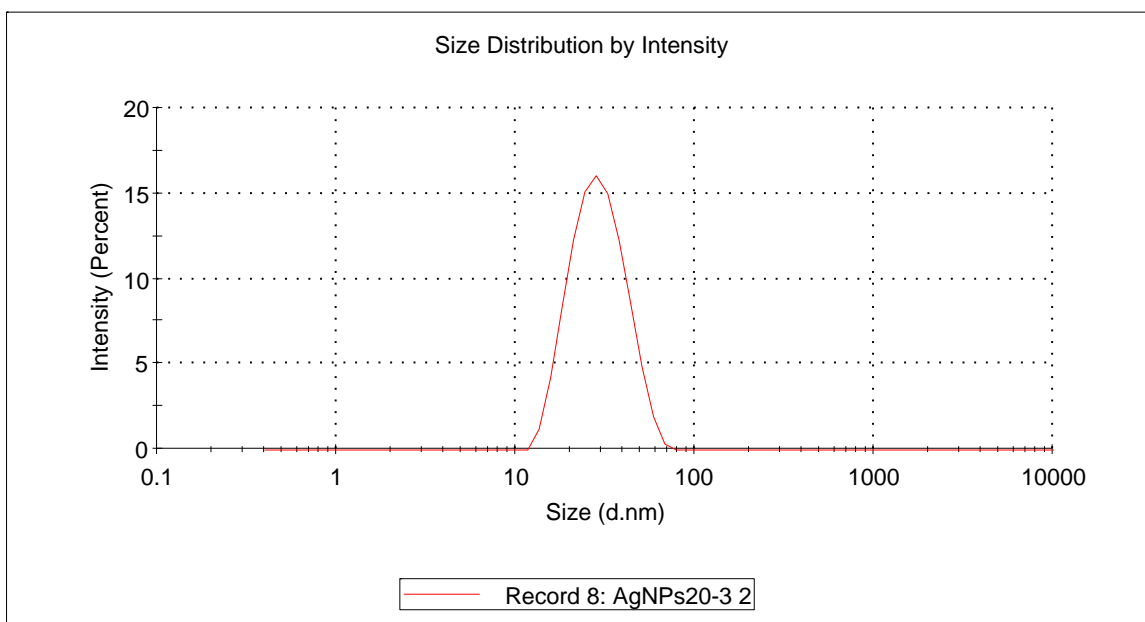
Temperature (°C): 25.0
Count Rate (kcps): 274.9
Cell Description: Disposable sizing cuvette

Duration Used (s): 60
Measurement Position (mm): 4.65
Attenuator: 6

Results

| | Size (d.n... | % Intensity: | St Dev (d.n... |
|--------------------------------|----------------------|--------------|----------------|
| Z-Average (d.nm): 26.71 | Peak 1: 30.23 | 100.0 | 10.28 |
| Pdl: 0.120 | Peak 2: 0.000 | 0.0 | 0.000 |
| Intercept: 0.905 | Peak 3: 0.000 | 0.0 | 0.000 |

Result quality **Good**



Size Distribution Report by Intensity

v2.2



Sample Details

Sample Name: AgNPs20-3 3

SOP Name: mansettings.nano

General Notes:

| | | | |
|----------------------|--------------|------------------|----------------|
| File Name: | 20170823.dts | Dispersant Name: | citrate buffer |
| Record Number: | 9 | Dispersant RI: | 1.330 |
| Material RI: | 1.59 | Viscosity (cP): | 0.8878 |
| Material Absorbtion: | 0.010 | | |

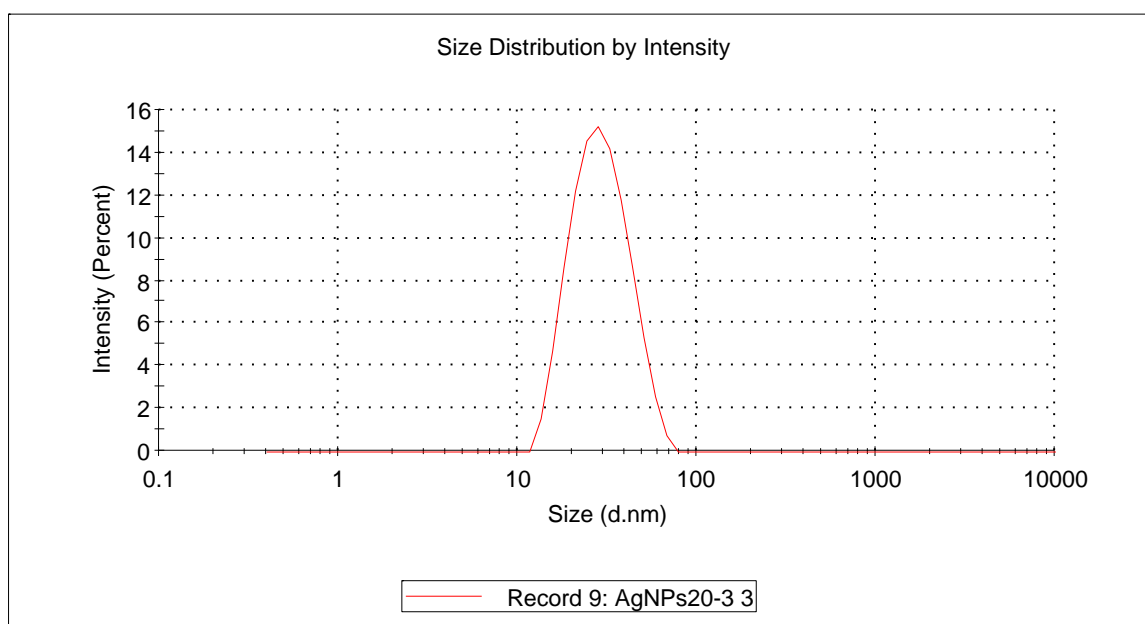
System

| | | | |
|--------------------|---------------------------|----------------------------|------|
| Temperature (°C): | 25.0 | Duration Used (s): | 60 |
| Count Rate (kcps): | 274.6 | Measurement Position (mm): | 4.65 |
| Cell Description: | Disposable sizing cuvette | Attenuator: | 6 |

Results

| | Size (d.n... | % Intensity: | St Dev (d.n... |
|--------------------------------|----------------------|--------------|----------------|
| Z-Average (d.nm): 26.74 | Peak 1: 30.51 | 100.0 | 10.98 |
| Pdl: 0.126 | Peak 2: 0.000 | 0.0 | 0.000 |
| Intercept: 0.904 | Peak 3: 0.000 | 0.0 | 0.000 |

Result quality **Good**



Zeta Potential Report

v2.3



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Sample Details

Sample Name: AgNPs20-5 1
SOP Name: mansettings.nano
General Notes:

| | |
|--------------------------------|---|
| File Name: 20170823.dts | Dispersant Name: citrate buffer |
| Record Number: 13 | Dispersant RI: 1.330 |
| | Viscosity (cP): 0.8878 |
| | Dispersant Dielectric Constant: 78.5 |

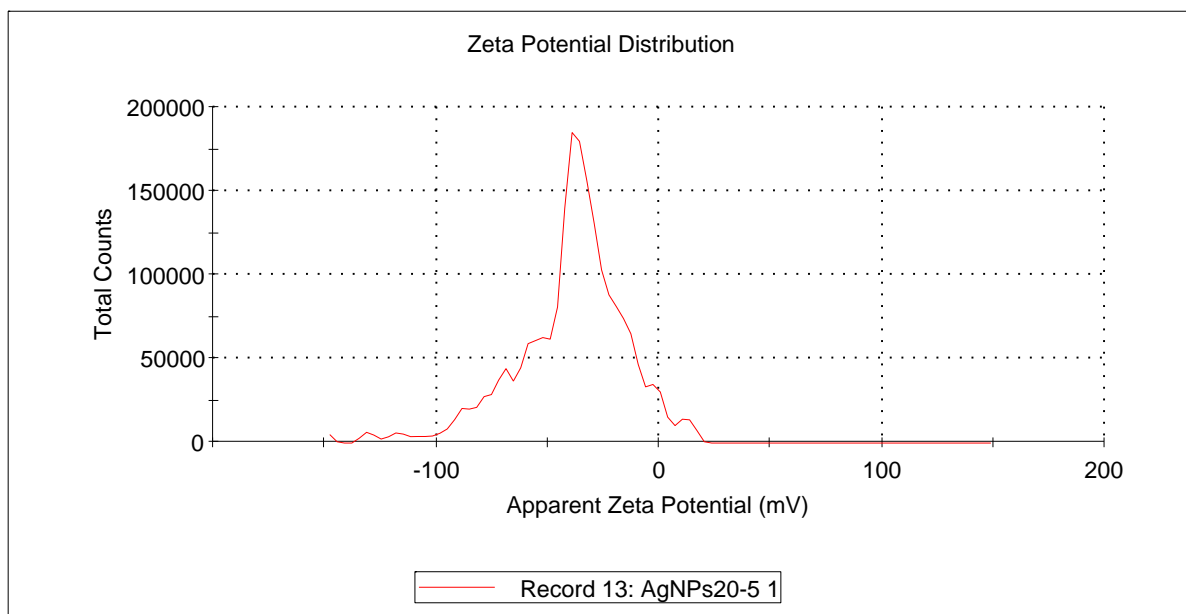
System

| | |
|---|--|
| Temperature (°C): 25.0 | Zeta Runs: 13 |
| Count Rate (kcps): 144.3 | Measurement Position (mm): 2.00 |
| Cell Description: Clear disposable zeta cell | Attenuator: 9 |

Results

| | Mean (mV) | Area (%) | St Dev (mV) |
|------------------------------------|----------------------|----------|-------------|
| Zeta Potential (mV): -40.1 | Peak 1: -30.8 | 62.9 | 11.0 |
| Zeta Deviation (mV): 26.4 | Peak 2: -56.2 | 14.4 | 5.35 |
| Conductivity (mS/cm): 0.686 | Peak 3: -73.5 | 9.6 | 6.28 |

Result quality [See result quality report](#)



Zeta Potential Report

v2.3



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Sample Details

Sample Name: AgNPs20-5 2
SOP Name: mansettings.nano
General Notes:

| | |
|--------------------------------|---|
| File Name: 20170823.dts | Dispersant Name: citrate buffer |
| Record Number: 14 | Dispersant RI: 1.330 |
| | Viscosity (cP): 0.8878 |
| | Dispersant Dielectric Constant: 78.5 |

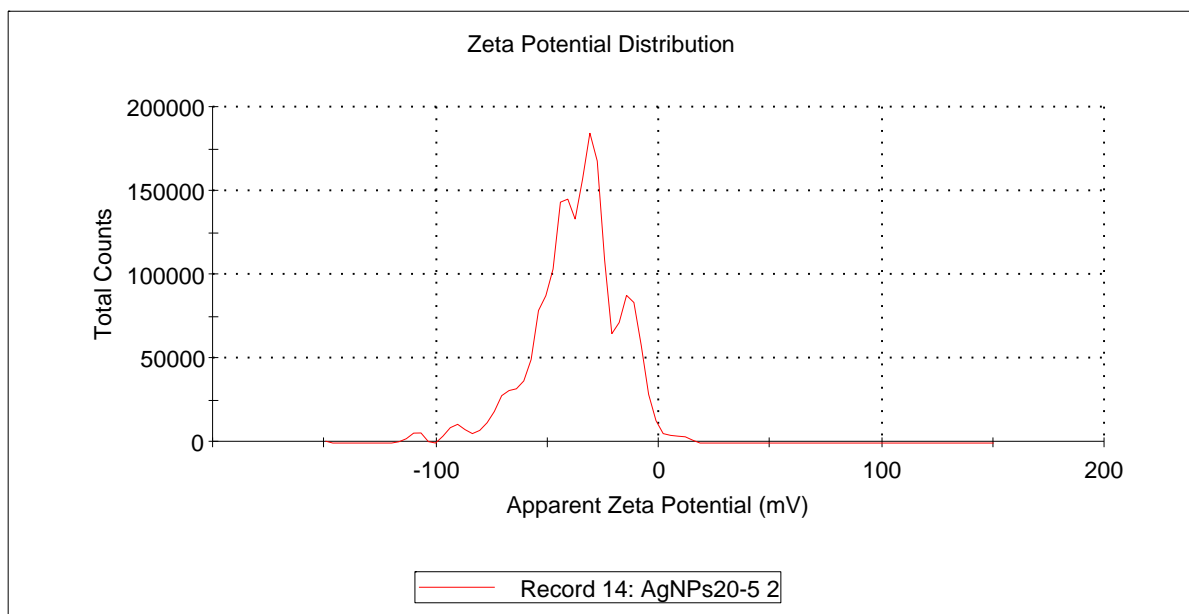
System

| | |
|---|--|
| Temperature (°C): 25.0 | Zeta Runs: 12 |
| Count Rate (kcps): 311.3 | Measurement Position (mm): 2.00 |
| Cell Description: Clear disposable zeta cell | Attenuator: 9 |

Results

| | Mean (mV) | Area (%) | St Dev (mV) |
|------------------------------------|----------------------|----------|-------------|
| Zeta Potential (mV): -37.1 | Peak 1: -49.8 | 41.3 | 10.8 |
| Zeta Deviation (mV): 19.9 | Peak 2: -30.4 | 36.9 | 4.95 |
| Conductivity (mS/cm): 0.709 | Peak 3: -12.6 | 19.3 | 6.81 |

Result quality [See result quality report](#)



Zeta Potential Report

v2.3



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Sample Details

Sample Name: AgNPs20-5 3

SOP Name: mansettings.nano

General Notes:

File Name: 20170823.dts

Dispersant Name: citrate buffer

Record Number: 15

Dispersant RI: 1.330

Viscosity (cP): 0.8878

Dispersant Dielectric Constant: 78.5

System

Temperature (°C): 25.0

Zeta Runs: 12

Count Rate (kcps): 131.0

Measurement Position (mm): 2.00

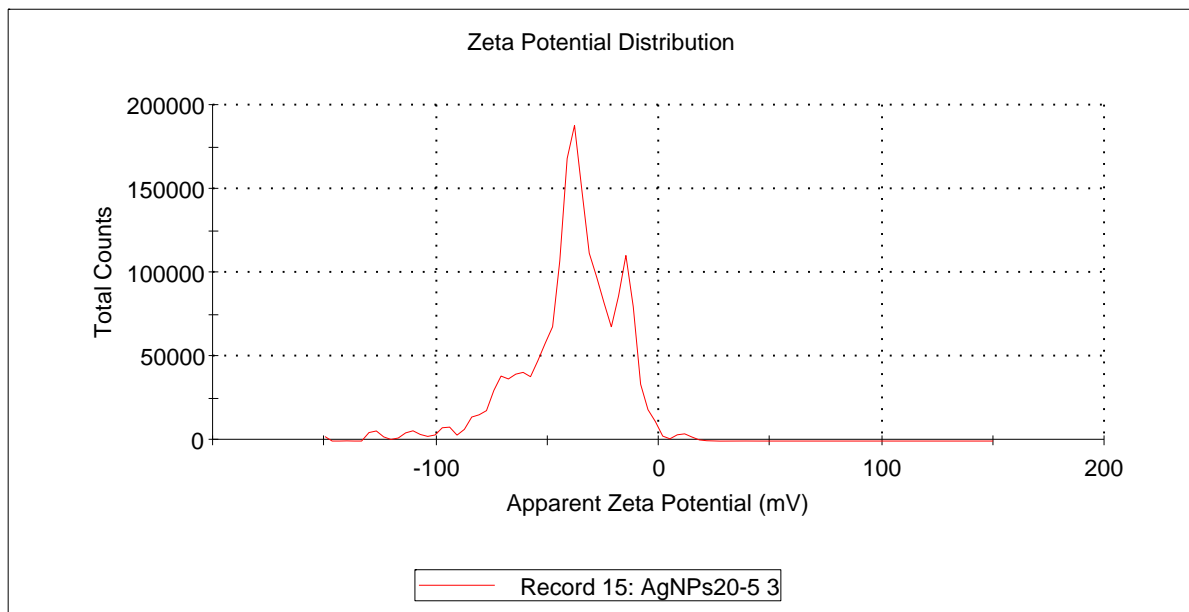
Cell Description: Clear disposable zeta cell

Attenuator: 9

Results

| | Mean (mV) | Area (%) | St Dev (mV) |
|------------------------------------|----------------------|----------|-------------|
| Zeta Potential (mV): -39.7 | Peak 1: -37.8 | 59.4 | 9.17 |
| Zeta Deviation (mV): 23.1 | Peak 2: -14.5 | 20.7 | 5.22 |
| Conductivity (mS/cm): 0.722 | Peak 3: -74.6 | 8.2 | 6.24 |

Result quality [See result quality report](#)



Size Distribution Report by Intensity

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Sample Details

Sample Name: AgNPs20-1 1
SOP Name: mansettings.nano
General Notes:

File Name: 20170823.dts
Record Number: 1
Material RI: 1.59
Material Absorbtion: 0.010
Dispersant Name: citrate buffer
Dispersant RI: 1.330
Viscosity (cP): 0.8878

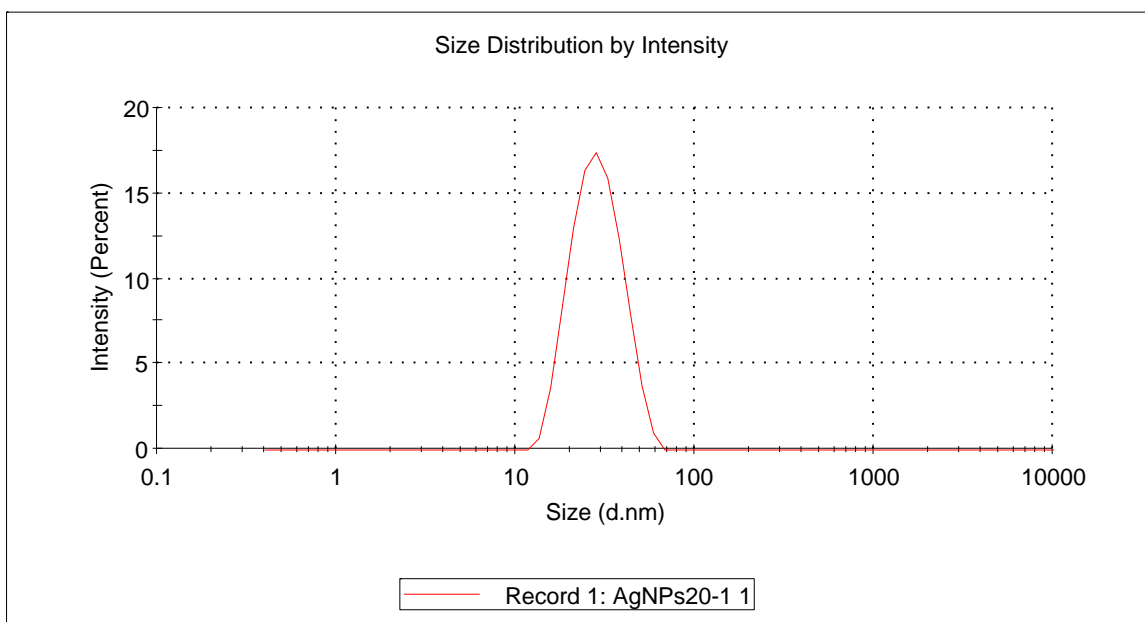
System

Temperature (°C): 25.0
Count Rate (kcps): 284.8
Cell Description: Disposable sizing cuvette
Duration Used (s): 60
Measurement Position (mm): 1.25
Attenuator: 5

Results

| | Size (d.n... | % Intensity: | St Dev (d.n... |
|--------------------------------|----------------------|--------------|----------------|
| Z-Average (d.nm): 26.59 | Peak 1: 29.56 | 100.0 | 9.212 |
| Pdl: 0.105 | Peak 2: 0.000 | 0.0 | 0.000 |
| Intercept: 0.910 | Peak 3: 0.000 | 0.0 | 0.000 |

Result quality **Good**



Size Distribution Report by Intensity

v2.2



Sample Details

Sample Name: AgNPs20-1 2
SOP Name: mansettings.nano
General Notes:

File Name: 20170823.dts
Record Number: 2
Material RI: 1.59
Material Absorbtion: 0.010
Dispersant Name: citrate buffer
Dispersant RI: 1.330
Viscosity (cP): 0.8878

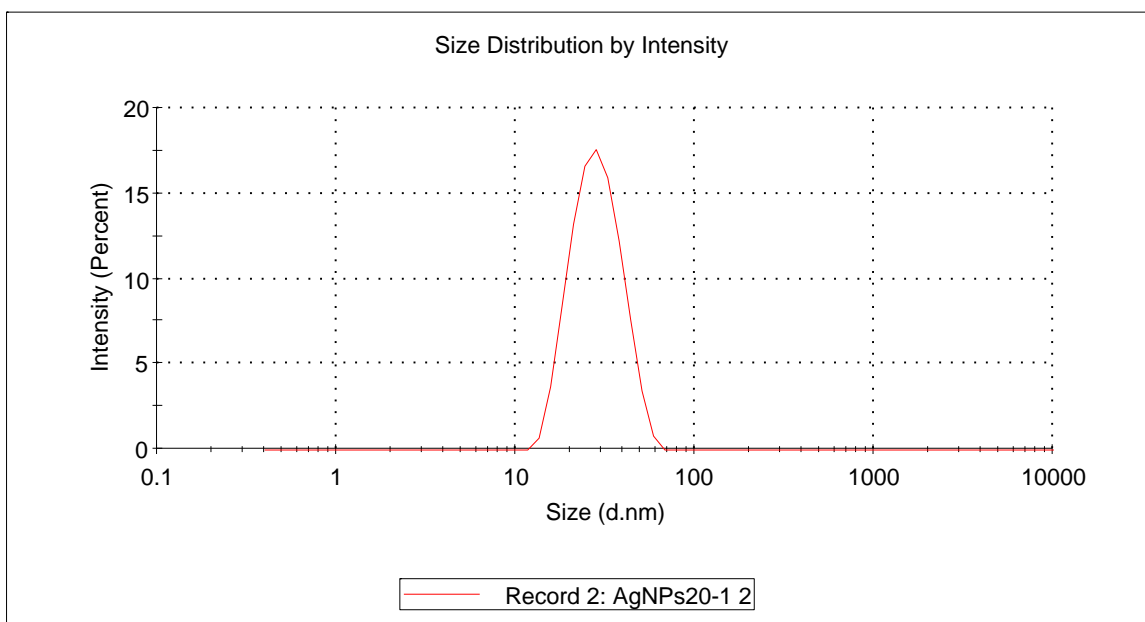
System

Temperature (°C): 25.0
Count Rate (kcps): 284.0
Cell Description: Disposable sizing cuvette
Duration Used (s): 60
Measurement Position (mm): 1.25
Attenuator: 5

Results

| | Size (d.n... | % Intensity: | St Dev (d.n... |
|--------------------------------|----------------------|--------------|----------------|
| Z-Average (d.nm): 26.43 | Peak 1: 29.32 | 100.0 | 9.045 |
| Pdl: 0.100 | Peak 2: 0.000 | 0.0 | 0.000 |
| Intercept: 0.909 | Peak 3: 0.000 | 0.0 | 0.000 |

Result quality **Good**



Size Distribution Report by Intensity

v2.2



Sample Details

Sample Name: AgNPs20-1 3

SOP Name: mansettings.nano

General Notes:

| | | | |
|----------------------|--------------|------------------|----------------|
| File Name: | 20170823.dts | Dispersant Name: | citrate buffer |
| Record Number: | 3 | Dispersant RI: | 1.330 |
| Material RI: | 1.59 | Viscosity (cP): | 0.8878 |
| Material Absorbtion: | 0.010 | | |

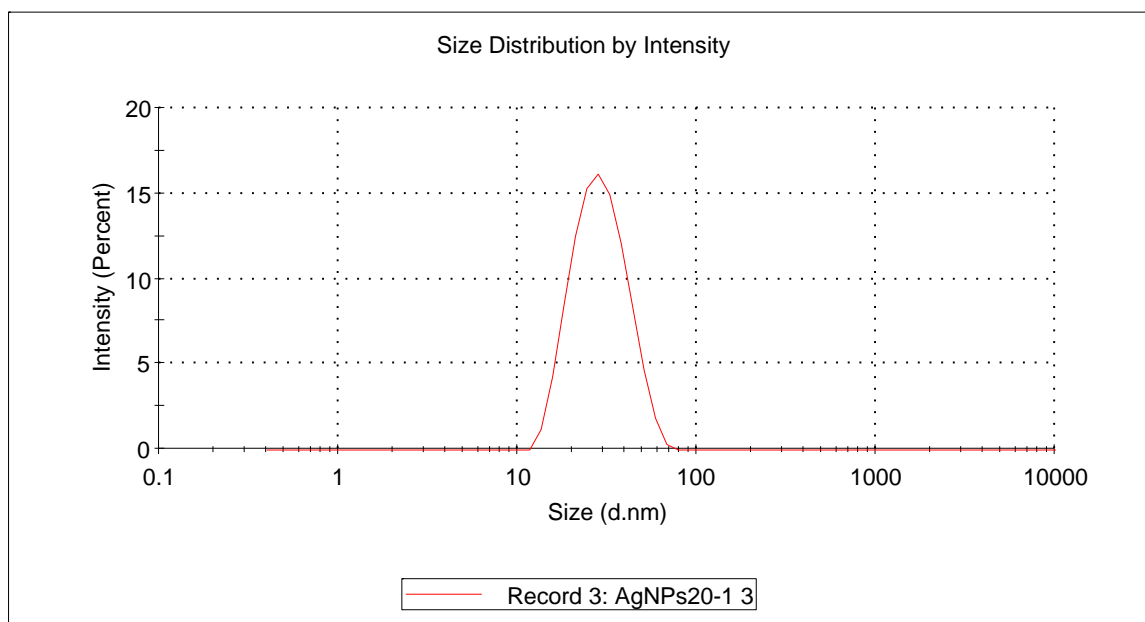
System

| | | | |
|--------------------|---------------------------|----------------------------|------|
| Temperature (°C): | 25.0 | Duration Used (s): | 60 |
| Count Rate (kcps): | 288.4 | Measurement Position (mm): | 1.25 |
| Cell Description: | Disposable sizing cuvette | Attenuator: | 5 |

Results

| | Size (d.n... | % Intensity: | St Dev (d.n... |
|--------------------------------|----------------------|--------------|----------------|
| Z-Average (d.nm): 26.59 | Peak 1: 30.05 | 100.0 | 10.19 |
| Pdl: 0.122 | Peak 2: 0.000 | 0.0 | 0.000 |
| Intercept: 0.911 | Peak 3: 0.000 | 0.0 | 0.000 |

Result quality **Good**



Zeta Potential Report

v2.3



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Sample Details

Sample Name: AgNPs20-4 1

SOP Name: mansettings.nano

General Notes:

File Name: 20170823.dts

Dispersant Name: citrate buffer

Record Number: 10

Dispersant RI: 1.330

Viscosity (cP): 0.8878

Dispersant Dielectric Constant: 78.5

System

Temperature (°C): 25.0

Zeta Runs: 15

Count Rate (kcps): 116.1

Measurement Position (mm): 2.00

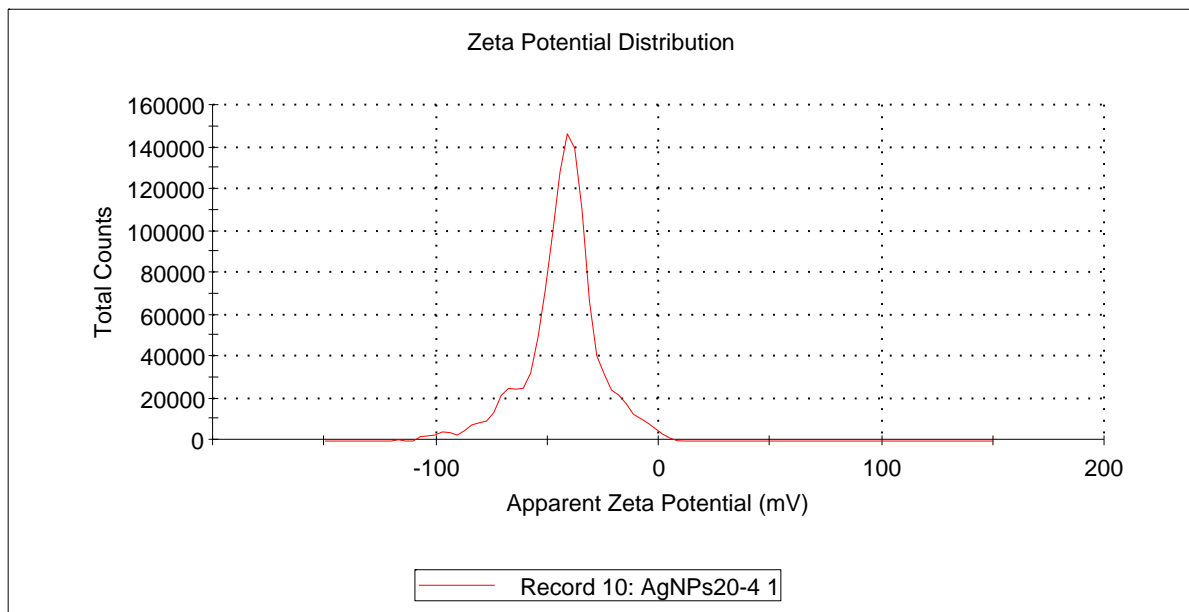
Cell Description: Clear disposable zeta cell

Attenuator: 7

Results

| | Mean (mV) | Area (%) | St Dev (mV) |
|------------------------------------|----------------------|----------|-------------|
| Zeta Potential (mV): -43.1 | Peak 1: -39.5 | 88.6 | 12.4 |
| Zeta Deviation (mV): 16.6 | Peak 2: -72.3 | 9.8 | 7.23 |
| Conductivity (mS/cm): 0.690 | Peak 3: -97.8 | 1.5 | 5.15 |

Result quality [See result quality report](#)



Zeta Potential Report

v2.3



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Sample Details

Sample Name: AgNPs20-4 2
SOP Name: mansettings.nano
General Notes:

| | |
|--------------------------------|---|
| File Name: 20170823.dts | Dispersant Name: citrate buffer |
| Record Number: 11 | Dispersant RI: 1.330 |
| | Viscosity (cP): 0.8878 |
| | Dispersant Dielectric Constant: 78.5 |

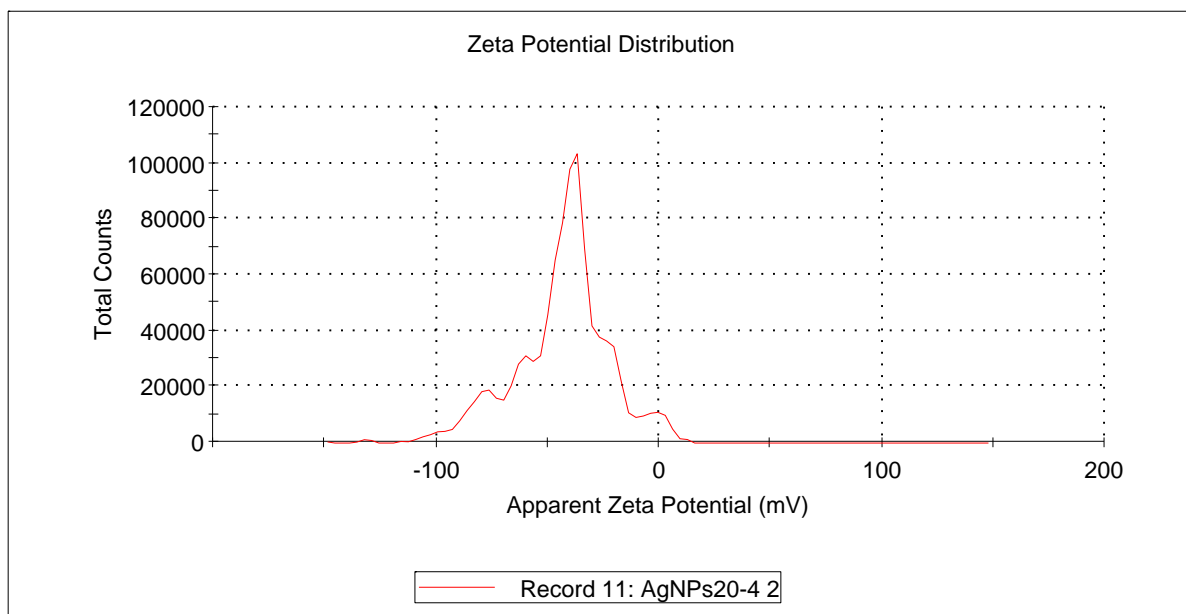
System

| | |
|---|--|
| Temperature (°C): 25.0 | Zeta Runs: 12 |
| Count Rate (kcps): 41.1 | Measurement Position (mm): 2.00 |
| Cell Description: Clear disposable zeta cell | Attenuator: 7 |

Results

| | Mean (mV) | Area (%) | St Dev (mV) |
|------------------------------------|----------------------|----------|-------------|
| Zeta Potential (mV): -43.4 | Peak 1: -37.2 | 69.8 | 10.6 |
| Zeta Deviation (mV): 21.5 | Peak 2: -62.0 | 12.2 | 4.35 |
| Conductivity (mS/cm): 0.714 | Peak 3: -81.7 | 12.0 | 9.65 |

Result quality [See result quality report](#)



Zeta Potential Report

v2.3



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Sample Details

Sample Name: AgNPs20-4 3

SOP Name: mansettings.nano

General Notes:

File Name: 20170823.dts

Dispersant Name: citrate buffer

Record Number: 12

Dispersant RI: 1.330

Viscosity (cP): 0.8878

Dispersant Dielectric Constant: 78.5

System

Temperature (°C): 25.0

Zeta Runs: 12

Count Rate (kcps): 69.1

Measurement Position (mm): 2.00

Cell Description: Clear disposable zeta cell

Attenuator: 7

Results

| | Mean (mV) | Area (%) | St Dev (mV) |
|------------------------------------|----------------------|----------|-------------|
| Zeta Potential (mV): -46.1 | Peak 1: -32.7 | 34.5 | 7.11 |
| Zeta Deviation (mV): 21.4 | Peak 2: -45.6 | 33.2 | 4.32 |
| Conductivity (mS/cm): 0.725 | Peak 3: -61.2 | 19.9 | 6.73 |

Result quality [See result quality report](#)

