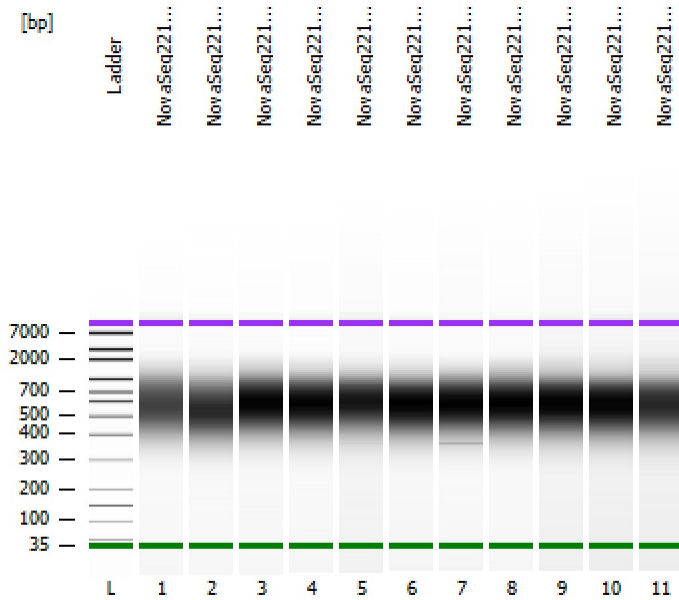


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
Modified: 6/26/2020 2:29:43 PM

Electrophoresis File Run Summary



Instrument Information:
 Instrument Name: DE34903152 Firmware: C.01.069
 Serial#: DE34903152 Type: G2938C

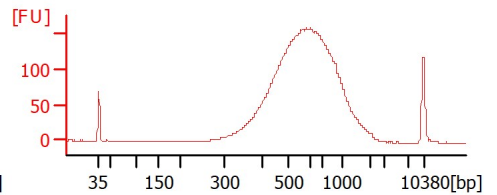
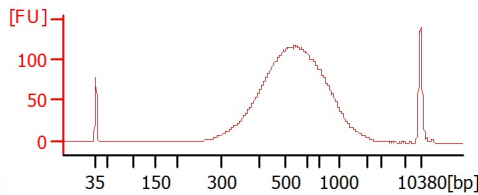
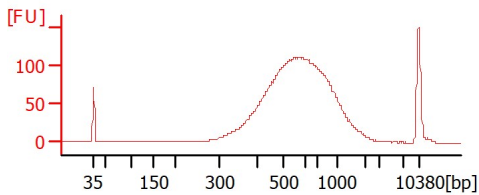
Assay Information:
 Assay Origin Path: C:\Program Files (x86)\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy
 Assay Class: High Sensitivity DNA Assay
 Version: 1.03
 Assay Comments: Copyright © 2003-2010 Agilent Technologies

Chip Information:
 Chip Lot #:
 Reagent Kit Lot #:
 Chip Comments:

NovaSeq221-8 SS lib

NovaSeq221-9 SS lib

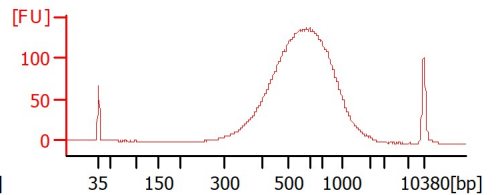
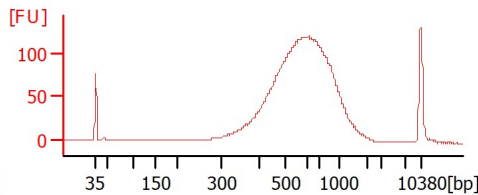
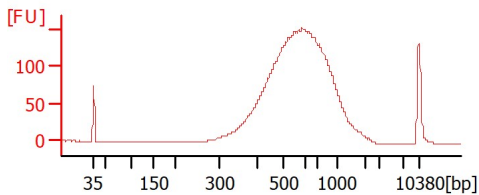
NovaSeq221-16 SS lib (1:2)



NovaSeq221-17 SS lib (1:2)

NovaSeq221-18 SS lib (1:2)

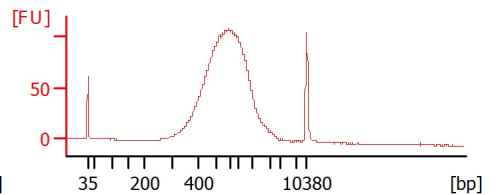
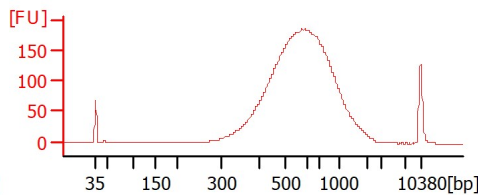
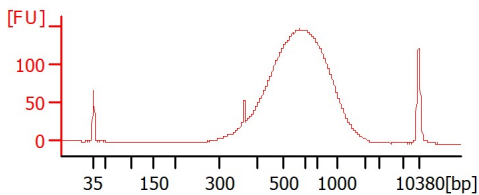
NovaSeq221-19 SS lib (1:2)



NovaSeq221-20 SS lib (1:2)

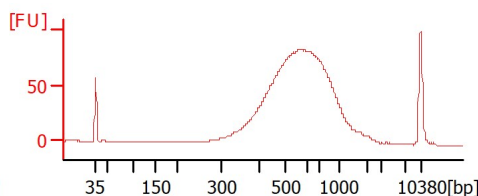
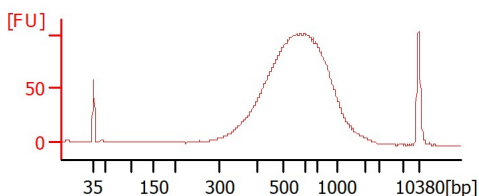
NovaSeq221-21 SS lib (1:2)

NovaSeq221-22 SS lib



NovaSeq221-23 SS lib

NovaSeq221-25 SS lib



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
NovaSeq221-8 SS lib		<input type="checkbox"/>	✓			
NovaSeq221-9 SS lib		<input type="checkbox"/>	✓			
NovaSeq221-16 SS lib (1:2)		<input type="checkbox"/>	✓			
NovaSeq221-17 SS lib (1:2)		<input type="checkbox"/>	✓			
NovaSeq221-18 SS lib (1:2)		<input type="checkbox"/>	✓			
NovaSeq221-19 SS lib (1:2)		<input type="checkbox"/>	✓			
NovaSeq221-20 SS lib (1:2)		<input type="checkbox"/>	✓			
NovaSeq221-21 SS lib (1:2)		<input type="checkbox"/>	✓			
NovaSeq221-22 SS lib		<input type="checkbox"/>	✓			
NovaSeq221-23 SS lib		<input type="checkbox"/>	✓			
NovaSeq221-25 SS lib		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
 Minimum Visible Range [s] : 32
 Maximum Visible Range [s] : 138
 Start Analysis Time Range [s] : 33
 End Analysis Time Range [s] : 137.5
 Ladder Concentration [pg/μl] : 1950
 Uses Standard Area for Ladder Fragments
 Lower Marker Concentration [pg/μl] : 125
 Upper Marker Concentration [pg/μl] : 75
 Used Upper Marker for Quantitation
 Standard Curve Fit is Point to Point
 Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
 Integration End Time [s] : 137
 Slope Threshold : 0.8
 Height Threshold [FU] : 5
 Area Threshold : 0.1
 Width Threshold [s] : 0.6
 Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
 Polynomial Order : 4

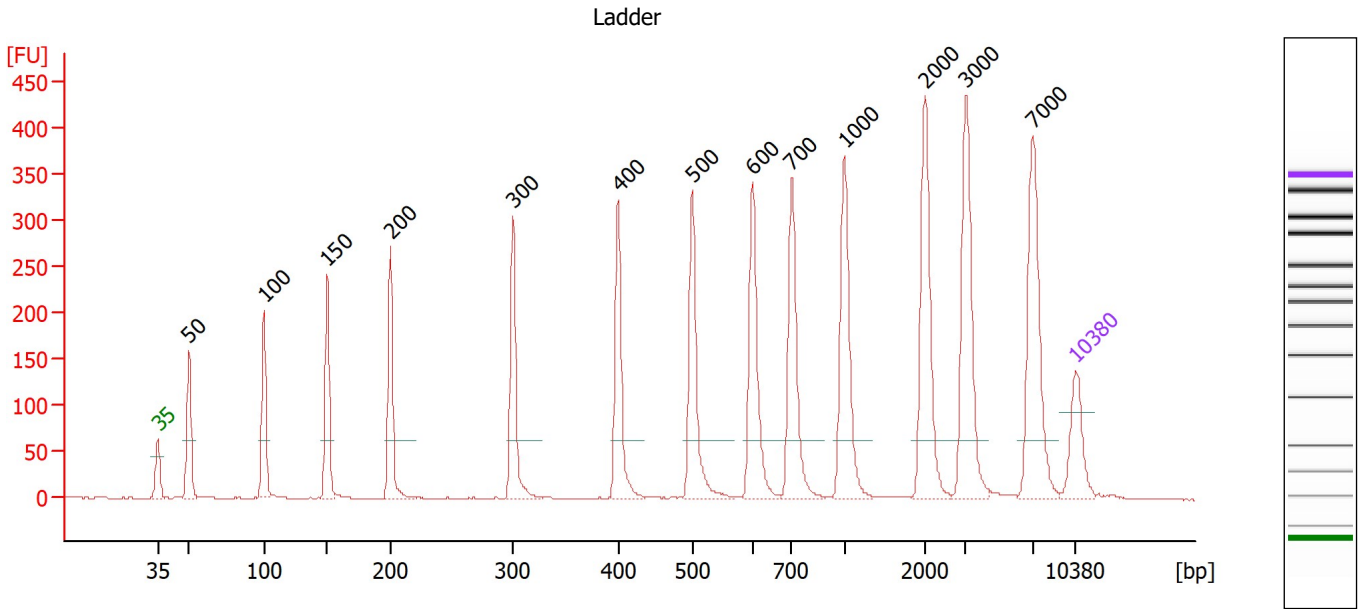
Ladder

Ladder Peak	Size	Area
1	35	160
2	50	210
3	100	208
4	150	221
5	200	242
6	300	270
7	400	305
8	500	306
9	600	336
10	700	321
11	1000	366
12	2000	413
13	3000	411
14	7000	400
15	10380	214

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

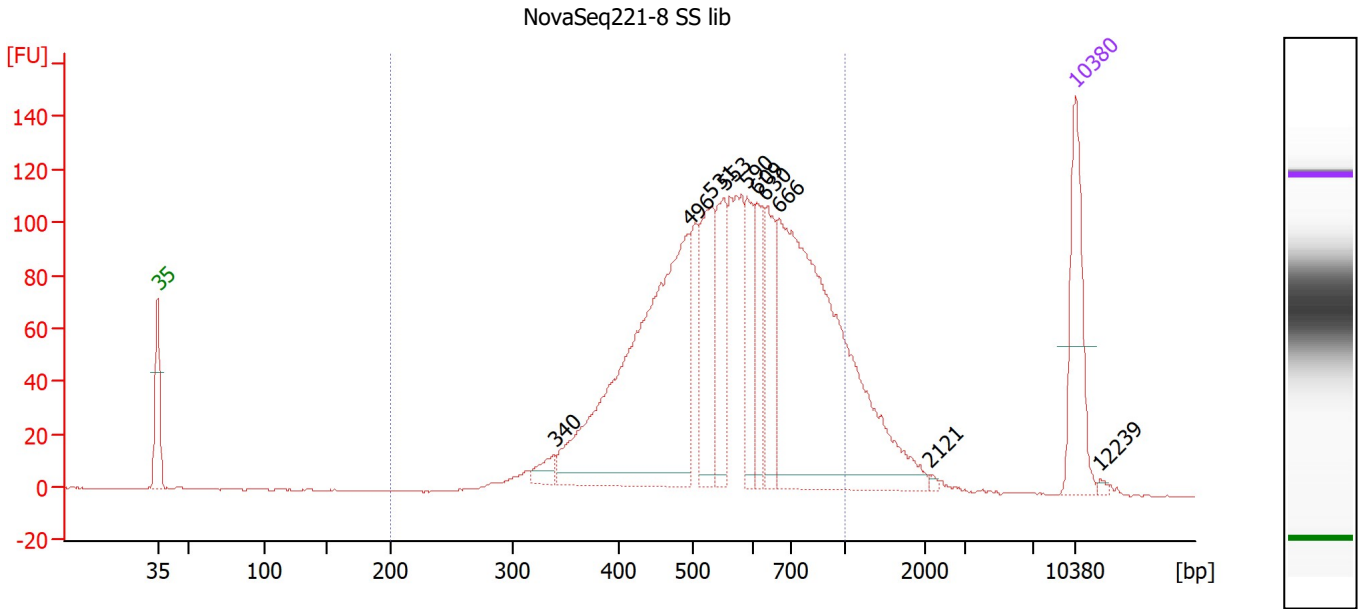
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : NovaSeq221-8 SS lib

Number of peaks found: 10 Corr. Area 1: 2,034.6
 Noise: 0.3

Peak table for sample 1 : NovaSeq221-8 SS lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	340	17.63	78.7	
3	496	456.56	1,394.1	
4	531	106.64	304.1	
5	553	88.33	242.2	
6	590	62.19	159.8	
7	609	56.31	140.2	
8	630	76.05	182.9	
9	666	472.42	1,074.8	
10	2,121	2.08	1.5	
11	10,380	75.00	10.9	Upper Marker
12	12,239	0.00	0.0	

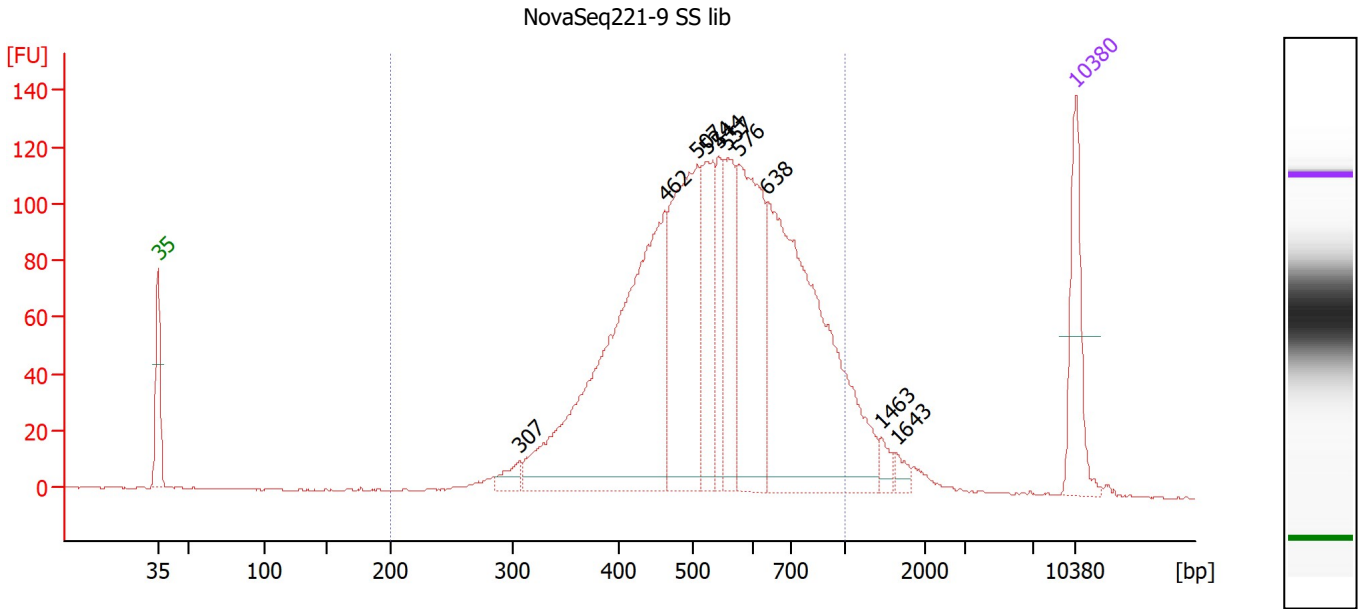
Region table for sample 1 : NovaSeq221-8 SS lib

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,034.6	90	580	26.7	1,466.77	4,205.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : NovaSeq221-9 SS lib

Number of peaks found: 10 Corr. Area 1: 2,206.9
 Noise: 0.3

Peak table for sample 2 : NovaSeq221-9 SS lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	307	21.24	105.0	
3	462	572.08	1,876.7	
4	507	293.38	876.5	
5	524	127.45	368.3	
6	544	81.29	226.5	
7	557	109.97	298.9	
8	576	241.05	634.4	
9	638	489.52	1,162.9	
10	1,463	12.80	13.3	
11	1,643	10.36	9.6	
12	10,380	75.00	10.9	Upper Marker

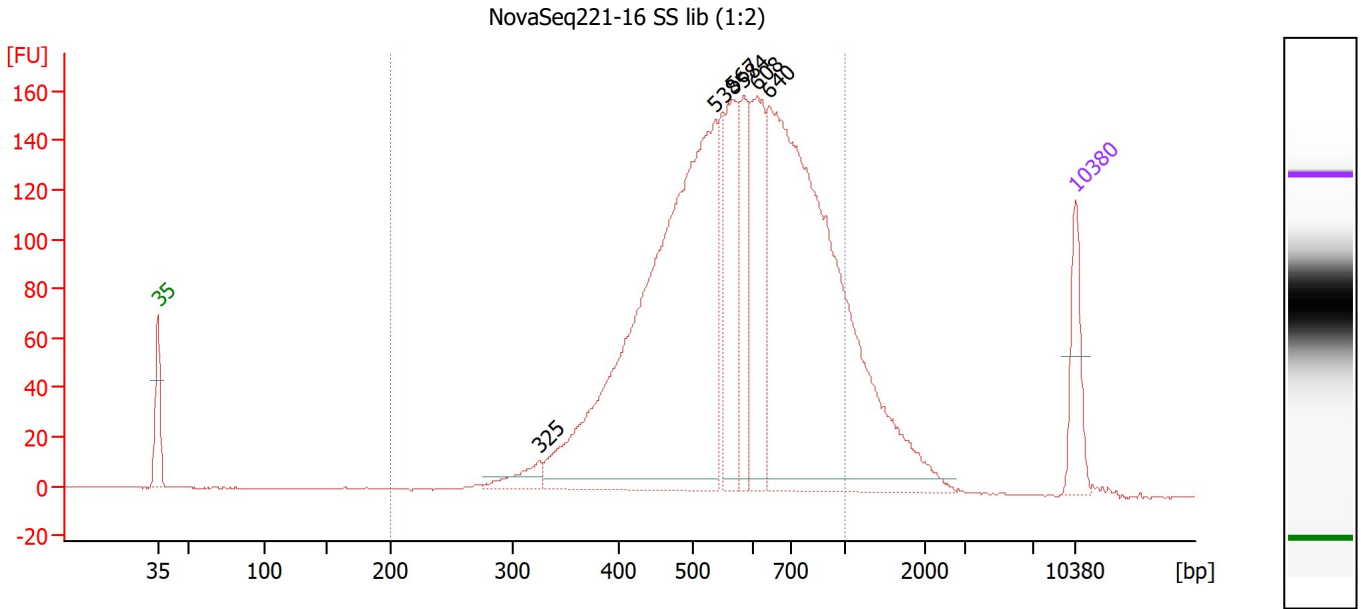
Region table for sample 2 : NovaSeq221-9 SS lib

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,206.9	93	554	26.9	1,931.29	5,800.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : NovaSeq221-16 SS lib (1:2)

Number of peaks found: 6 Corr. Area 1: 2,729.0
 Noise: 0.2

Peak table for sample 3 : NovaSeq221-16 SS lib (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	325	44.21	206.1	
3	538	1,219.72	3,437.9	
4	567	215.46	576.0	
5	584	152.02	394.2	
6	608	236.56	589.1	
7	640	1,162.67	2,752.0	
8	10,380	75.00	10.9	Upper Marker

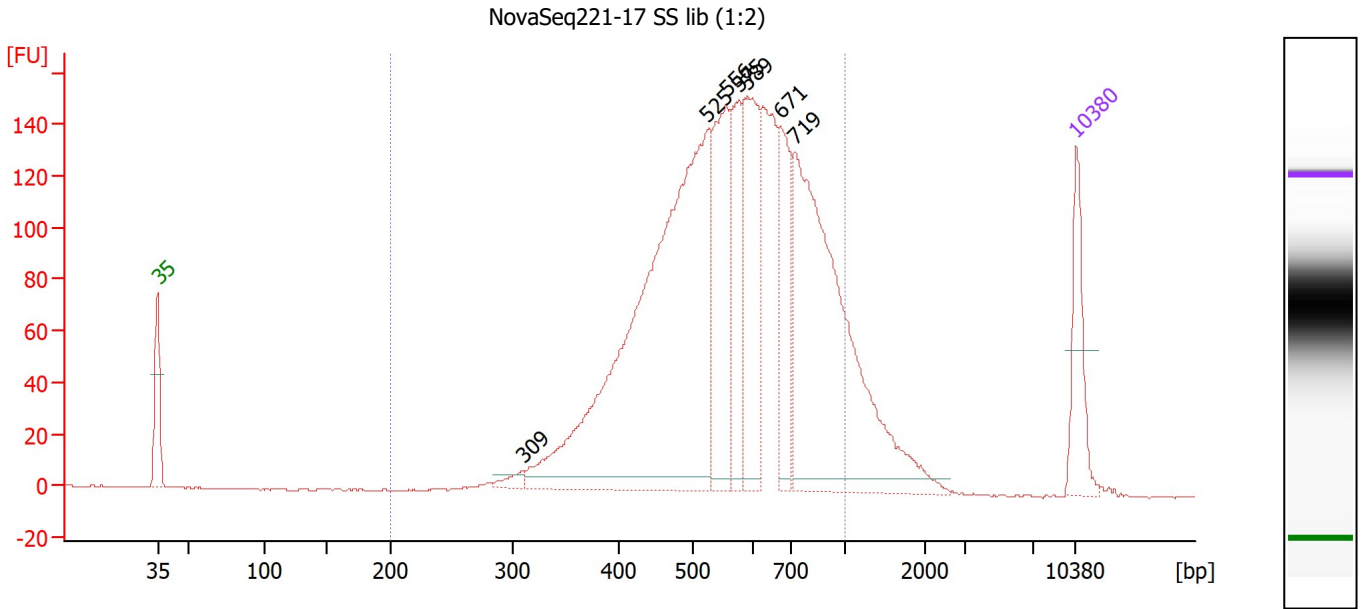
Region table for sample 3 : NovaSeq221-16 SS lib (1:2)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,729.0	90	589	26.2	2,939.14	8,288.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : NovaSeq221-17 SS lib (1:2)

Number of peaks found: 7 Corr. Area 1: 2,560.4
 Noise: 0.2

Peak table for sample 4 : NovaSeq221-17 SS lib (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	309	15.70	77.0	
3	525	967.41	2,793.8	
4	556	220.54	601.3	
5	575	136.15	358.8	
6	589	201.90	519.2	
7	671	128.64	290.6	
8	719	605.11	1,275.2	
9	10,380	75.00	10.9	Upper Marker

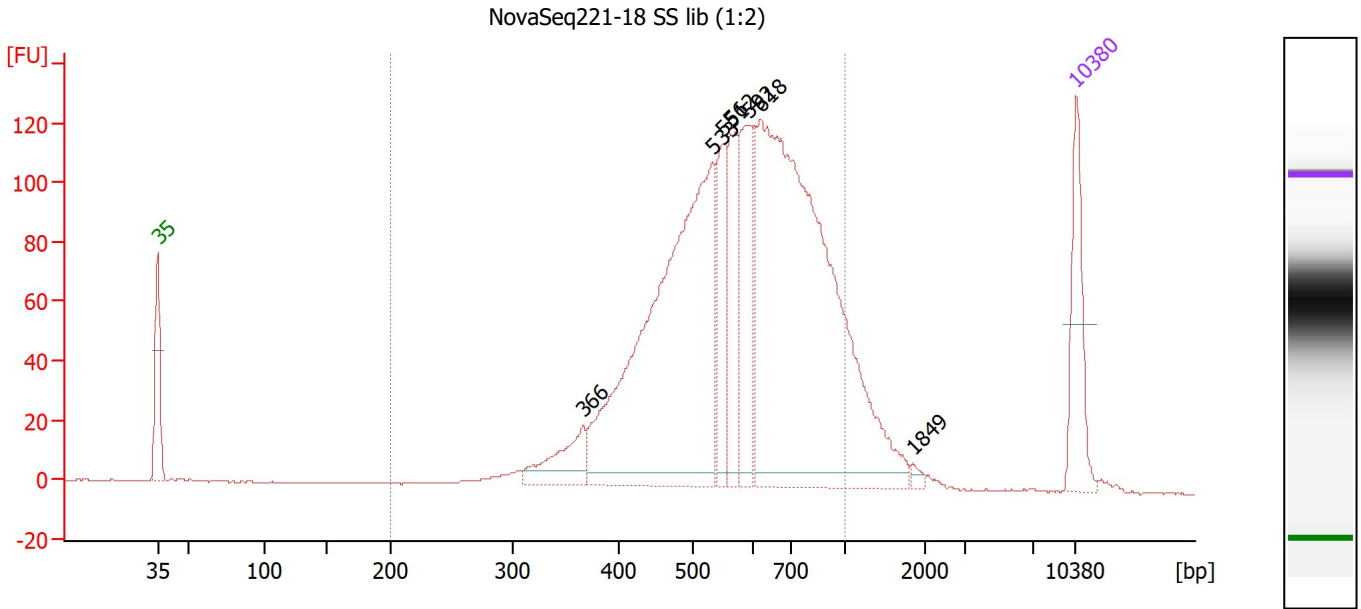
Region table for sample 4 : NovaSeq221-17 SS lib (1:2)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,560.4	92	586	25.9	2,379.36	6,712.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NovaSeq221-18 SS lib (1:2)

Number of peaks found: 7 Corr. Area 1: 1,968.0
 Noise: 0.2

Peak table for sample 5 : NovaSeq221-18 SS lib (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	366	68.78	284.5	
3	533	641.95	1,825.9	
4	551	94.04	258.6	
5	562	116.79	314.8	
6	592	128.57	329.3	
7	618	788.24	1,933.3	
8	1,849	5.50	4.5	
9	10,380	75.00	10.9	Upper Marker

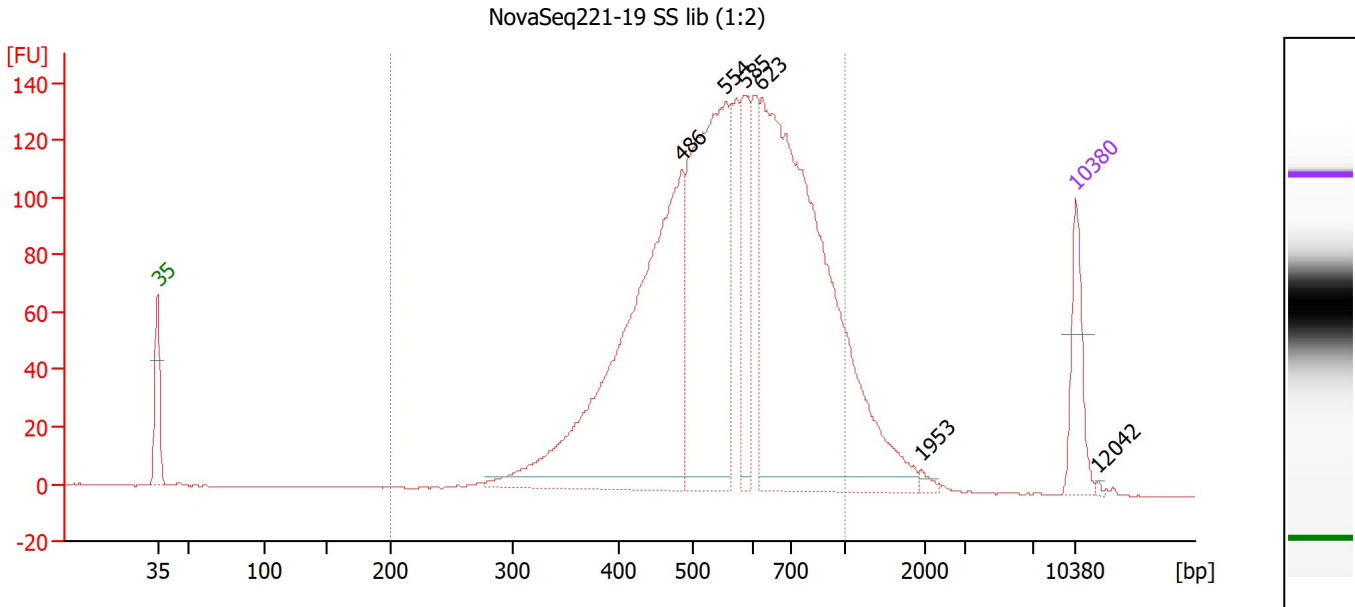
Region table for sample 5 : NovaSeq221-18 SS lib (1:2)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,968.0	91	594	25.8	1,802.21	5,031.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NovaSeq221-19 SS lib (1:2)

Number of peaks found: 6 Corr. Area 1: 2,307.1
 Noise: 0.2

Peak table for sample 6 : NovaSeq221-19 SS lib (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	486	851.35	2,656.4	
3	554	582.59	1,593.6	
4	585	141.18	365.5	
5	623	1,017.86	2,477.4	
6	1,953	7.56	5.9	
7	10,380	75.00	10.9	Upper Marker
8	12,042	0.00	0.0	

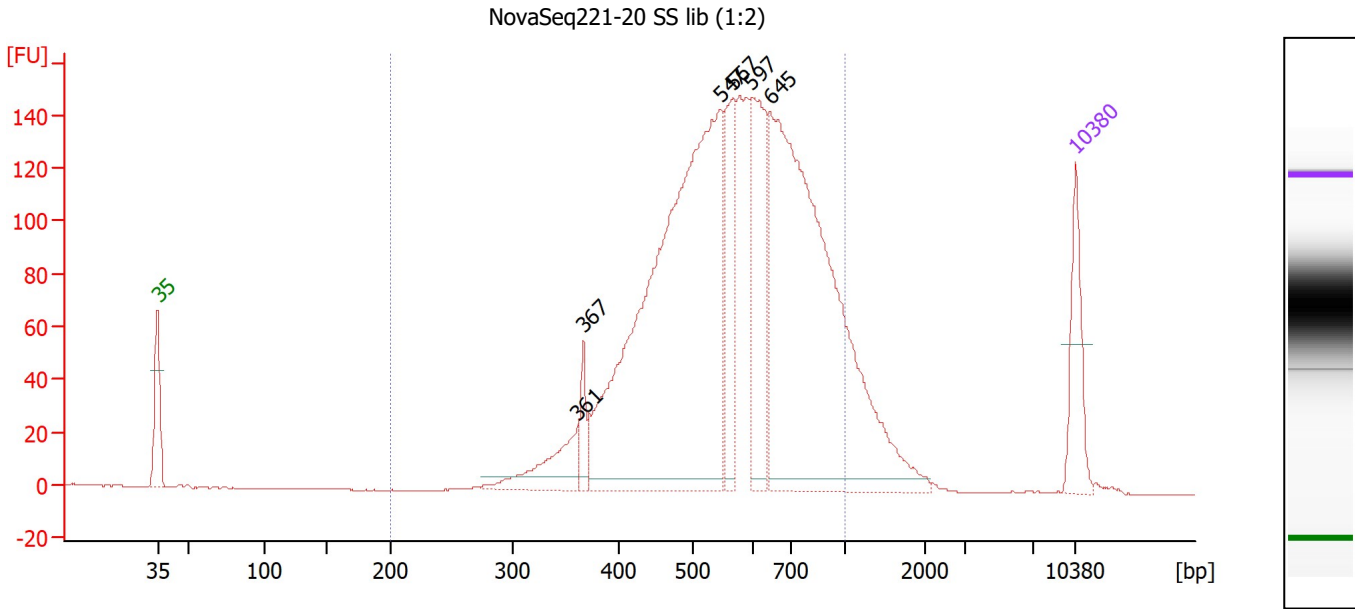
Region table for sample 6 : NovaSeq221-19 SS lib (1:2)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,307.1	93	581	25.8	2,714.97	7,725.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : NovaSeq221-20 SS lib (1:2)

Number of peaks found: 6 Corr. Area 1: 2,437.4
 Noise: 0.2

Peak table for sample 7 : NovaSeq221-20 SS lib (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	361	93.63	392.9	
3	367	43.22	178.5	
4	547	1,044.86	2,896.2	
5	567	137.18	366.6	
6	597	197.37	500.6	
7	645	878.16	2,064.4	
8	10,380	75.00	10.9	Upper Marker

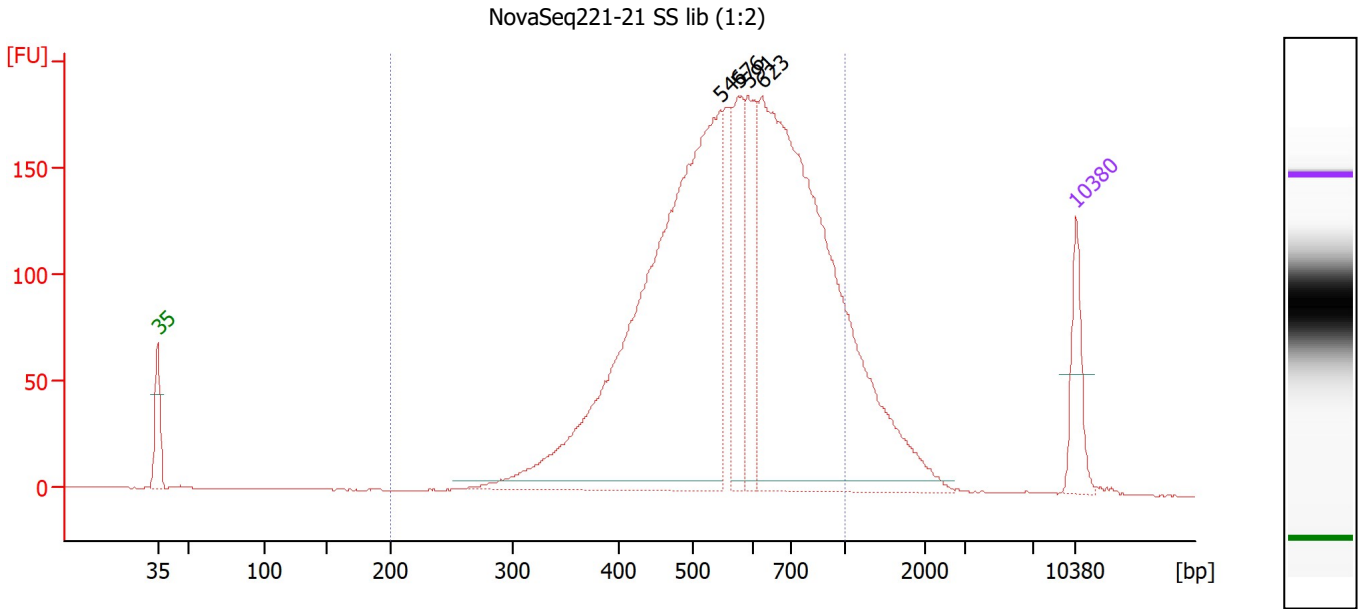
Region table for sample 7 : NovaSeq221-20 SS lib (1:2)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,437.4	92	587	25.6	2,506.01	7,037.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : NovaSeq221-21 SS lib (1:2)

Number of peaks found: 4 Corr. Area 1: 3,080.1
 Noise: 0.1

Peak table for sample 8 : NovaSeq221-21 SS lib (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	546	1,398.54	3,878.3	
3	576	188.28	495.3	
4	591	196.08	502.3	
5	623	1,305.87	3,174.3	
6	10,380	75.00	10.9	Upper Marker

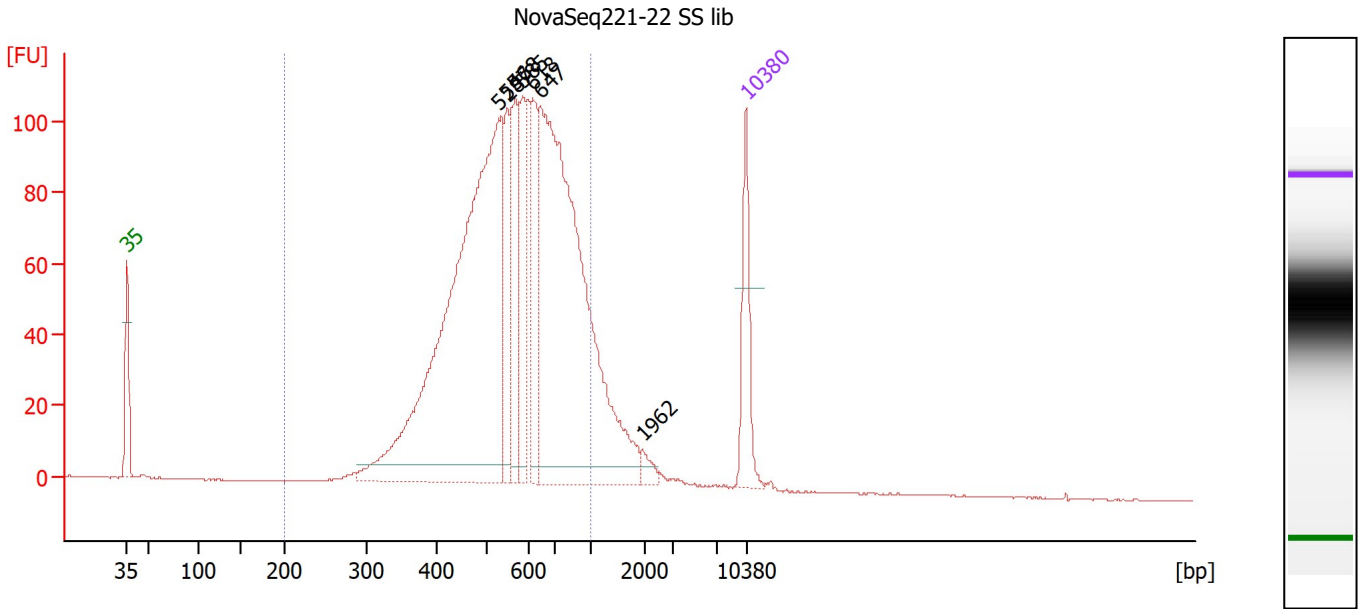
Region table for sample 8 : NovaSeq221-21 SS lib (1:2)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	3,080.1	91	586	26.0	3,059.57	8,628.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : NovaSeq221-22 SS lib

Number of peaks found: 7 Corr. Area 1: 1,840.7
 Noise: 0.2

Peak table for sample 9 : NovaSeq221-22 SS lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	528	931.44	2,673.6	
3	547	107.22	296.8	
4	568	131.60	351.0	
5	585	105.66	273.6	
6	618	118.87	291.6	
7	647	759.96	1,780.7	
8	1,962	13.19	10.2	
9	10,380	75.00	10.9	Upper Marker

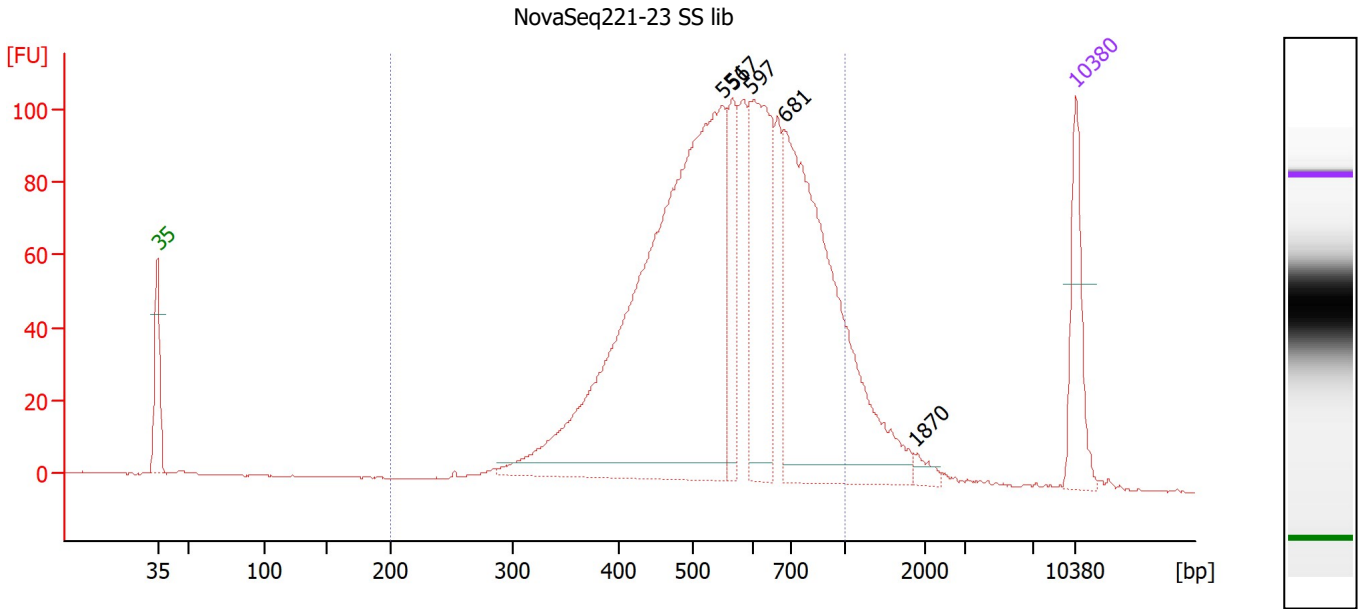
Region table for sample 9 : NovaSeq221-22 SS lib

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,840.7	91	584	26.2	2,164.51	6,141.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : NovaSeq221-23 SS lib

Number of peaks found: 5 Corr. Area 1: 1,788.1
 Noise: 0.2

Peak table for sample 10 : NovaSeq221-23 SS lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	551	980.42	2,697.2	
3	567	101.93	272.6	
4	597	238.56	605.7	
5	681	547.31	1,217.8	
6	1,870	11.40	9.2	
7	10,380	75.00	10.9	Upper Marker

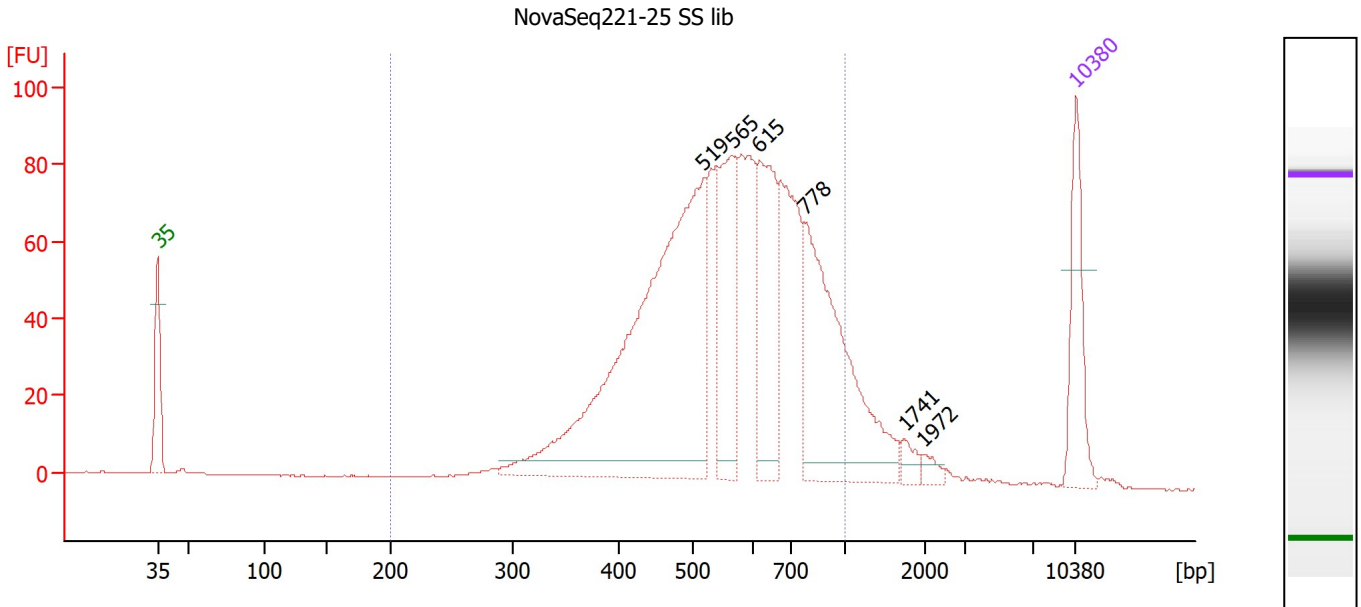
Region table for sample 10 : NovaSeq221-23 SS lib

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,788.1	92	579	26.2	2,046.58	5,858.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : NovaSeq221-25 SS lib

Number of peaks found: 6 Corr. Area 1: 1,423.9
 Noise: 0.2

Peak table for sample 11 : NovaSeq221-25 SS lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	519	666.04	1,946.1	
3	565	164.02	439.7	
4	615	165.82	408.7	
5	778	290.23	565.1	
6	1,741	13.70	11.9	
7	1,972	9.92	7.6	
8	10,380	75.00	10.9	Upper Marker

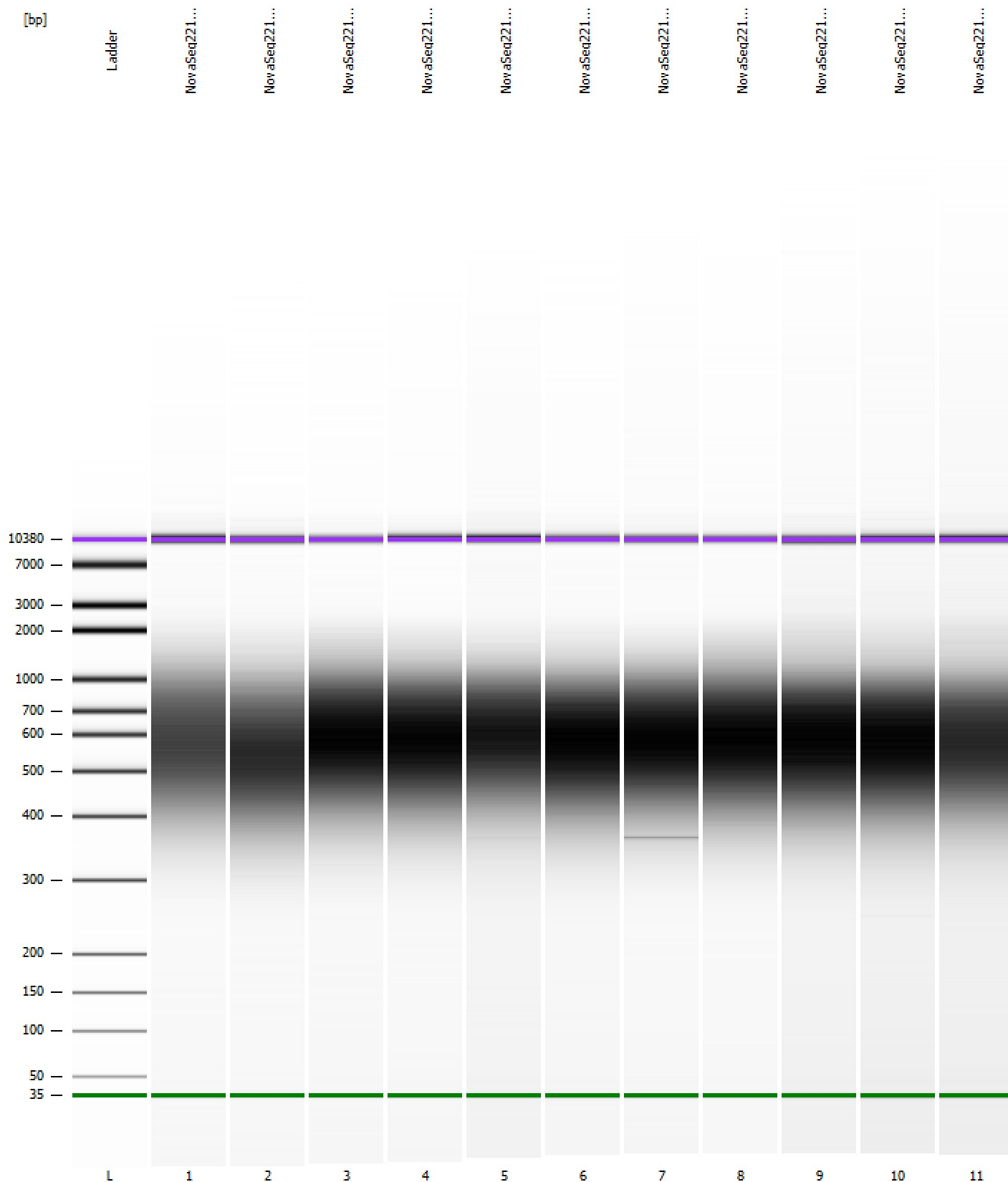
Region table for sample 11 : NovaSeq221-25 SS lib

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,423.9	91	578	26.3	1,695.28	4,869.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
Modified: 6/26/2020 2:29:43 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-06-26_001.xad

Created: 6/26/2020 1:08:02 PM
 Modified: 6/26/2020 2:29:43 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		6/26/2020 1:49:20 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-06-26\Bioanalyze r1_High Sensitivity DNA Assay_2020-06-26_001.xad)		Instrument	Run		6/26/2020 1:08:07 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		6/26/2020 1:08:07 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		6/26/2020 1:08:07 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		6/26/2020 1:08:07 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		6/26/2020 1:08:07 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		6/26/2020 1:08:07 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		6/26/2020 1:08:07 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB