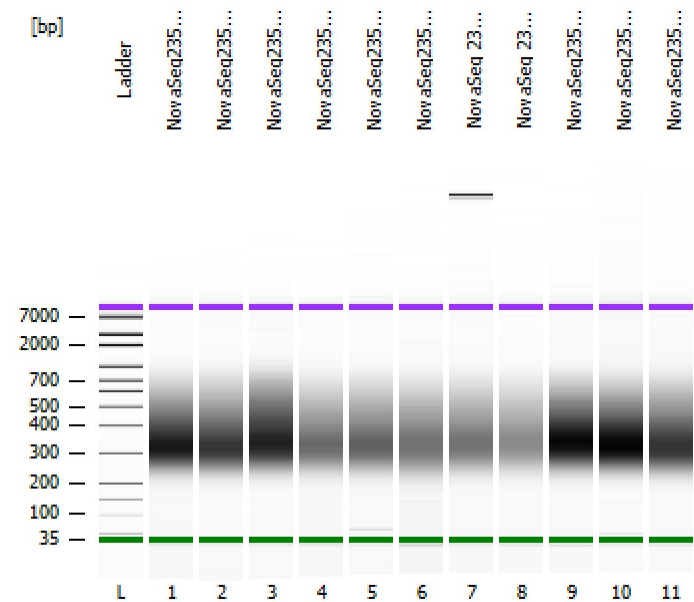


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
Modified: 8/14/2020 12:43:24 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

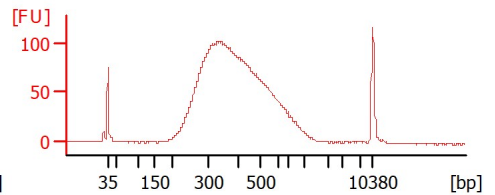
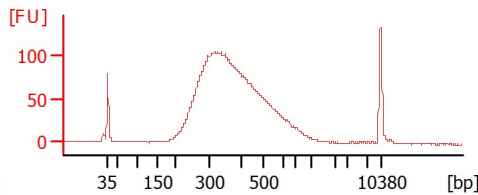
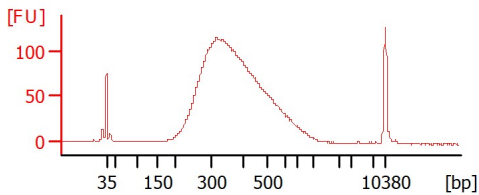
Chip Information:

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

NovaSeq235 Lib 23

NovaSeq235 Lib 24

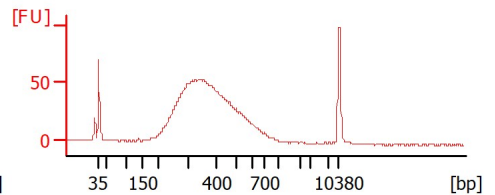
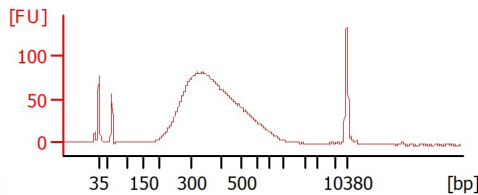
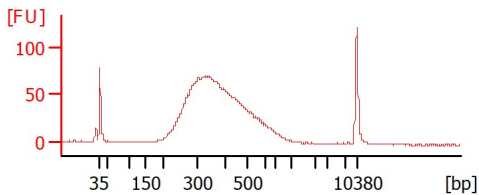
NovaSeq235 Lib 25



NovaSeq235 Lib 26

NovaSeq235 Lib 27

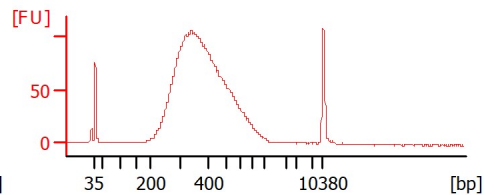
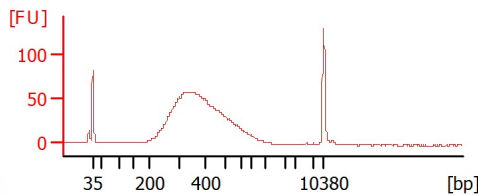
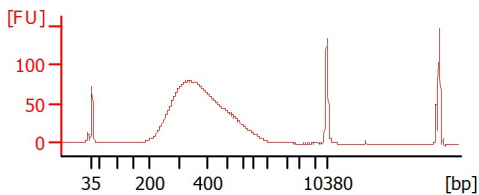
NovaSeq235 Lib 28



NovaSeq 235 Lib 29

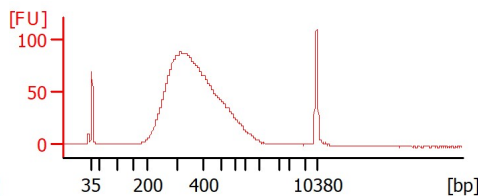
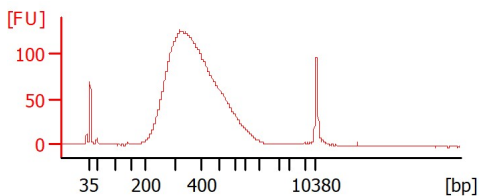
NovaSeq 235 Lib 30

NovaSeq235 Lib 31



NovaSeq235 Lib 32

NovaSeq235 Lib 33



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
NovaSeq235 Lib 23		<input type="checkbox"/>	✓			
NovaSeq235 Lib 24		<input type="checkbox"/>	✓			
NovaSeq235 Lib 25		<input type="checkbox"/>	✓			
NovaSeq235 Lib 26		<input type="checkbox"/>	✓			
NovaSeq235 Lib 27		<input type="checkbox"/>	✓			
NovaSeq235 Lib 28		<input type="checkbox"/>	✓			
NovaSeq 235 Lib 29		<input type="checkbox"/>	✓			
NovaSeq 235 Lib 30		<input type="checkbox"/>	✓			
NovaSeq235 Lib 31		<input type="checkbox"/>	✓			
NovaSeq235 Lib 32		<input type="checkbox"/>	✓			
NovaSeq235 Lib 33		<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_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 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

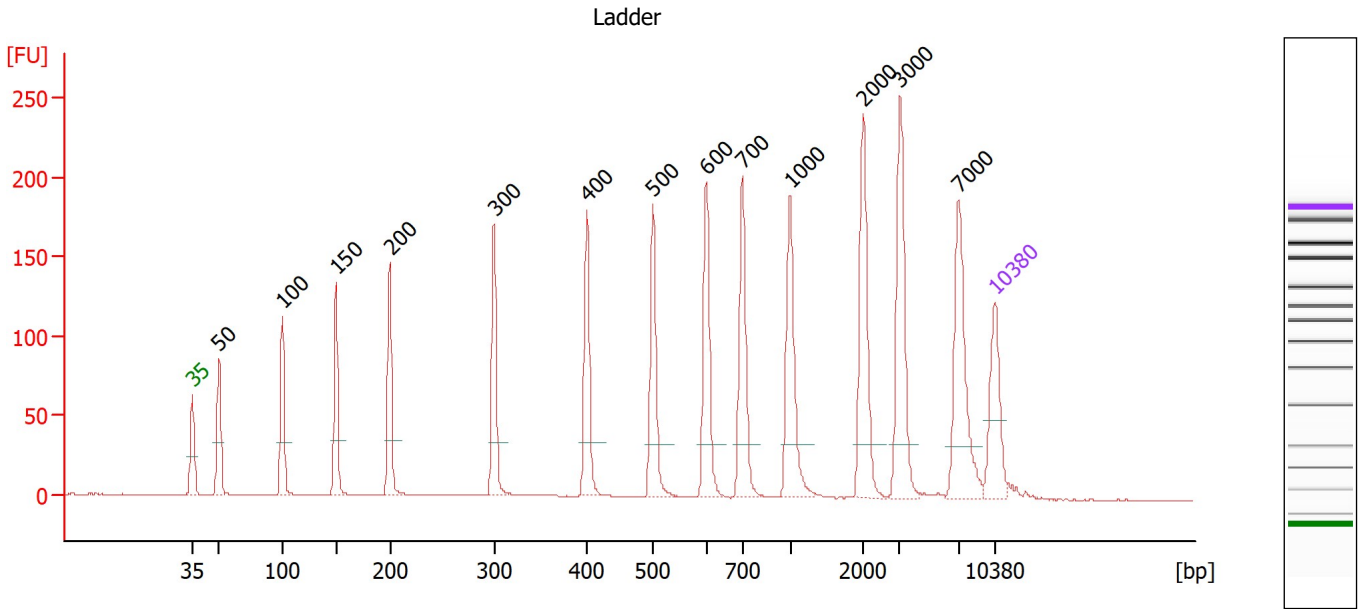
Ladder

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_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

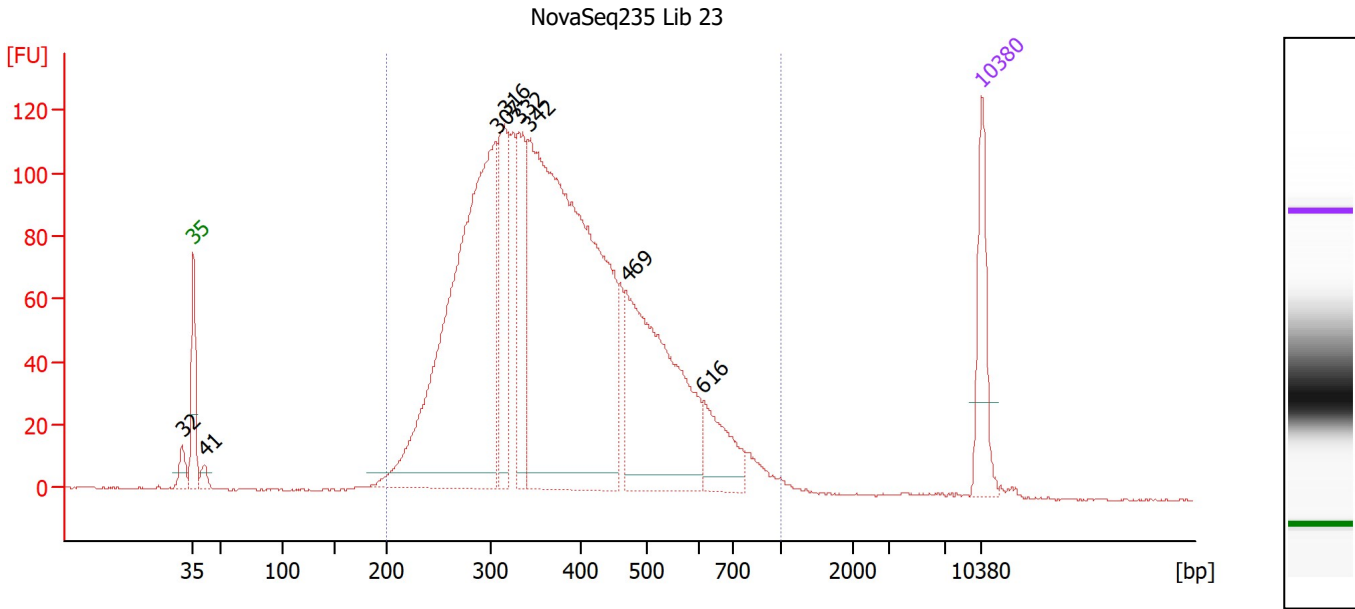
Peak table for Ladder

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_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : NovaSeq235 Lib 23

Number of peaks found: 8 Corr. Area 1: 2,780.6
 Noise: 0.2

Peak table for sample 1 : NovaSeq235 Lib 23

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	41	17.40	641.4	
4	307	860.60	4,253.9	
5	316	171.67	823.4	
6	332	155.57	710.7	
7	342	1,091.76	4,841.9	
8	469	392.84	1,268.5	
9	616	79.10	194.7	
10	10,380	75.00	10.9	Upper Marker

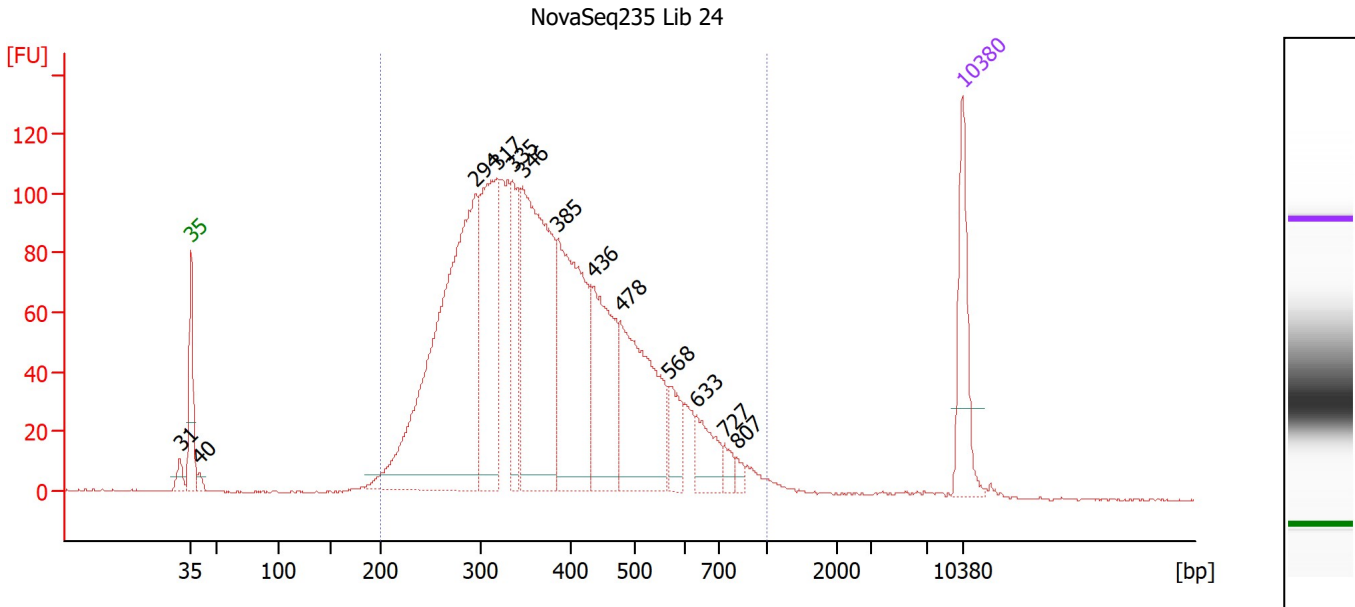
Region table for sample 1 : NovaSeq235 Lib 23

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	2,780.6	97	390	30.7	2,962.12	12,833.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : NovaSeq235 Lib 24

Number of peaks found: 13 Corr. Area 1: 2,624.8
 Noise: 0.2

Peak table for sample 2 : NovaSeq235 Lib 24

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	40	10.44	398.7	
4	294	664.54	3,424.0	
5	317	272.50	1,304.0	
6	335	109.54	495.2	
7	346	411.70	1,803.3	
8	385	296.01	1,163.8	
9	436	174.22	605.9	
10	478	224.53	712.3	
11	568	44.38	118.4	
12	633	47.33	113.3	
13	727	14.89	31.0	
14	807	8.63	16.2	
15	10,380	75.00	10.9	Upper Marker

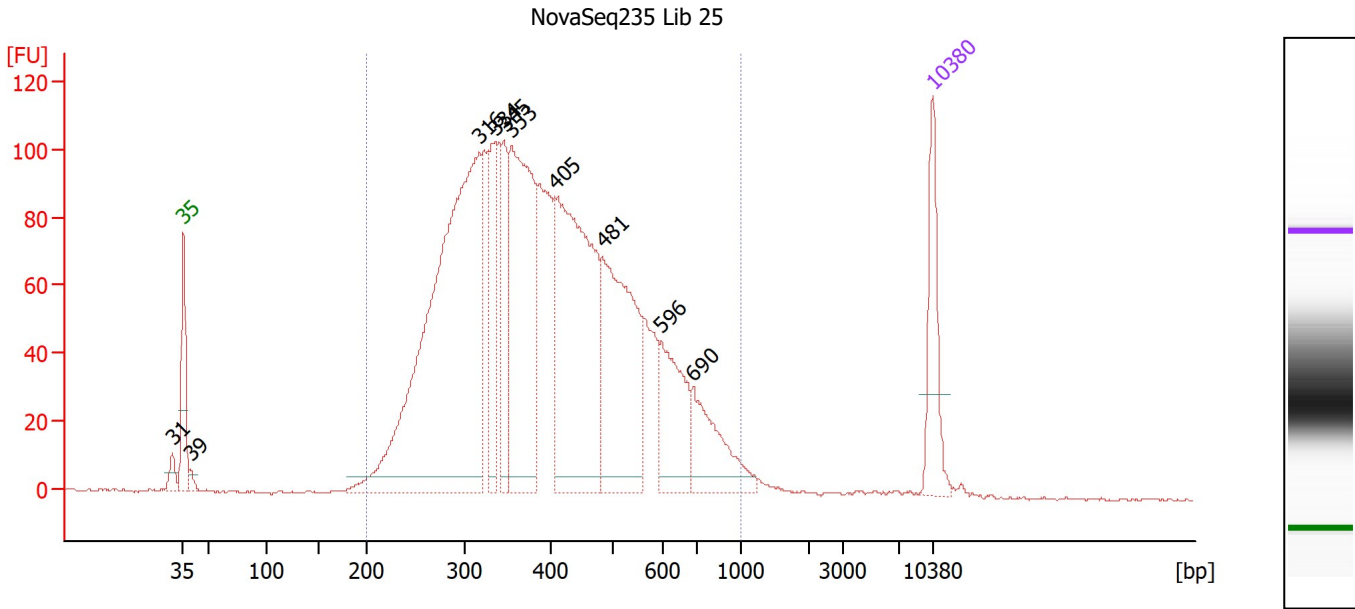
Region table for sample 2 : NovaSeq235 Lib 24

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	2,624.8	97	390	31.8	2,554.24	11,150.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : NovaSeq235 Lib 25

Number of peaks found: 10 Corr. Area 1: 2,701.2
 Noise: 0.4

Peak table for sample 3 : NovaSeq235 Lib 25

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	39	11.75	454.3	
4	316	881.40	4,221.0	
5	334	110.64	502.5	
6	345	99.96	439.4	
7	353	379.22	1,626.2	
8	405	448.28	1,675.7	
9	481	303.07	954.0	
10	596	118.99	302.6	
11	690	107.00	235.1	
12	10,380	75.00	10.9	Upper Marker

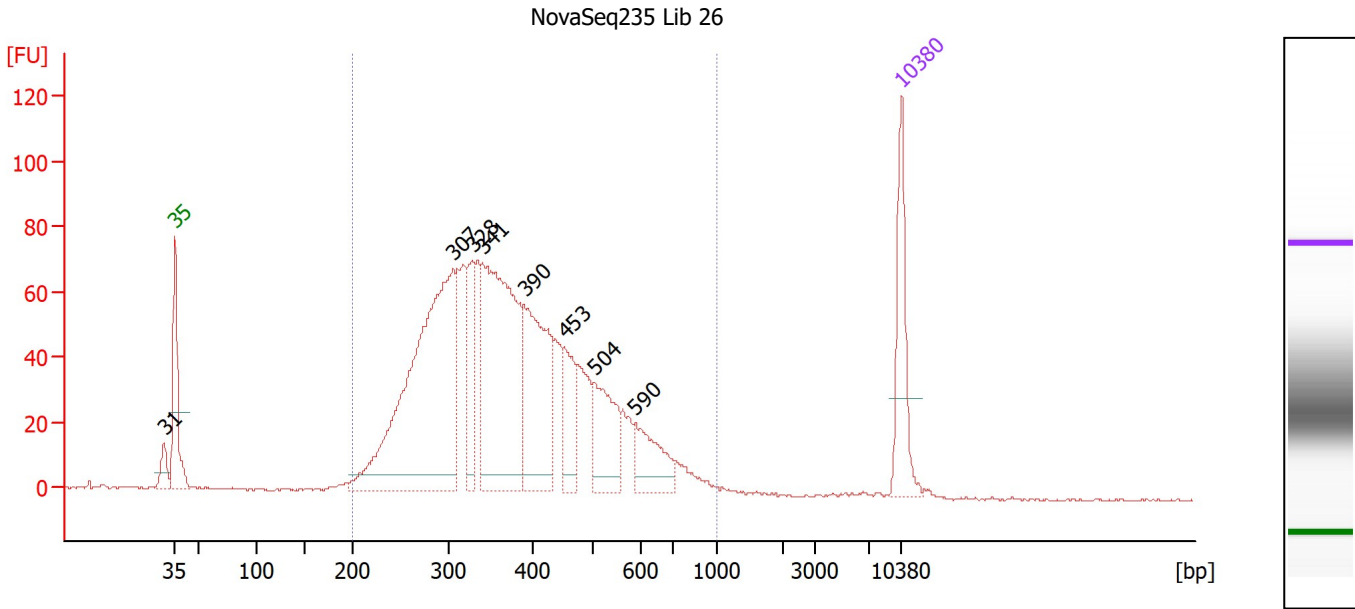
Region table for sample 3 : NovaSeq235 Lib 25

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	2,701.2	98	413	32.5	2,933.87	12,200.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : NovaSeq235 Lib 26

Number of peaks found: 8 Corr. Area 1: 1,684.7
 Noise: 0.2

Peak table for sample 4 : NovaSeq235 Lib 26

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	307	541.92	2,678.0	
4	328	83.01	383.2	
5	341	383.79	1,705.9	
6	390	207.74	806.3	
7	453	64.92	217.0	
8	504	93.90	282.3	
9	590	64.14	164.7	
10	10,380	75.00	10.9	Upper Marker

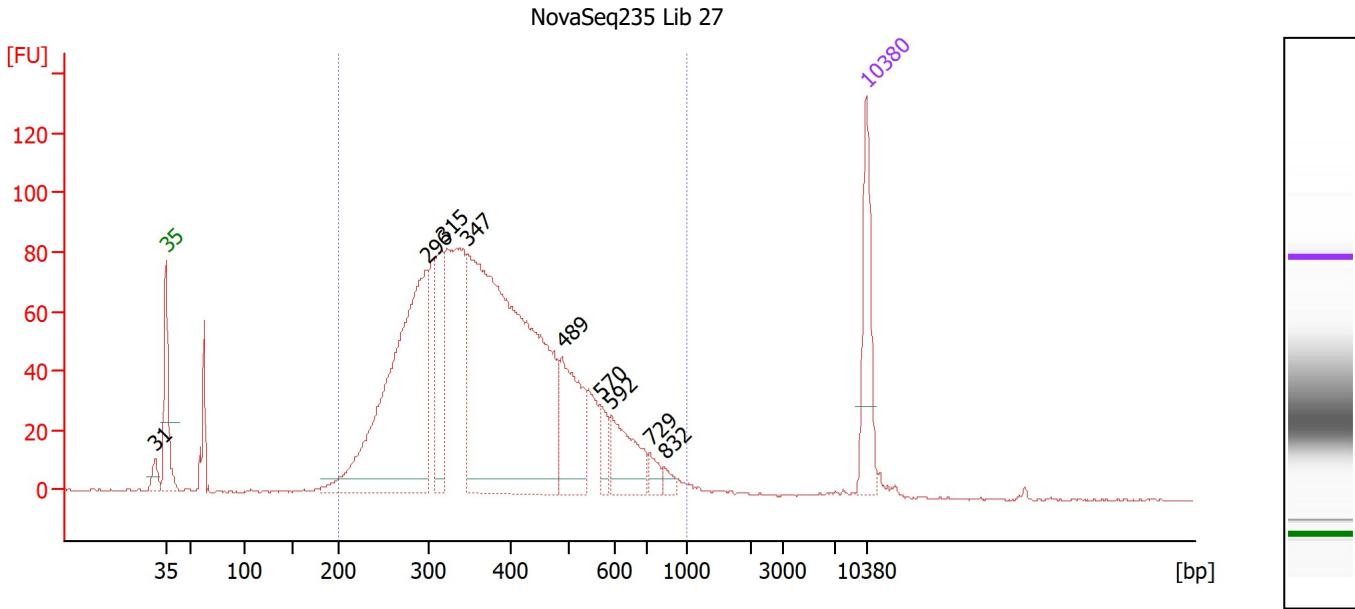
Region table for sample 4 : NovaSeq235 Lib 26

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	1,684.7	97	390	30.4	1,828.12	7,907.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NovaSeq235 Lib 27

Number of peaks found: 9 Corr. Area 1: 1,991.1
 Noise: 0.4

Peak table for sample 5 : NovaSeq235 Lib 27

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	296	518.79	2,655.3	
4	315	115.34	554.3	
5	347	795.32	3,473.6	
6	489	124.72	386.4	
7	570	25.88	68.8	
8	592	74.01	189.4	
9	729	15.46	32.1	
10	832	9.16	16.7	
11	10,380	75.00	10.9	Upper Marker

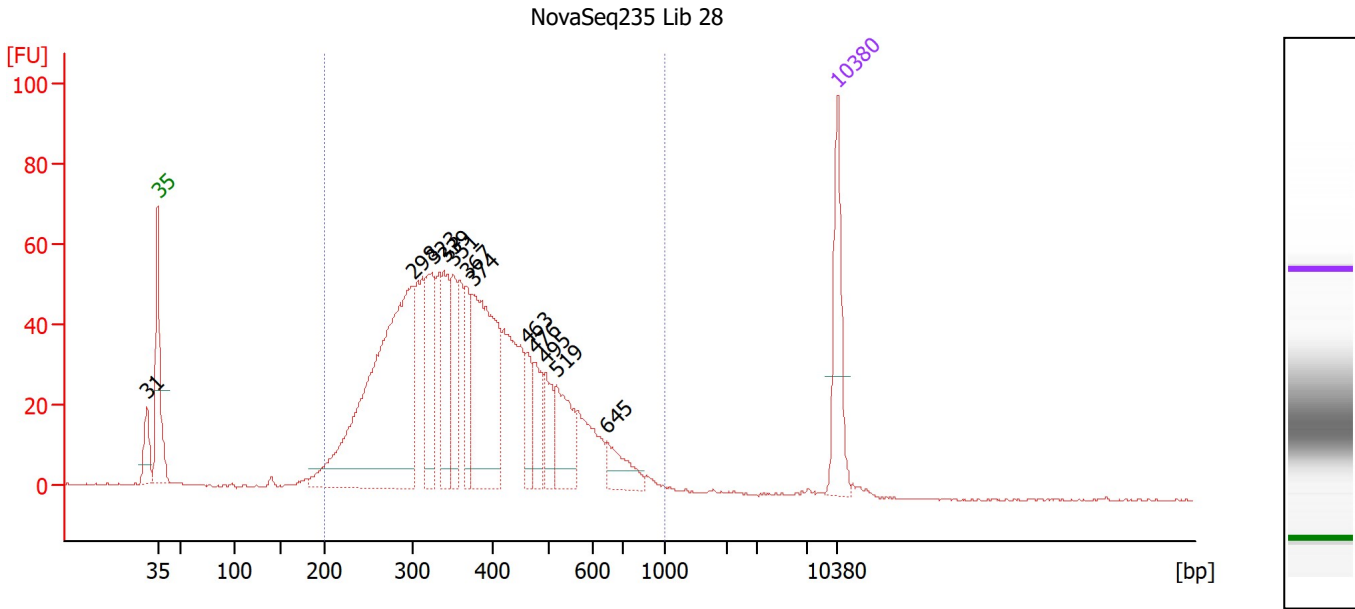
Region table for sample 5 : NovaSeq235 Lib 27

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	1,991.1	95	393	31.1	2,043.10	8,819.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NovaSeq235 Lib 28

Number of peaks found: 12 Corr. Area 1: 1,352.5
 Noise: 0.3

Peak table for sample 6 : NovaSeq235 Lib 28

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	298	534.67	2,714.0	
4	323	108.06	506.3	
5	339	93.26	416.8	
6	351	68.53	295.6	
7	367	62.64	258.7	
8	374	242.42	981.3	
9	463	42.52	139.2	
10	476	46.29	147.3	
11	495	43.06	131.7	
12	519	75.40	220.1	
13	645	39.13	92.0	
14	10,380	75.00	10.9	Upper Marker

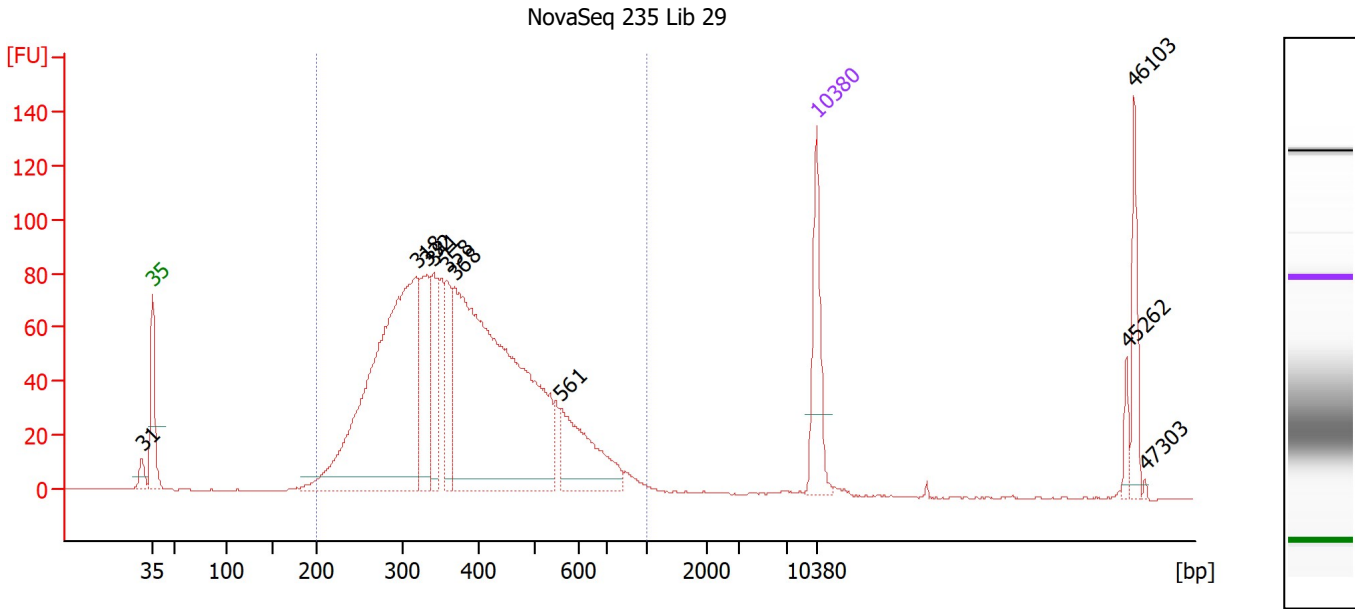
Region table for sample 6 : NovaSeq235 Lib 28

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	1,352.5	96	386	30.8	1,871.09	8,222.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : NovaSeq 235 Lib 29

Number of peaks found: 10 Corr. Area 1: 1,911.6
 Noise: 0.3

Peak table for sample 7 : NovaSeq 235 Lib 29

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	318	663.11	3,156.2	
4	332	131.35	600.3	
5	341	85.82	381.8	
6	358	79.44	336.3	
7	368	733.03	3,021.2	
8	561	125.94	340.0	
9	10,380	75.00	10.9	Upper Marker
10	45,262	0.00	0.0	
11	46,103	0.00	0.0	
12	47,303	0.00	0.0	

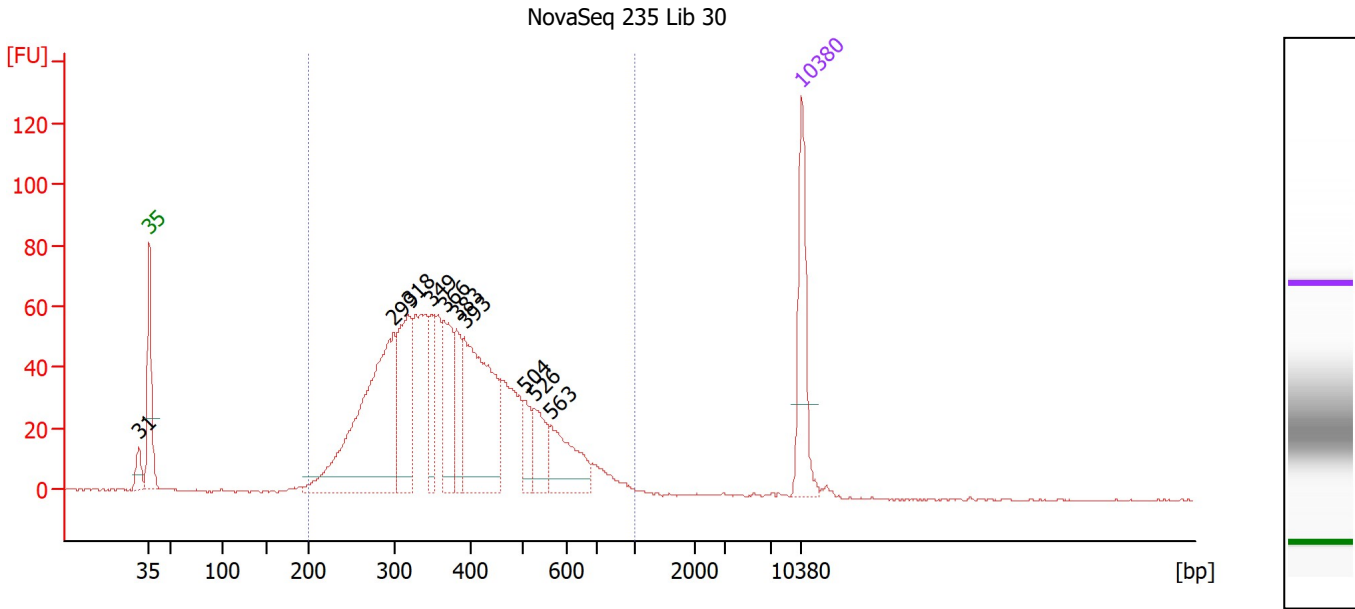
Region table for sample 7 : NovaSeq 235 Lib 29

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	1,911.6	94	394	30.5	1,931.85	8,294.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : NovaSeq 235 Lib 30

Number of peaks found: 10 Corr. Area 1: 1,369.8
 Noise: 0.2

Peak table for sample 8 : NovaSeq 235 Lib 30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	299	341.10	1,729.8	
4	318	135.57	645.1	
5	349	57.46	249.6	
6	366	88.42	366.2	
7	383	51.48	203.8	
8	393	210.67	812.9	
9	504	29.11	87.6	
10	526	45.80	132.0	
11	563	72.01	193.9	
12	10,380	75.00	10.9	Upper Marker

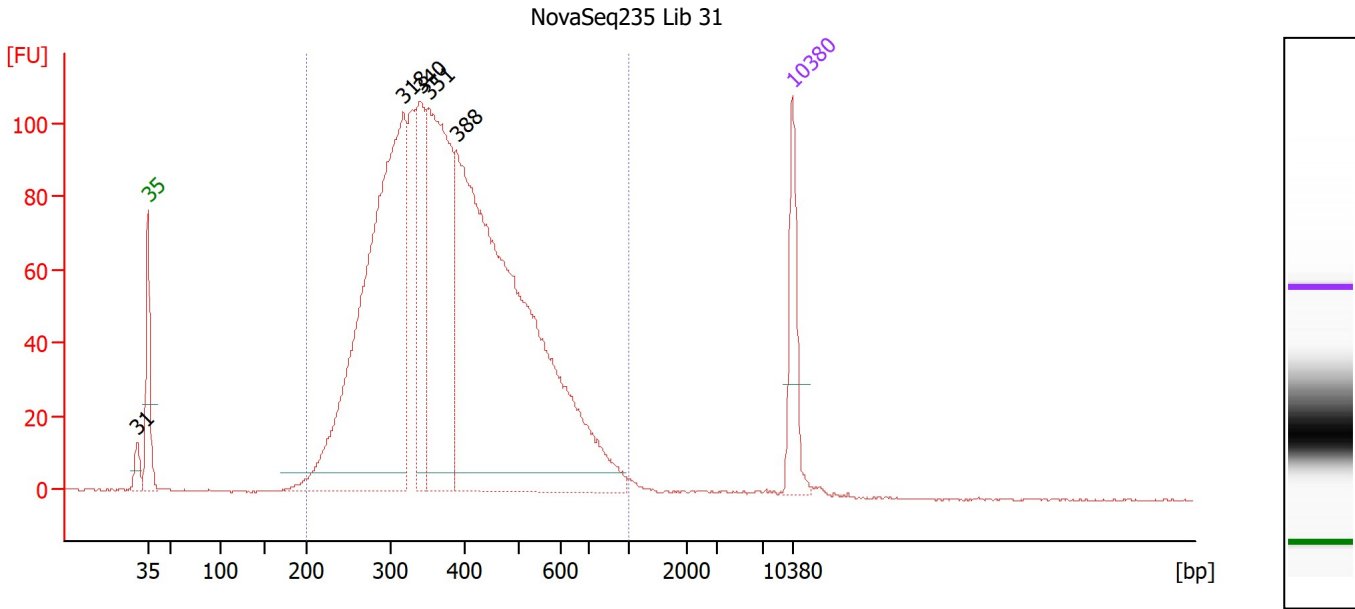
Region table for sample 8 : NovaSeq 235 Lib 30

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	1,369.8	97	395	30.0	1,374.11	5,866.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : NovaSeq235 Lib 31

Number of peaks found: 5 Corr. Area 1: 2,421.9
 Noise: 0.2

Peak table for sample 9 : NovaSeq235 Lib 31

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	318	920.22	4,388.9	
4	340	187.41	835.5	
5	351	473.37	2,045.6	
6	388	1,196.70	4,674.9	
7	10,380	75.00	10.9	Upper Marker

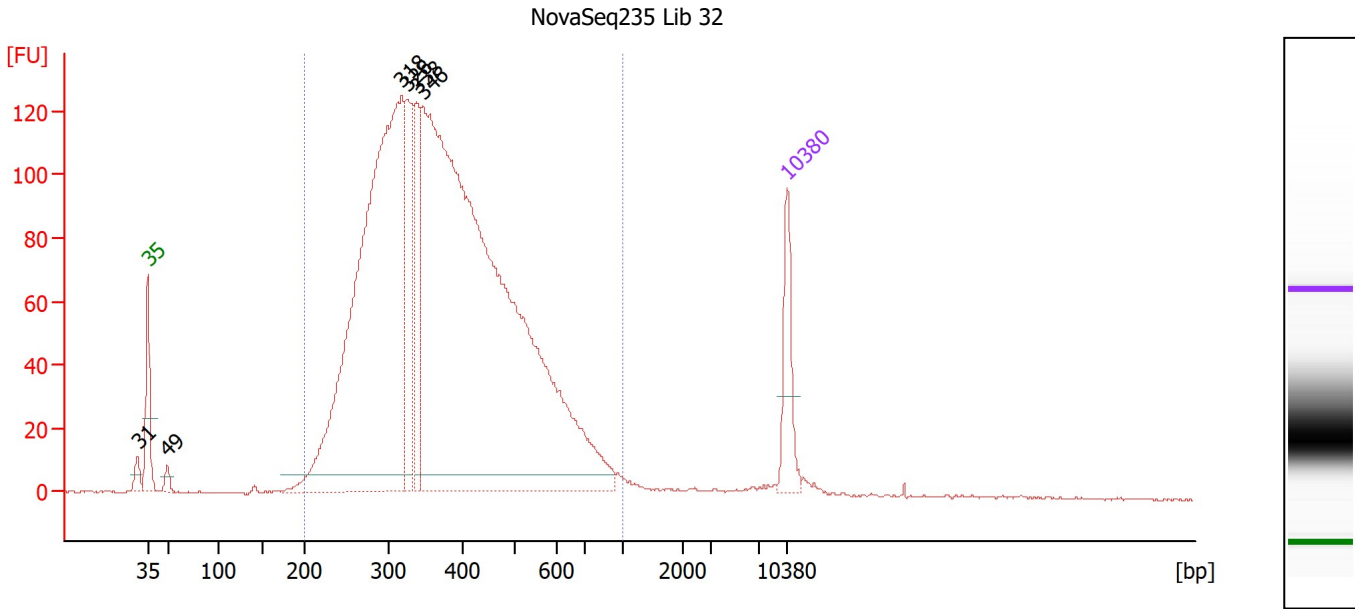
Region table for sample 9 : NovaSeq235 Lib 31

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	2,421.9	98	398	30.1	2,914.75	12,326.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : NovaSeq235 Lib 32

Number of peaks found: 6 Corr. Area 1: 2,837.5
 Noise: 0.3

Peak table for sample 10 : NovaSeq235 Lib 32

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	49	18.09	560.2	
4	318	1,313.75	6,257.7	
5	326	195.01	906.3	
6	338	163.23	731.1	
7	346	2,165.81	9,478.0	
8	10,380	75.00	10.9	Upper Marker

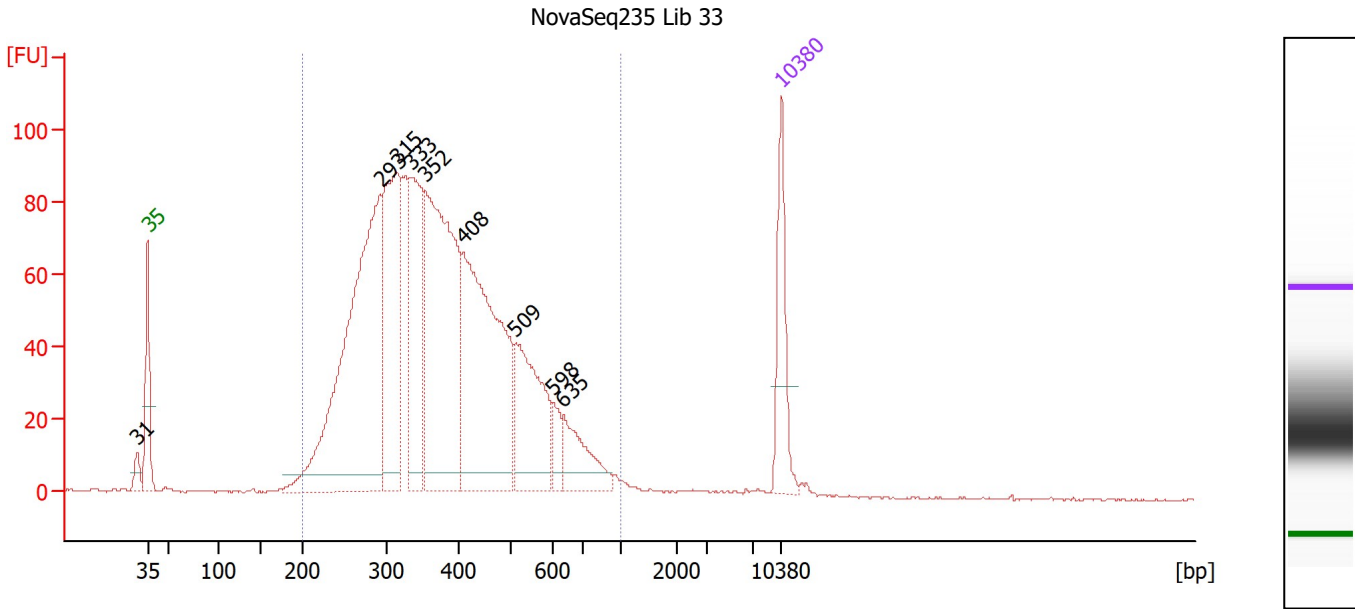
Region table for sample 10 : NovaSeq235 Lib 32

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	2,837.5	97	390	30.3	3,749.16	16,193.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : NovaSeq235 Lib 33

Number of peaks found: 9 Corr. Area 1: 2,087.5
 Noise: 0.3

Peak table for sample 11 : NovaSeq235 Lib 33

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	31	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	293	616.97	3,192.7	
4	315	295.56	1,420.9	
5	333	212.09	964.0	
6	352	463.60	1,994.0	
7	408	405.56	1,507.8	
8	509	171.80	511.0	
9	598	27.76	70.3	
10	635	73.38	175.2	
11	10,380	75.00	10.9	Upper Marker

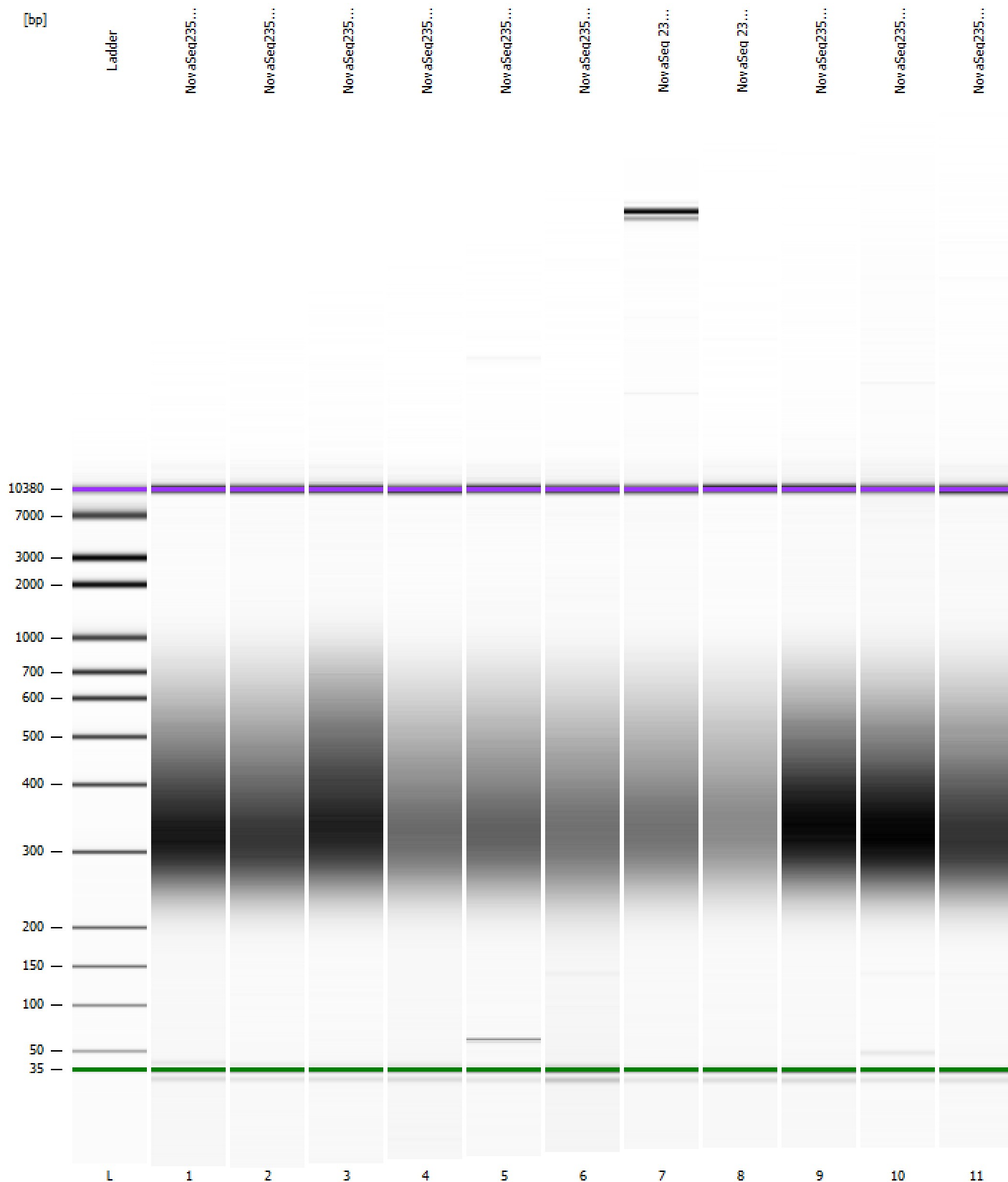
Region table for sample 11 : NovaSeq235 Lib 33

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	2,087.5	97	389	31.4	2,423.32	10,582.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
Modified: 8/14/2020 12:43:24 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-08-14_006.xad

Created: 8/14/2020 12:02:59 PM
 Modified: 8/14/2020 12:43:24 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		8/14/2020 12:43:21 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-08-14\Bioanalyze r1_High Sensitivity DNA Assay_2020-08-14_006.xad)		Instrument	Run		8/14/2020 12:03:00 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		8/14/2020 12:03:00 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		8/14/2020 12:03:00 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		8/14/2020 12:03:00 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		8/14/2020 12:03:00 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		8/14/2020 12:03:00 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		8/14/2020 12:03:00 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB