



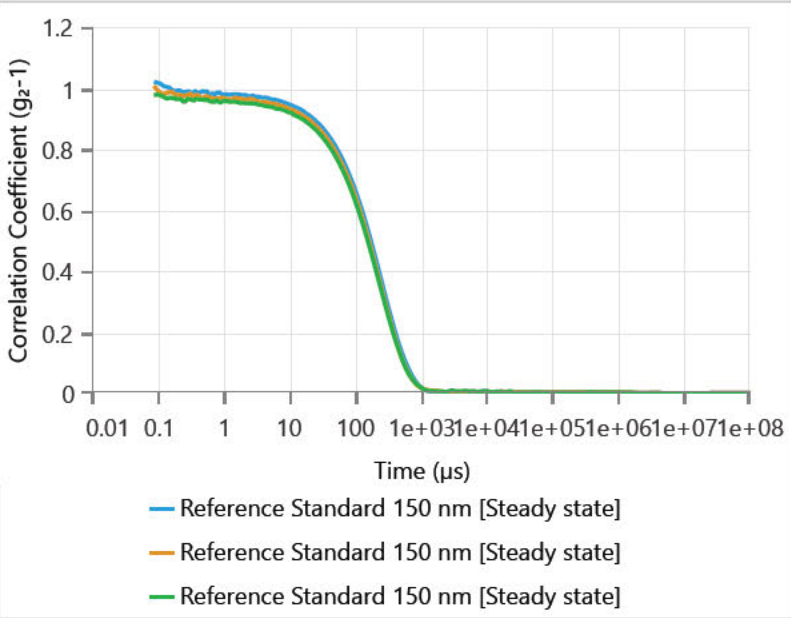
Sample Details

Sample Name:	Reference Standard 150 nm			Result Source:	Instrument	
Project Name:	Pfizer - BNT162			Temperature (°C):	25	
Date and Time:	Friday, July 23 2021 01:50:10 PM			Dispersant Name:	PBS - Pfizer	
Type:	Size			Dispersant RI:	1.34	
Cell Name:	DTS0012			Dispersant Viscosity (cP):	1.02	
Material Name:	Protein			Dispersant Dielectric Constant:	78.5	
Material RI:	1.45					
Material Absorption:	0.001					

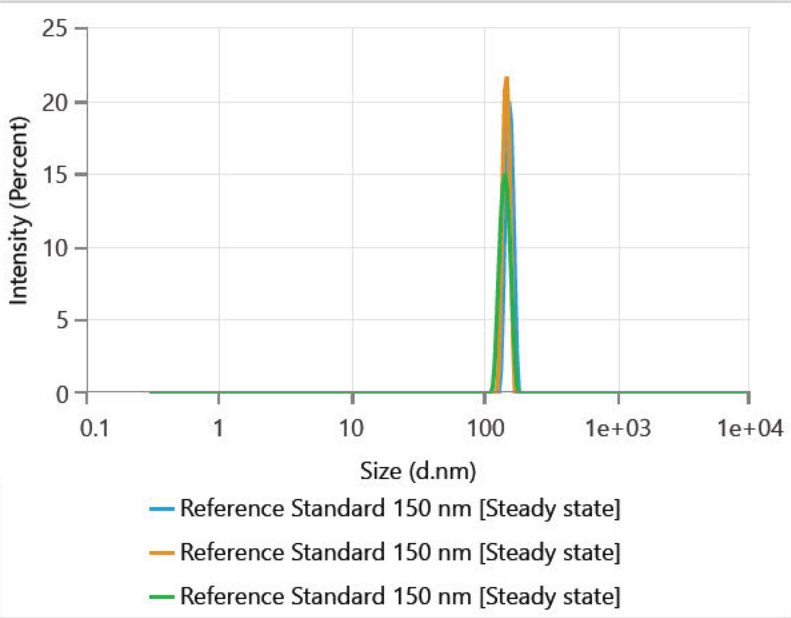
Statistics Table

Name	Mean	Standard Deviation	RSD	Minimum	Maximum
Z-Average (nm)	148.1	5.628	3.801	143.1	154.2
Polydispersity Index (PI)	0.02494	0.01539	61.71	0.0118	0.04187

Correlogram



Size Distribution by Intensity





Parameter List

Malvern Defined Material	: True
Malvern Defined Dispersant	: False
Temperature (°C)	: 25
Cell Name	: DTS0012
Measurement Duration (s)	: 33.60
Use Automatic Measurement Duration:	
Fixed Position	: 4.65
Attenuation Factor	: 0.014
Attenuator	: 7
Analysis Model	: LCurve





Sample Details

Sample Name: Reference Standard 150 nm
Project Name: Pfizer - BNT162 -23July2021
Date and Time: Friday, July 23 2021 01:50:10 PM

Type: Size
Cell Name: DTS0012
Material Name: Protein
Material RI: 1.45
Material Absorption: 0.001

Result Source: Instrument
Temperature (°C): 25
Dispersant Name: PBS - Pfizer
Dispersant RI: 1.34
Dispersant Viscosity (cP): 1.02
Dispersant Dielectric Constant: 78.5

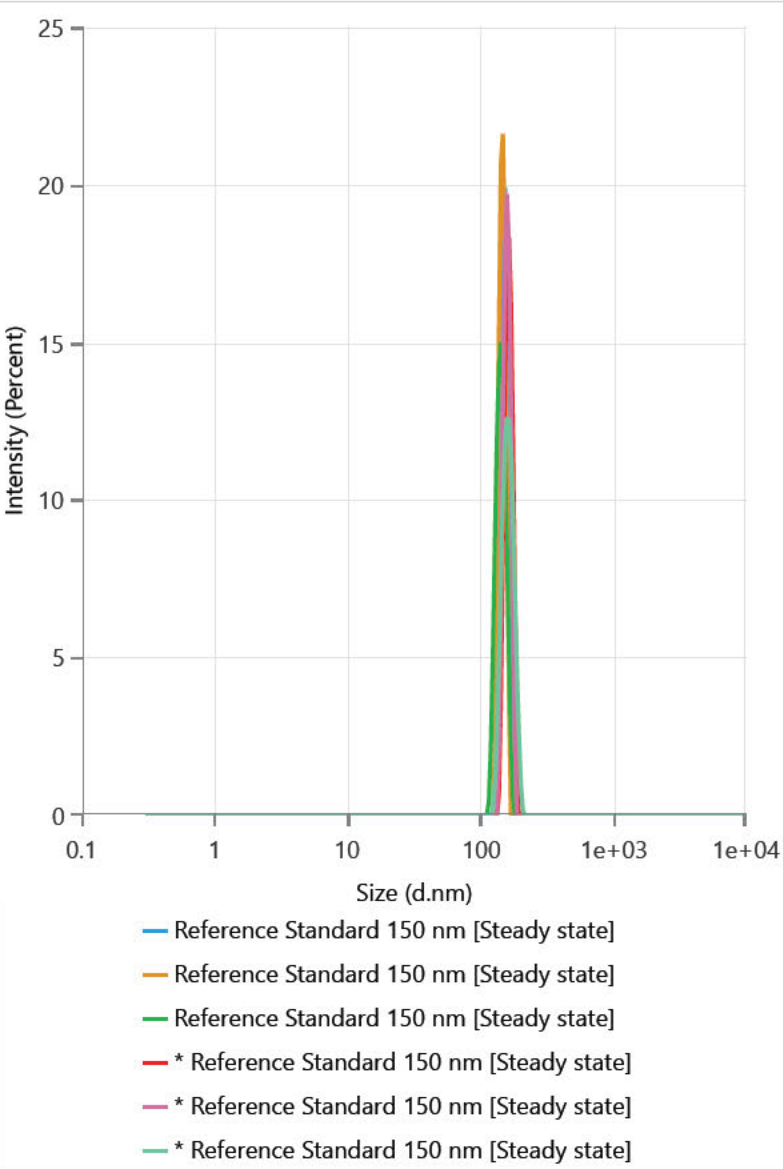
Statistics Table

Name	Mean	Standard Deviation	RSD	Minimum	Maximum	
Z-Average (nm)	154.5	8.049	5.208	143.1	163.7	
Polydispersity Index (PI)	0.02535	0.01241	48.95	0.0118	0.04187	
Peak One Mean by Intensity (nm)	154.7	8.308	5.371	143.3	163.5	
Peak One Area by Number (%)	100	6.355E-15	6.355E-15	100	100	

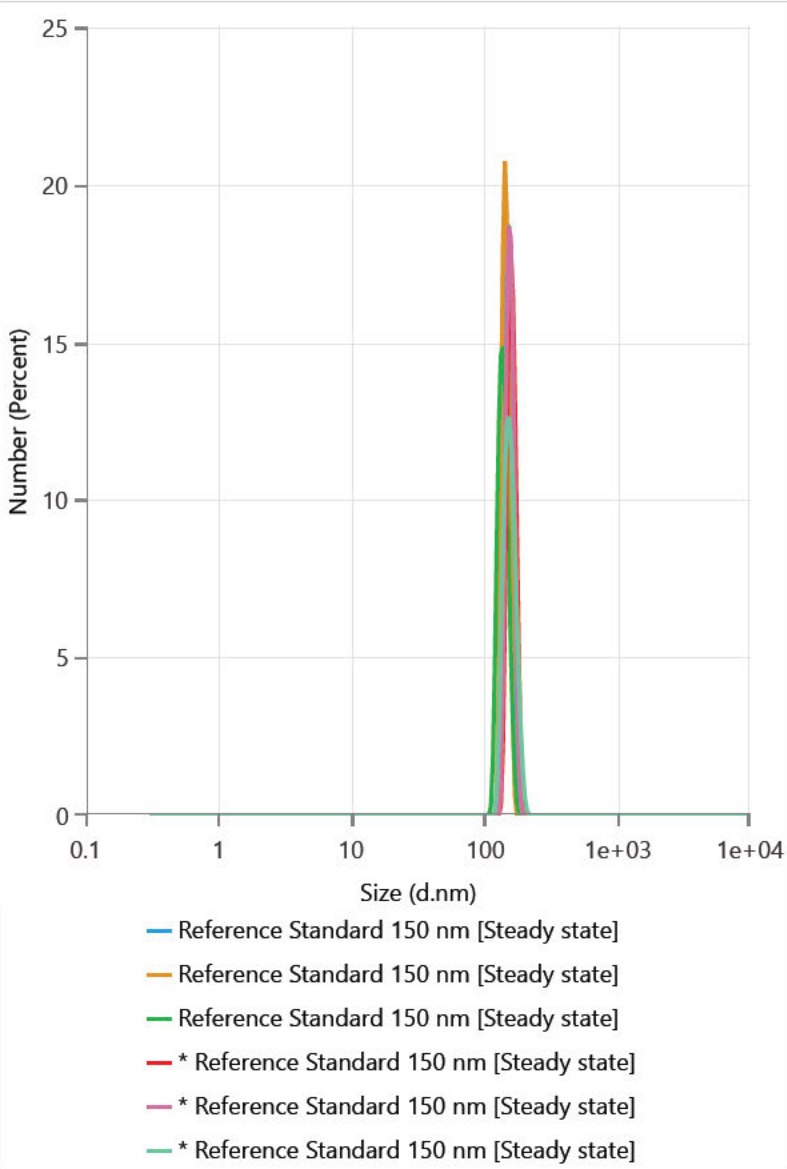


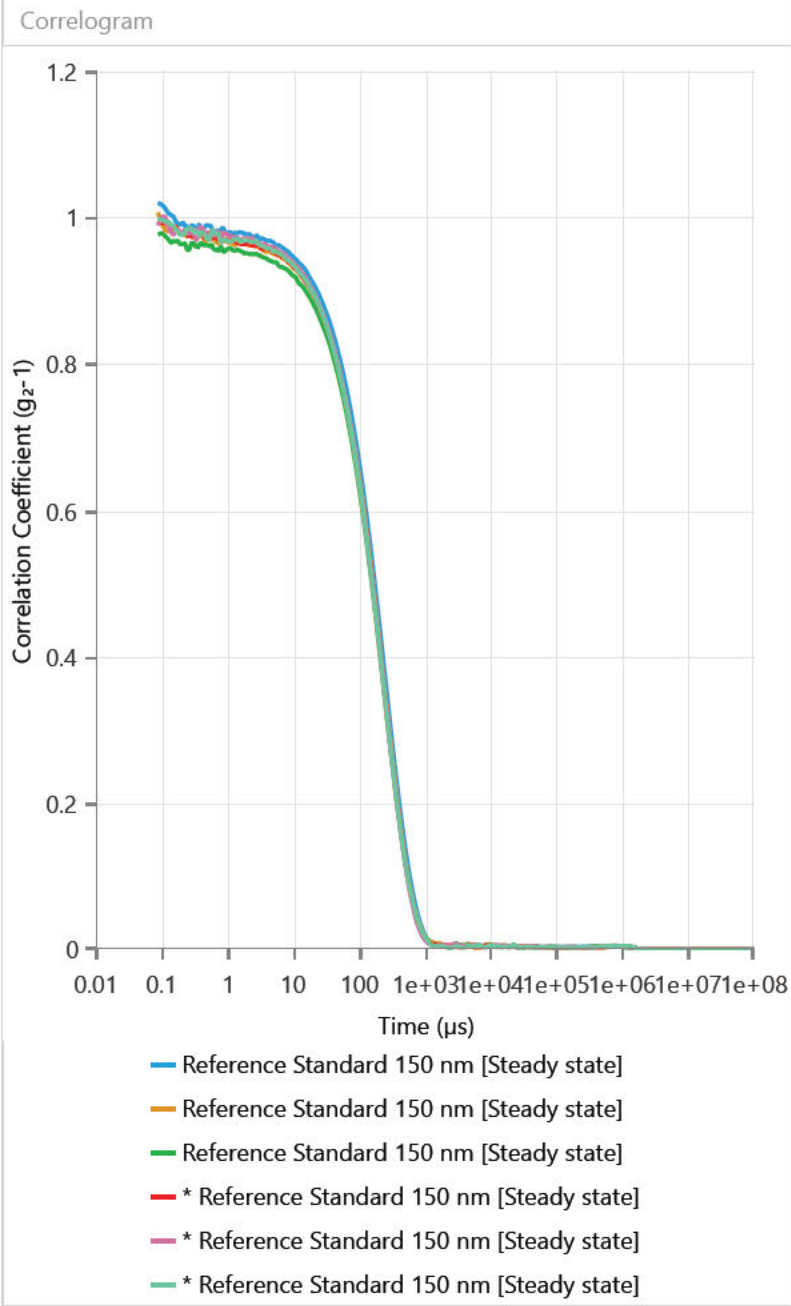
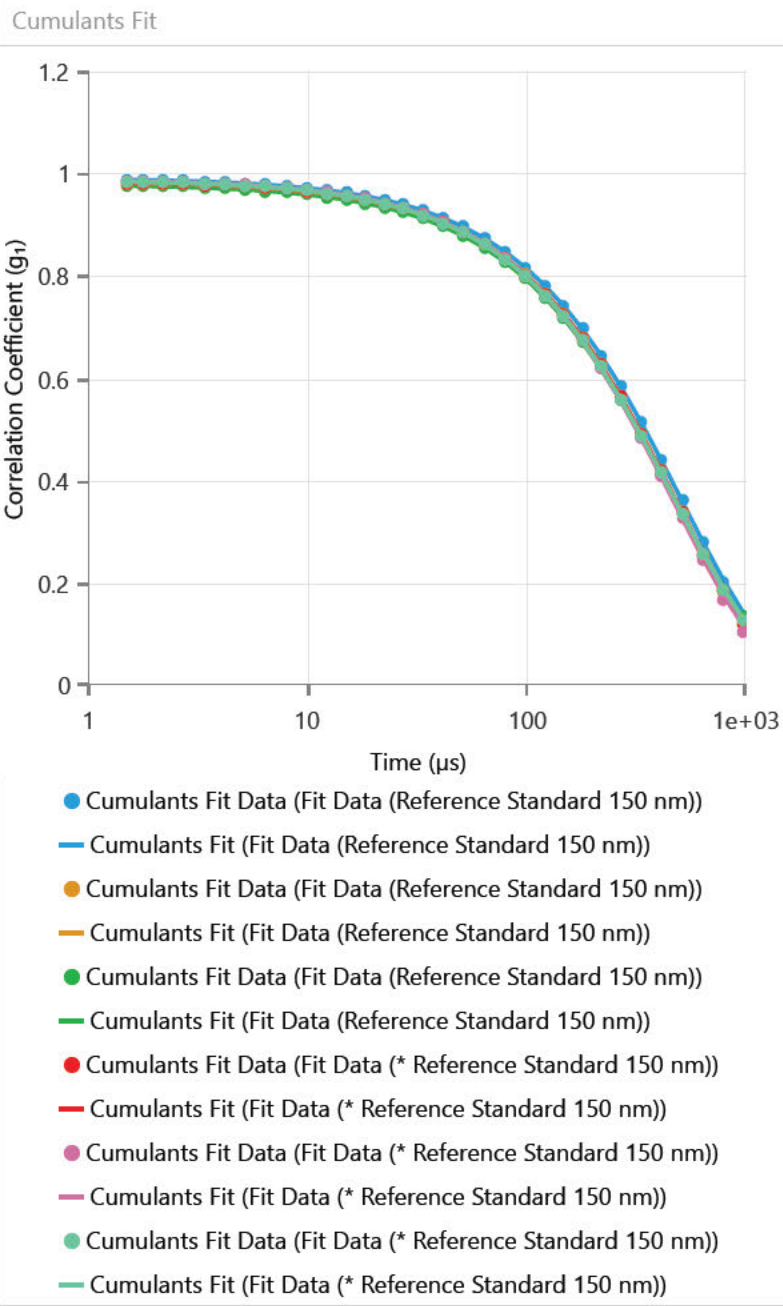


Size Distribution by Intensity



Size Distribution by Number







Data Quality Guidance



Reference Standard 150 nm

No data quality issues detected.



Reference Standard 150 nm

No data quality issues detected.



Reference Standard 150 nm

No data quality issues detected.



* Reference Standard 150 nm

No data quality issues detected.



* Reference Standard 150 nm

No data quality issues detected.



* Reference Standard 150 nm

No data quality issues detected.



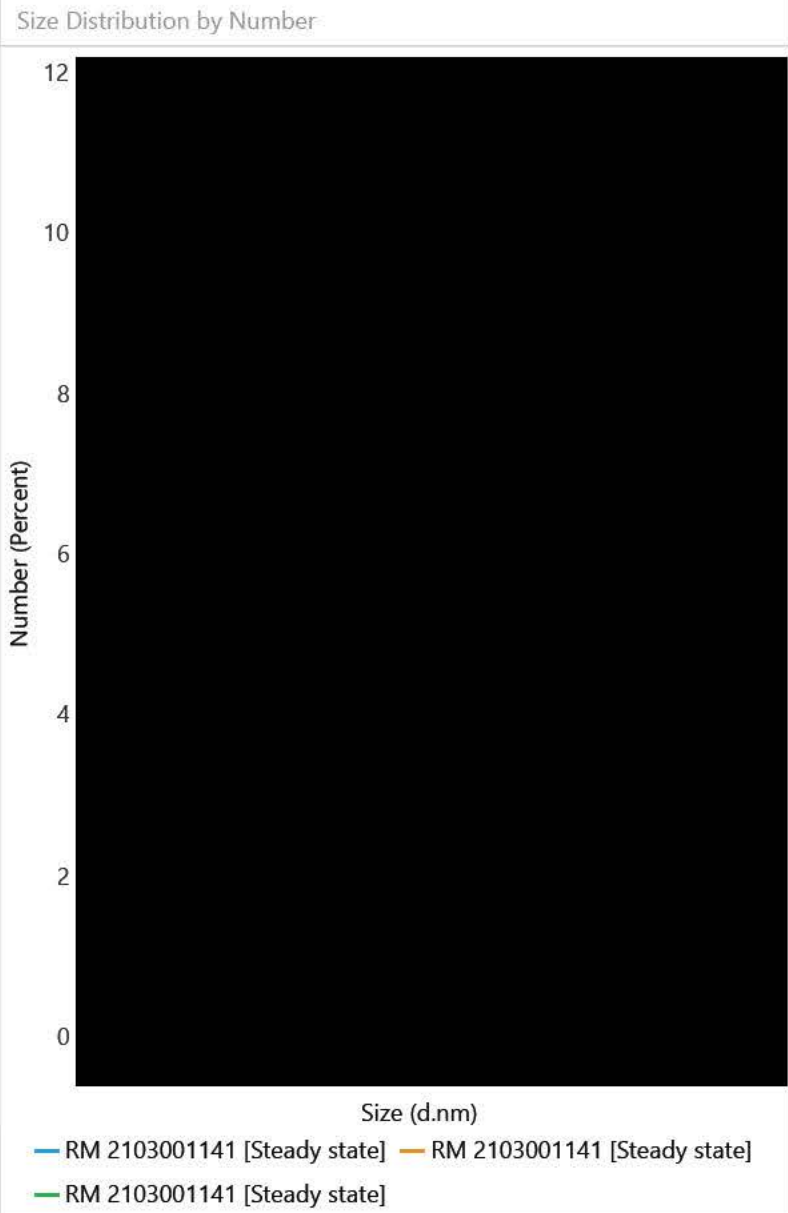
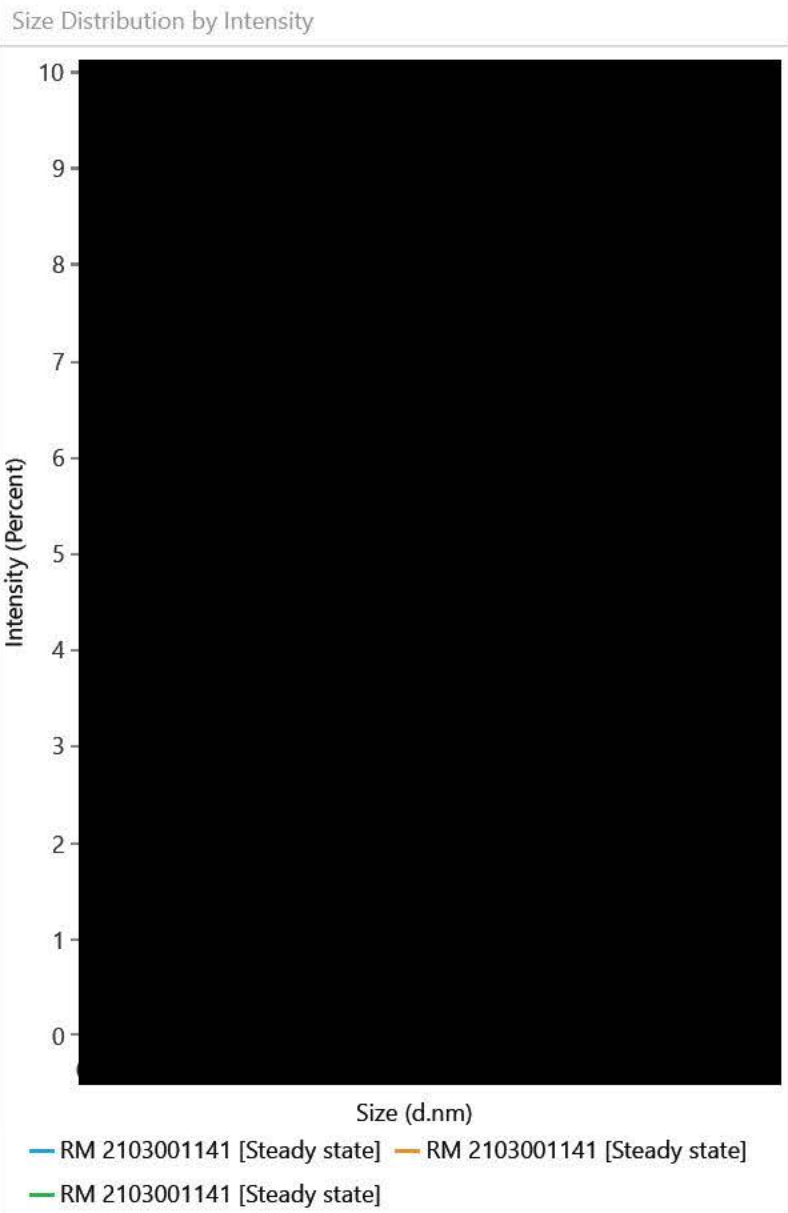
Sample Details

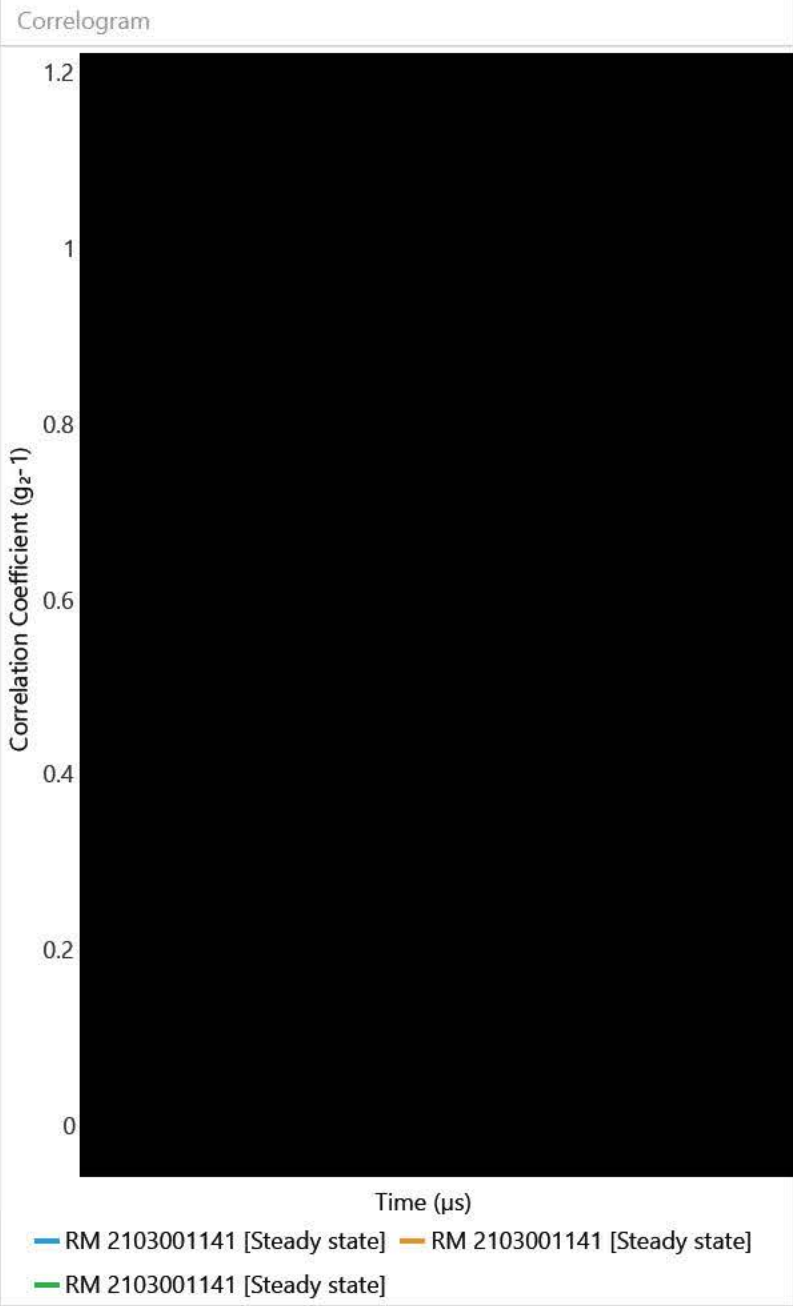
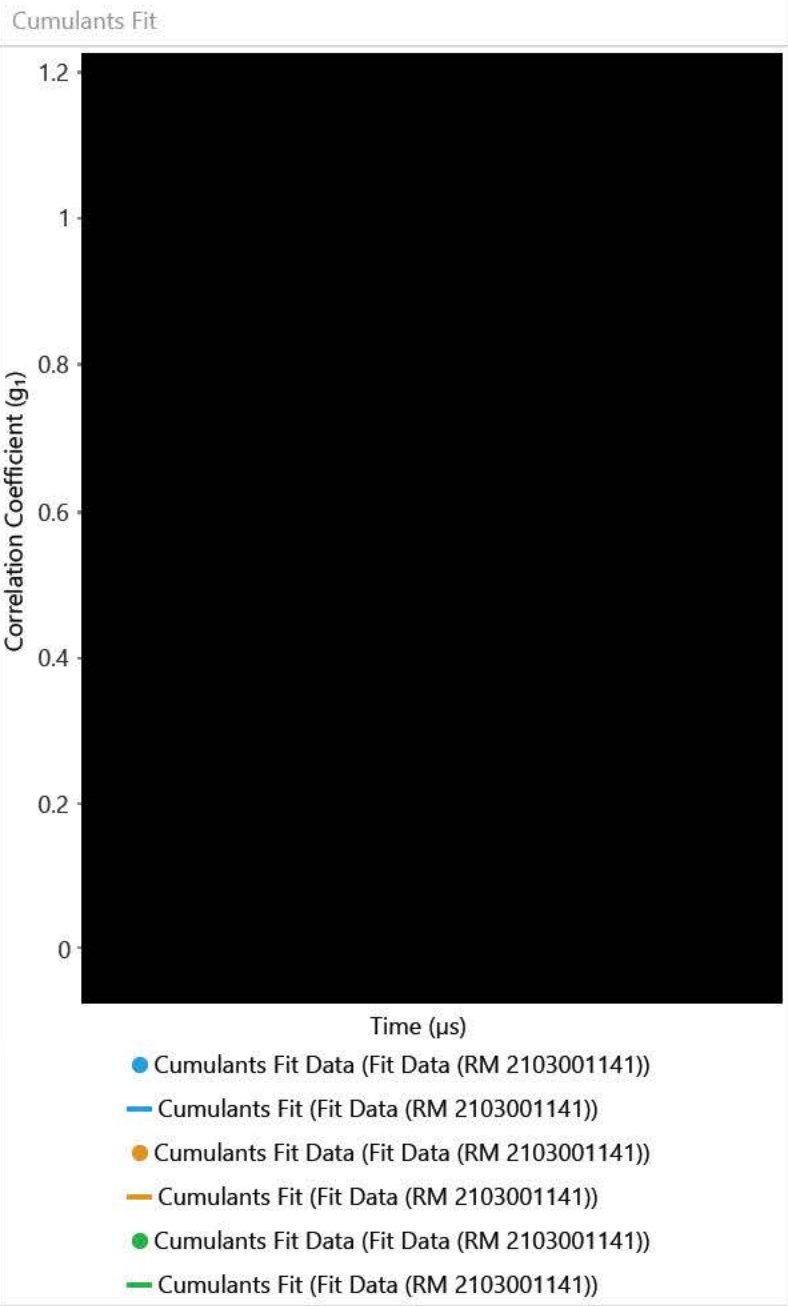
Sample Name:	RM 2103001141	Result Source:	Instrument
Project Name:	Pfizer - BNT162 -23July2021	Temperature (°C):	25
Date and Time:	Friday, July 23 2021 03:39:21 PM	Dispersant Name:	PBS - Pfizer
Type:	Size	Dispersant RI:	1.34
Cell Name:	DTS0012	Dispersant Viscosity (cP):	1.02
Material Name:	Protein	Dispersant Dielectric Constant:	78.5
Material RI:	1.45		
Material Absorption:	0.001		

Statistics Table

Name	Mean	Standard Deviation	RSD	Minimum	Maximum
Z-Average (nm)					
Polydispersity Index (PI)					
Peak One Mean by Intensity (nm)					
Peak Two Mean by Intensity (nm)					
Peak One Area by Number (%)					









Data Quality Guidance



RM 2103001141

Multiple populations



RM 2103001141

Multiple populations



RM 2103001141

No data quality issues detected.

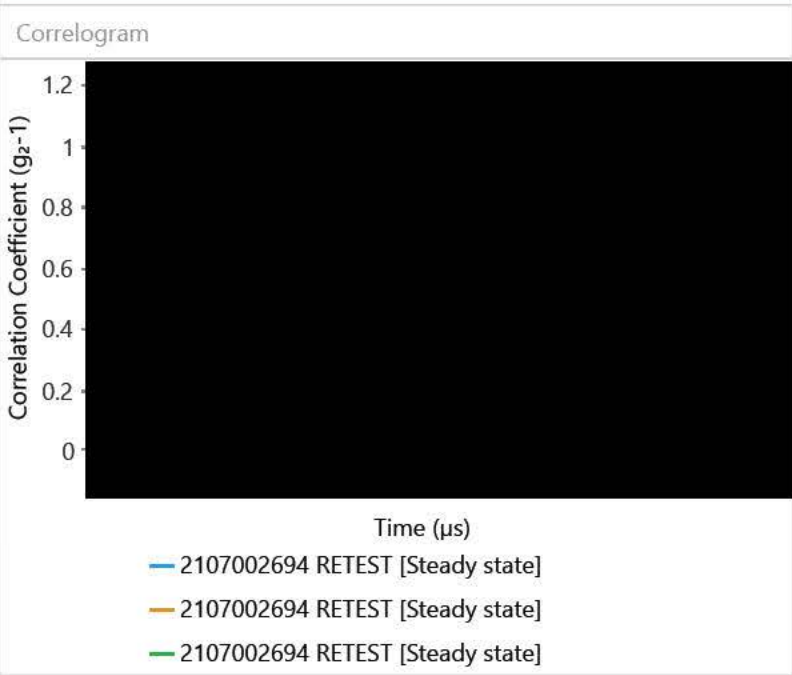


Sample Details

Sample Name:	2107002694 RETEST	Result Source:	Instrument
Project Name:	Pfizer - BNT162	Temperature (°C):	25
Date and Time:	Friday, July 23 2021 02:30:14 PM	Dispersant Name:	PBS - Pfizer
Type:	Size	Dispersant RI:	1.34
Cell Name:	DTS0012	Dispersant Viscosity (cP):	1.02
Material Name:	Protein	Dispersant Dielectric Constant:	78.5
Material RI:	1.45		
Material Absorption:	0.001		

Statistics Table

Name	Mean	Standard Deviation	RSD	Minimum	Maximum
Z-Average (nm)					
Polydispersity Index (PI)					





Parameter List

Malvern Defined Material	: True
Malvern Defined Dispersant	: False
Temperature (°C)	: 25
Cell Name	: DTS0012
Measurement Duration (s)	: 25.20
Use Automatic Measurement Duration:	
Fixed Position	: 4.65
Attenuation Factor	: 0.047
Attenuator	: 8
Analysis Model	: LCurve

