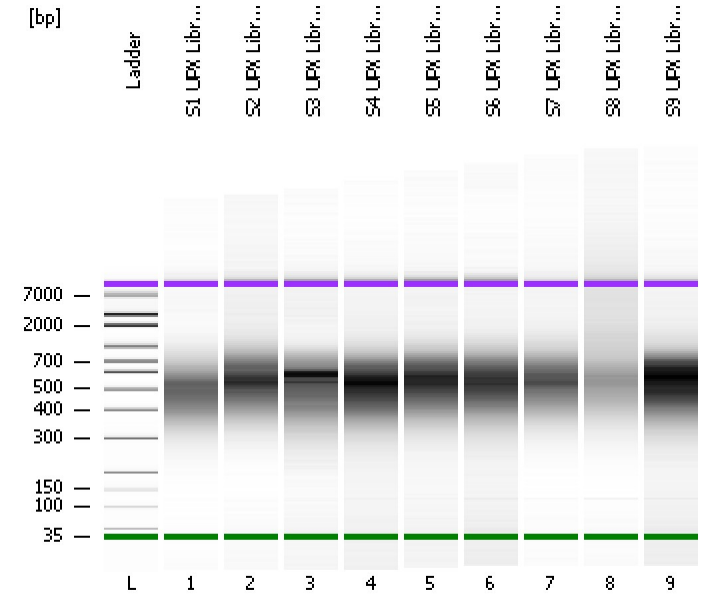
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electrophoresis File Run Summary



Instrument Information:

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

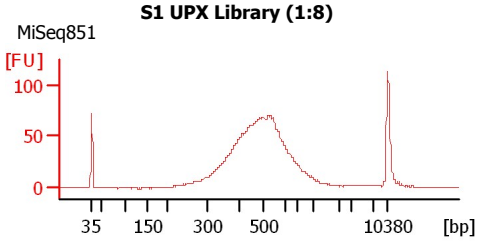
Assay Information:

Assay Origin Path: C:\Program Files\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

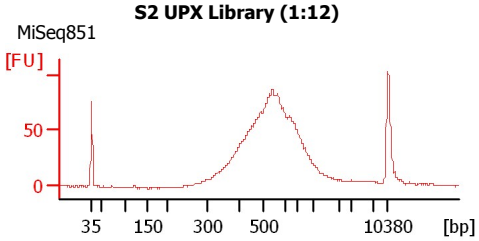
Chip Information:

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

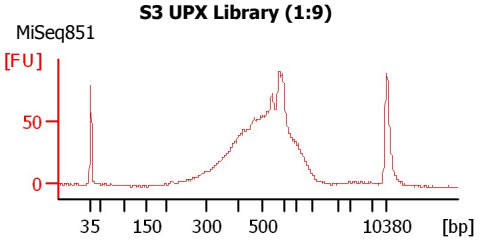
S1 UPX Library (1:8)



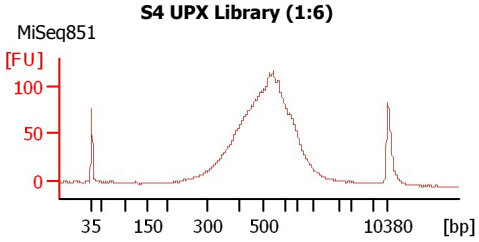
S2 UPX Library (1:12)



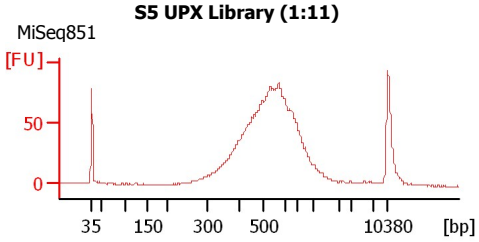
S3 UPX Library (1:9)



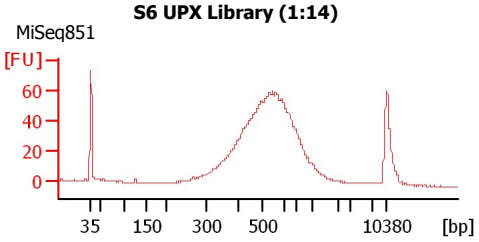
S4 UPX Library (1:6)



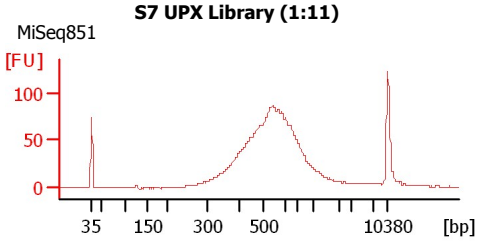
S5 UPX Library (1:11)



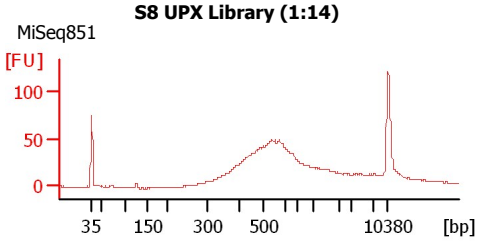
S6 UPX Library (1:14)



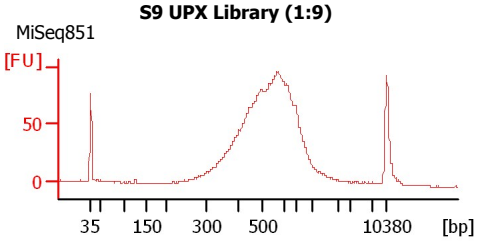
S7 UPX Library (1:11)



S8 UPX Library (1:14)



S9 UPX Library (1:9)



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
S1 UPX Library (1:8)	MiSeq851	☐	✔			
S2 UPX Library (1:12)	MiSeq851	☐	✔			
S3 UPX Library (1:9)	MiSeq851	☐	✔			
S4 UPX Library (1:6)	MiSeq851	☐	✔			
S5 UPX Library (1:11)	MiSeq851	☐	✔			
S6 UPX Library (1:14)	MiSeq851	☐	✔			
S7 UPX Library (1:11)	MiSeq851	☐	✔			
S8 UPX Library (1:14)	MiSeq851	☐	✔			
S9 UPX Library (1:9)	MiSeq851	☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 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

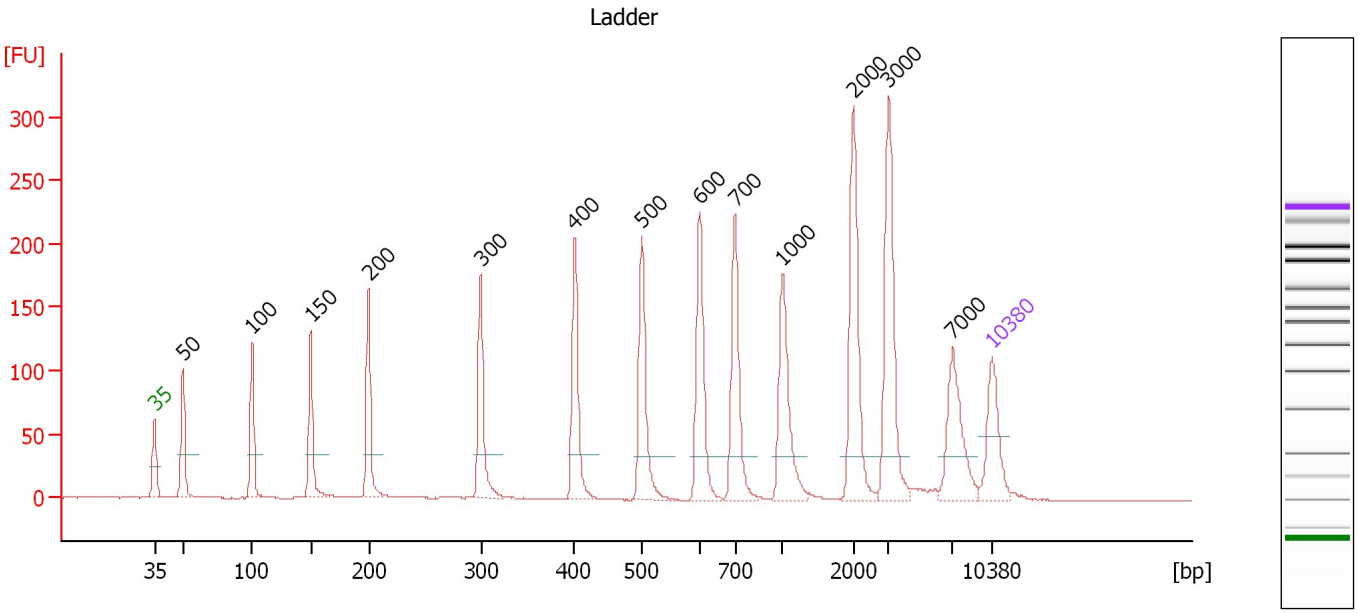
Ladder

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: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.4

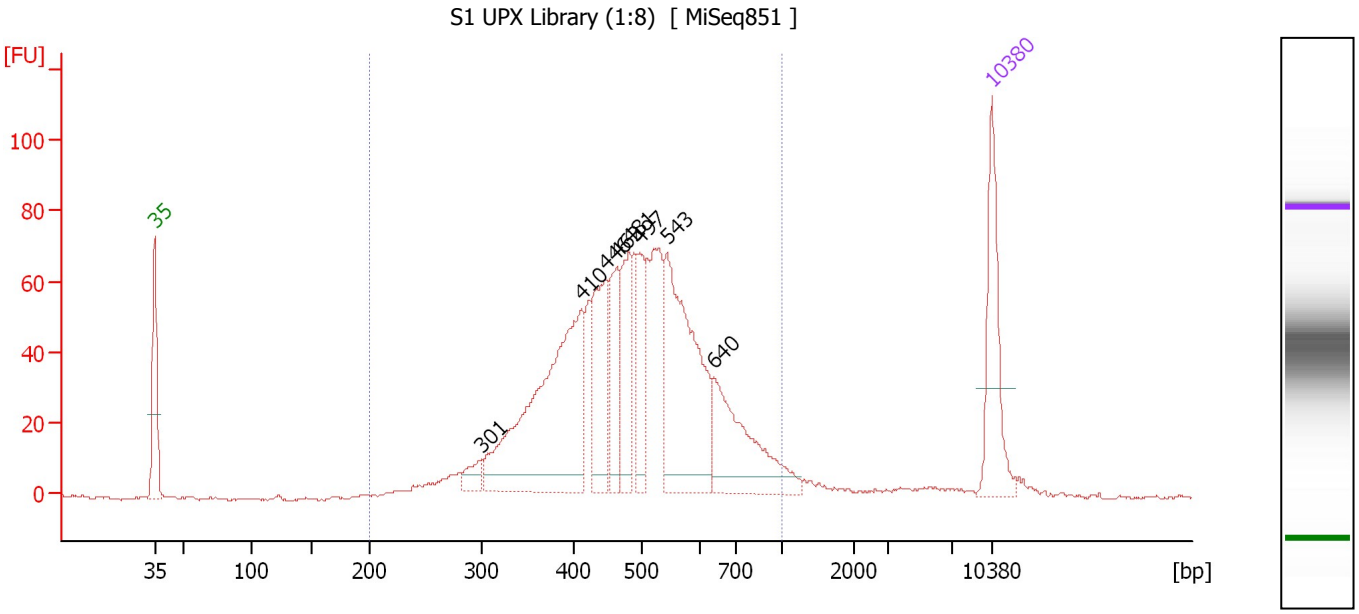
Peak table for Ladder

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1		35	125.00	5,411.3	Lower Marker	43.00
2		50	150.00	4,545.5	Ladder Peak	45.37
3		100	150.00	2,272.7	Ladder Peak	51.14
4		150	150.00	1,515.2	Ladder Peak	56.06
5		200	150.00	1,136.4	Ladder Peak	60.89
6		300	150.00	757.6	Ladder Peak	70.26
7		400	150.00	568.2	Ladder Peak	78.12
8		500	150.00	454.5	Ladder Peak	83.75
9		600	150.00	378.8	Ladder Peak	88.58
10		700	150.00	324.7	Ladder Peak	91.51
11		1,000	150.00	227.3	Ladder Peak	95.49
12		2,000	150.00	113.6	Ladder Peak	101.45
13		3,000	150.00	75.8	Ladder Peak	104.39
14		7,000	150.00	32.5	Ladder Peak	109.73
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : S1 UPX Library (1:8)

Number of peaks found:	8	Corr. Area 1:	1,281.4
Noise:	0.3		

Peak table for sample 1 : S1 UPX Library (1:8)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	301	21.02	105.7		70.37
3	410	308.76	1,140.0		78.70
4	446	107.55	365.7		80.69
5	463	72.39	237.0		81.66
6	481	83.52	263.1		82.67
7	497	59.92	182.6		83.60
8	543	223.18	622.8		85.82
9	640	123.76	293.1		89.75
10	10,380	75.00	10.9	Upper Marker	113.00

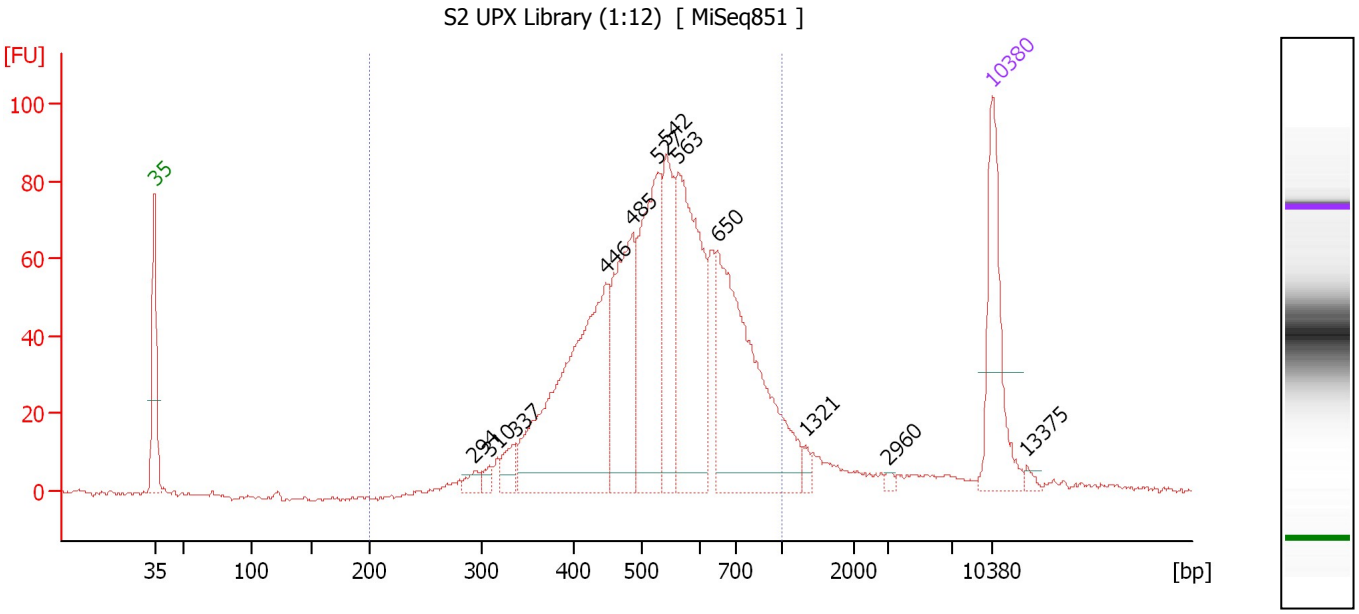
Region table for sample 1 : S1 UPX Library (1:8)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	493	1,269.23	1,281.4	4,254.8	97	25.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : S2 UPX Library (1:12)

Number of peaks found:	12	Corr. Area 1:	1,355.7
Noise:	0.4		

Peak table for sample 2 : S2 UPX Library (1:12)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	294	10.90	56.1		69.73
3	310	8.23	40.3		71.01
4	337	20.96	94.2		73.17
5	446	281.28	955.1		80.72
6	485	148.12	462.3		82.93
7	527	169.42	487.4		85.04
8	542	92.41	258.4		85.78
9	563	196.10	527.5		86.81
10	650	234.51	546.7		90.04
11	1,321	6.14	7.0		97.40
12	2,960	2.80	1.4		104.27
13	10,380	75.00	10.9	Upper Marker	113.00
14	13,375	0.00	0.0		115.89

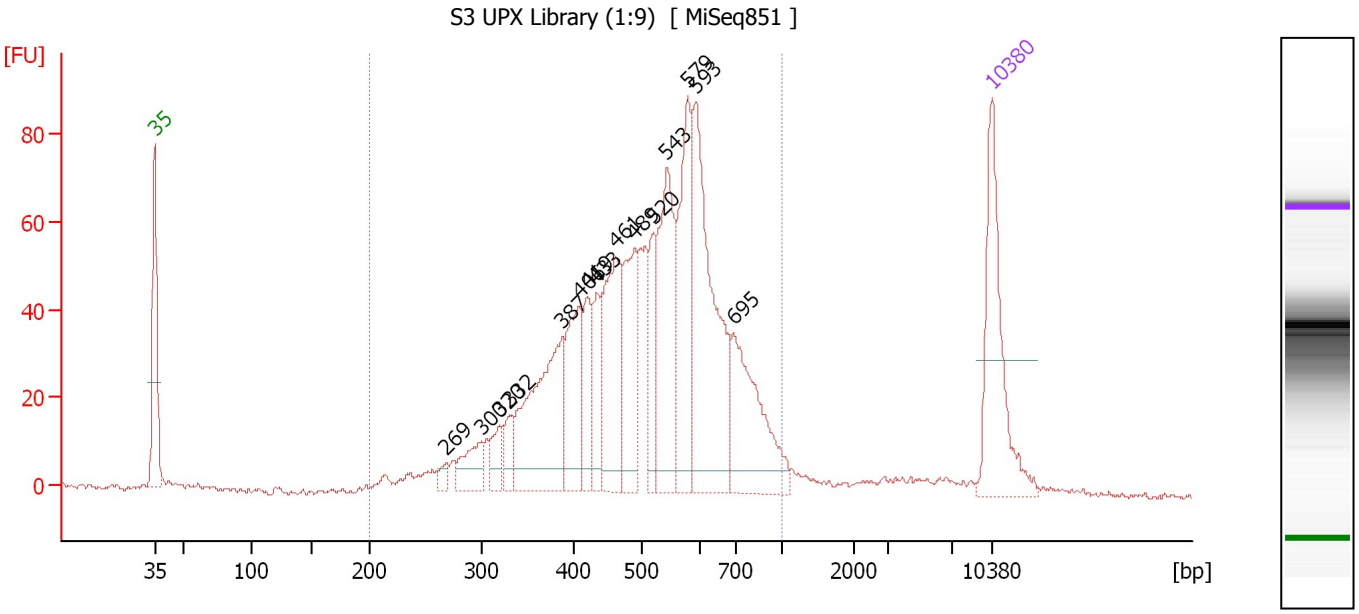
Region table for sample 2 : S2 UPX Library (1:12)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	547	1,167.70	1,355.7	3,510.7	93	25.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : S3 UPX Library (1:9)

Number of peaks found:	15	Corr. Area 1:	1,273.5
Noise:	0.6		

Peak table for sample 3 : S3 UPX Library (1:9)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	269	7.80	43.9		67.36
3	300	28.46	143.6		70.29
4	320	20.05	95.0		71.82
5	332	19.63	89.6		72.77
6	387	126.61	495.9		77.08
7	406	65.09	242.7		78.47
8	419	41.51	150.2		79.17
9	433	34.69	121.5		79.96
10	461	98.02	322.2		81.55
11	489	74.69	231.4		83.13
12	520	38.62	112.5		84.72
13	543	110.30	307.9		85.81
14	579	98.99	259.2		87.55
15	593	164.14	419.3		88.24
16	695	95.70	208.6		91.37
17	10,380	75.00	10.9	Upper Marker	113.00

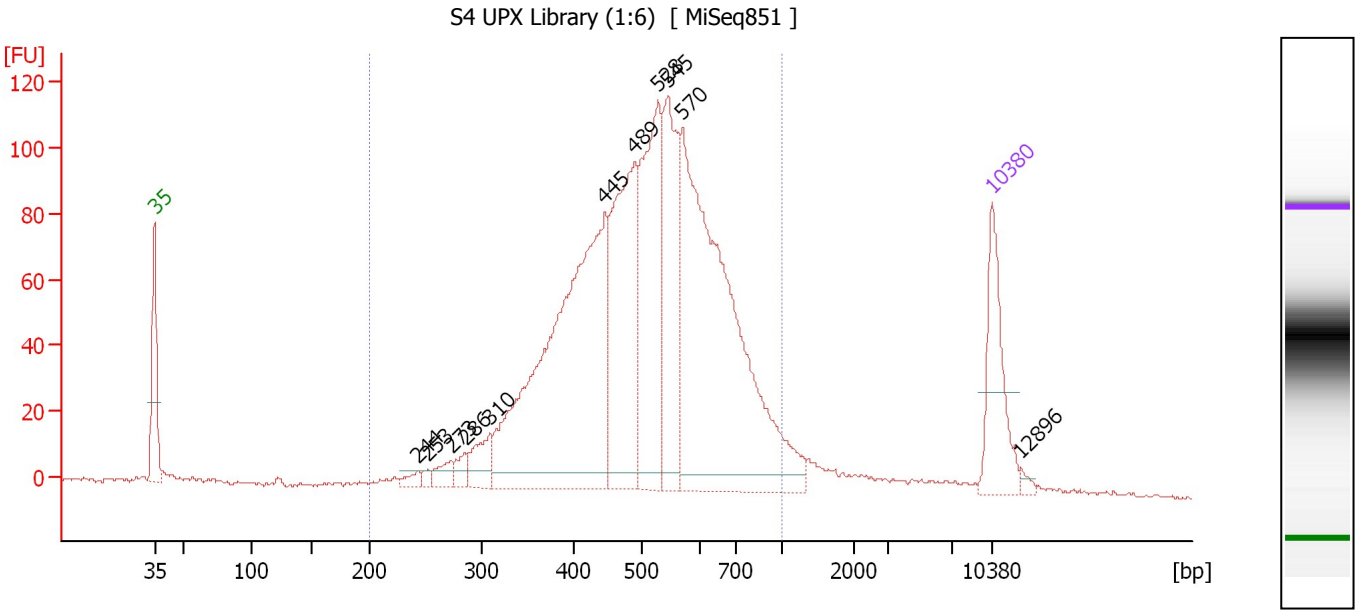
Region table for sample 3 : S3 UPX Library (1:9)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	517	1,104.58	1,273.5	3,590.4	96	26.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : S4 UPX Library (1:6)

Number of peaks found:	11	Corr. Area 1:	1,970.9
Noise:	0.7		

Peak table for sample 4 : S4 UPX Library (1:6)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	244	10.91	67.8		64.98
3	253	6.90	41.4		65.84
4	273	18.44	102.2		67.77
5	286	17.55	93.0		68.93
6	310	40.82	199.4		71.06
7	445	544.23	1,854.4		80.63
8	489	258.57	801.6		83.12
9	528	234.34	672.7		85.09
10	545	168.97	470.1		85.90
11	570	538.55	1,432.2		87.12
12	10,380	75.00	10.9	Upper Marker	113.00
13	12,896	0.00	0.0		115.43

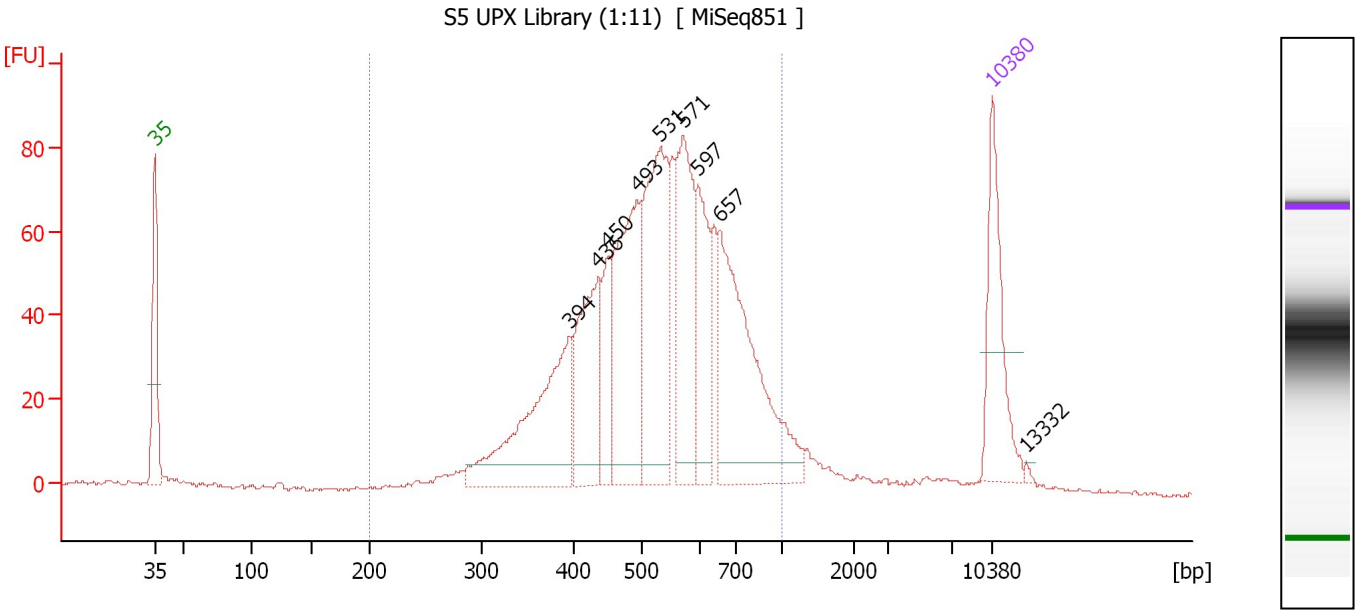
Region table for sample 4 : S4 UPX Library (1:6)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
200	1,000	518	1,795.39	1,970.9	5,750.9	95	25.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : S5 UPX Library (1:11)

Number of peaks found:	9	Corr. Area 1:	1,365.9
Noise:	0.4		

Peak table for sample 5 : S5 UPX Library (1:11)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	394	185.12	712.1		77.64
3	436	118.56	412.4		80.13
4	450	55.71	187.4		80.96
5	493	179.85	553.0		83.34
6	531	198.86	567.2		85.26
7	571	142.85	379.0		87.18
8	597	82.64	209.8		88.42
9	657	212.30	489.9		90.24
10	10,380	75.00	10.9	Upper Marker	113.00
11	13,332	0.00	0.0		115.85

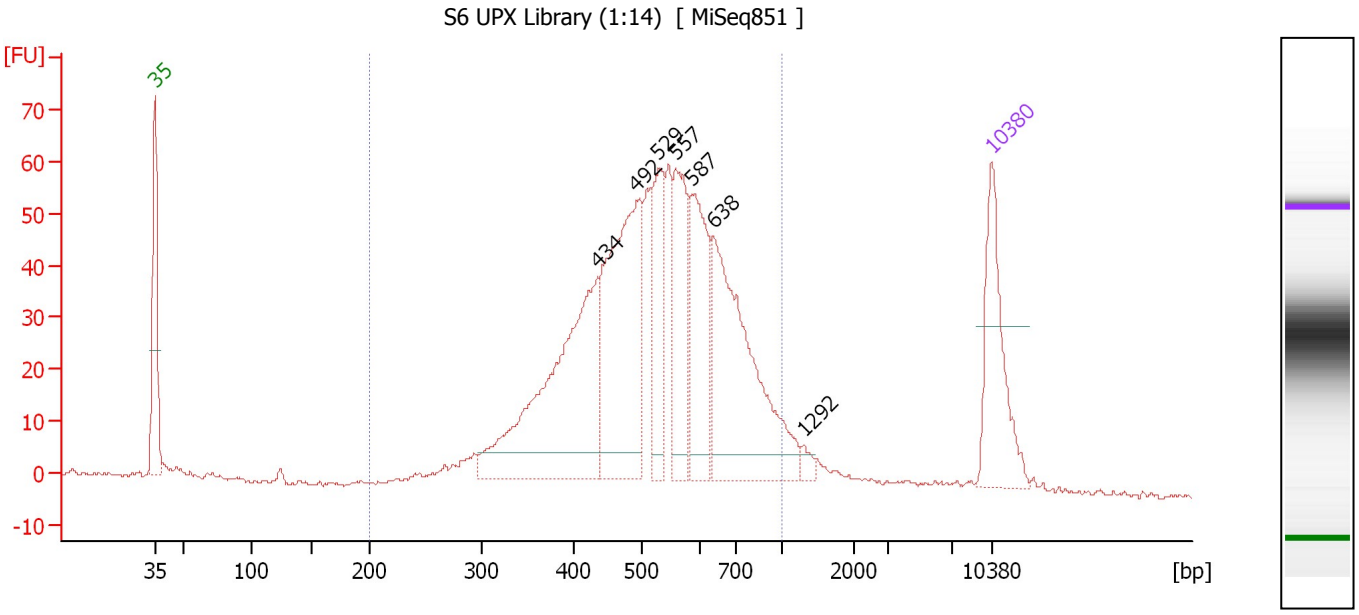
Region table for sample 5 : S5 UPX Library (1:11)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	539	1,285.10	1,365.9	3,935.8	94	25.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : S6 UPX Library (1:14)

Number of peaks found:	7	Corr. Area 1:	1,035.6
Noise:	0.5		

Peak table for sample 6 : S6 UPX Library (1:14)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	434	266.52	930.5		80.03
3	492	236.06	726.9		83.30
4	529	84.61	242.4		85.15
5	557	95.84	260.5		86.52
6	587	108.02	278.9		87.94
7	638	206.66	491.0		89.68
8	1,292	6.62	7.8		97.23
9	10,380	75.00	10.9	Upper Marker	113.00

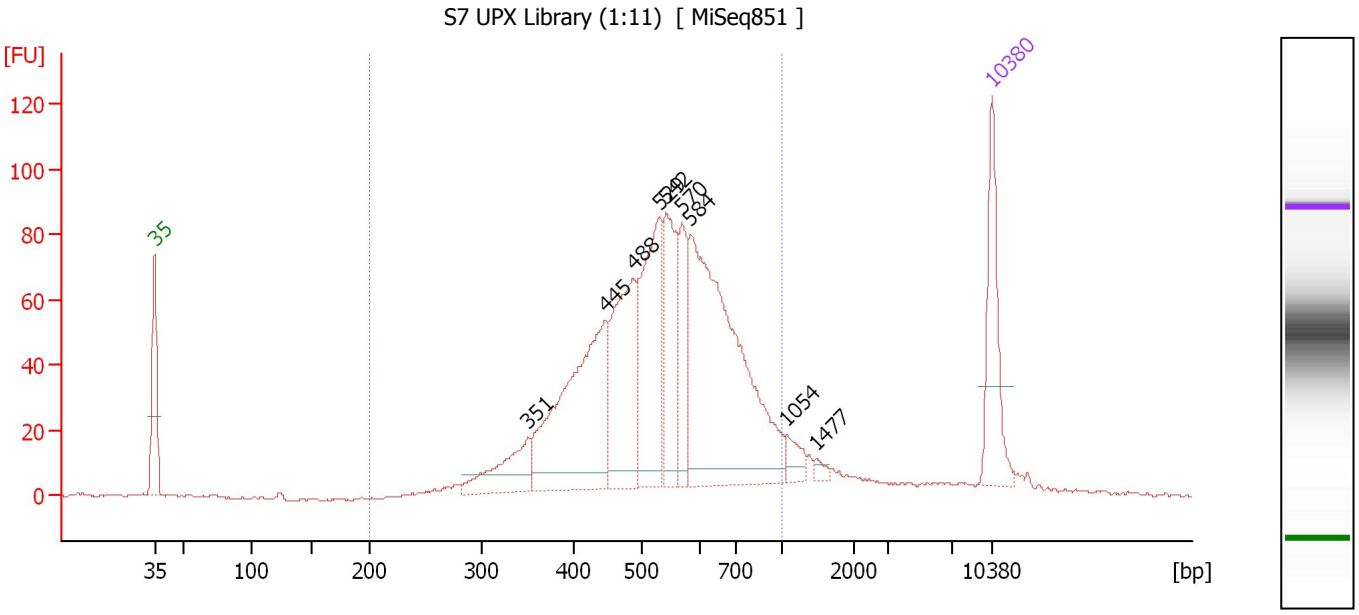
Region table for sample 6 : S6 UPX Library (1:14)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	536	1,147.21	1,035.6	3,527.0	96	25.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : S7 UPX Library (1:11)

Number of peaks found:	9	Corr. Area 1:	1,375.9
Noise:	0.3		

Peak table for sample 7 : S7 UPX Library (1:11)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	351	72.44	312.7		74.27
3	445	268.00	912.3		80.66
4	488	172.35	535.1		83.08
5	529	172.29	493.1		85.17
6	542	117.38	328.3		85.76
7	570	72.82	193.7		87.11
8	584	379.12	983.6		87.80
9	1,054	17.97	25.8		95.81
10	1,477	5.71	5.9		98.33
11	10,380	75.00	10.9	Upper Marker	113.00

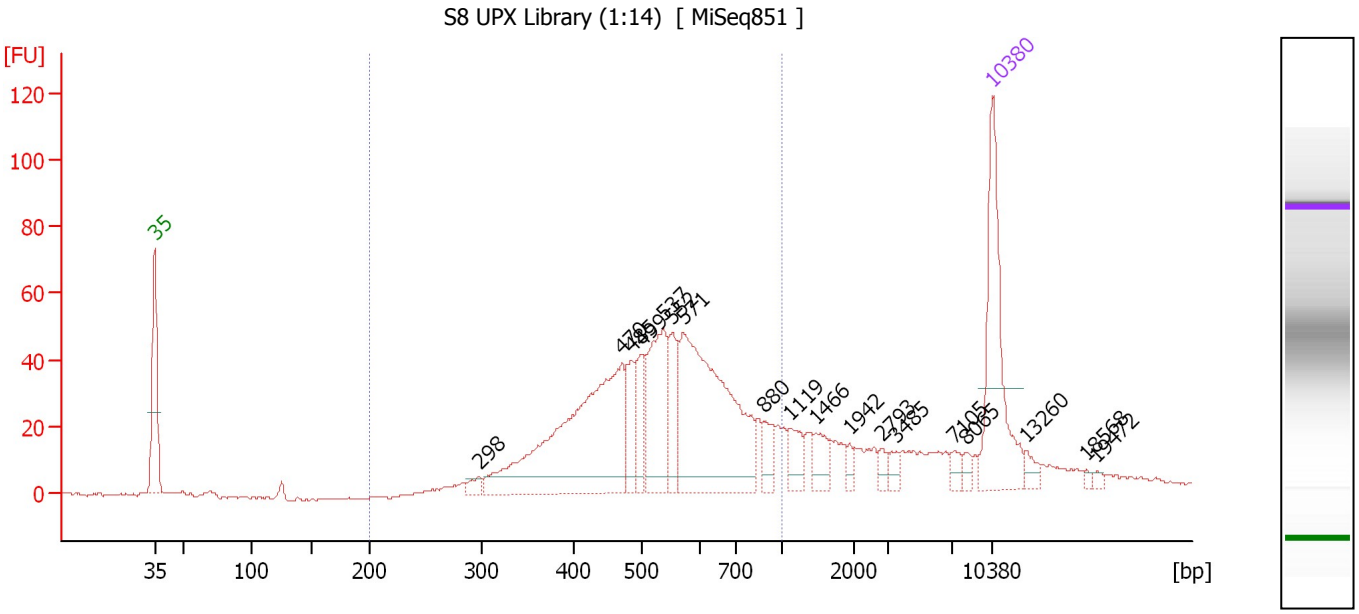
Region table for sample 7 : S7 UPX Library (1:11)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	544	1,340.94	1,375.9	4,065.2	92	25.1

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : S8 UPX Library (1:14)

Number of peaks found:	18	Corr. Area 1:	829.9
Noise:	0.5		

Peak table for sample 8 : S8 UPX Library (1:14)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	298	7.47	37.9		70.12
3	470	218.53	704.4		82.06
4	485	27.47	85.9		82.88
5	499	28.31	86.0		83.70
6	537	72.94	205.6		85.56
7	552	34.34	94.2		86.27
8	571	180.27	478.1		87.19
9	880	13.61	23.4		93.90
10	1,119	16.16	21.9		96.20
11	1,466	15.09	15.6		98.27
12	1,942	5.46	4.3		101.11
13	2,793	5.72	3.1		103.78
14	3,485	5.76	2.5		105.03
15	7,105	5.84	1.2		109.84
16	8,065	4.27	0.8		110.76
17	10,380	75.00	10.9	Upper Marker	113.00
18	13,260	0.00	0.0		115.78
19	18,568	0.00	0.0		120.91
20	19,472	0.00	0.0		121.78

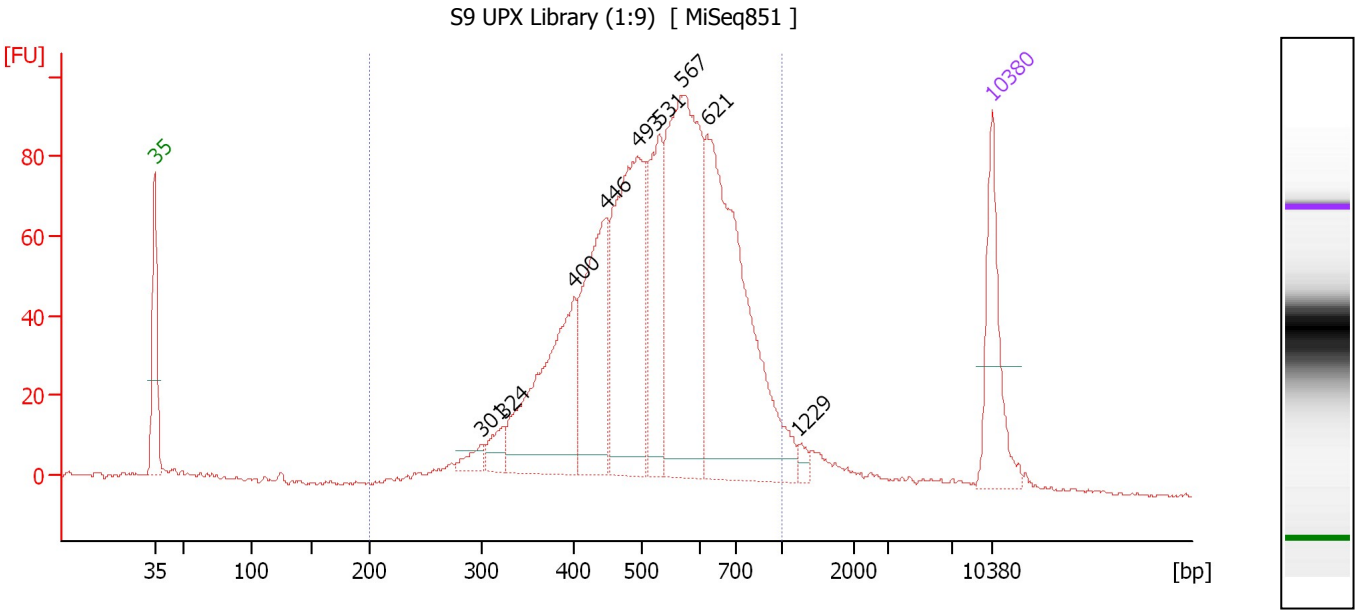
Region table for sample 8 : S8 UPX Library (1:14)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	545	615.43	829.9	1,880.9	74	27.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : S9 UPX Library (1:9)

Number of peaks found:	9	Corr. Area 1:	1,655.6
Noise:	0.5		

Peak table for sample 9 : S9 UPX Library (1:9)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	301	16.99	85.4		70.37
3	324	23.32	109.2		72.12
4	400	211.16	800.8		78.08
5	446	180.31	612.6		80.71
6	493	278.63	857.0		83.34
7	531	120.35	343.3		85.25
8	567	337.73	901.9		87.00
9	621	362.39	884.3		89.19
10	1,229	7.00	8.6		96.85
11	10,380	75.00	10.9	Upper Marker	113.00

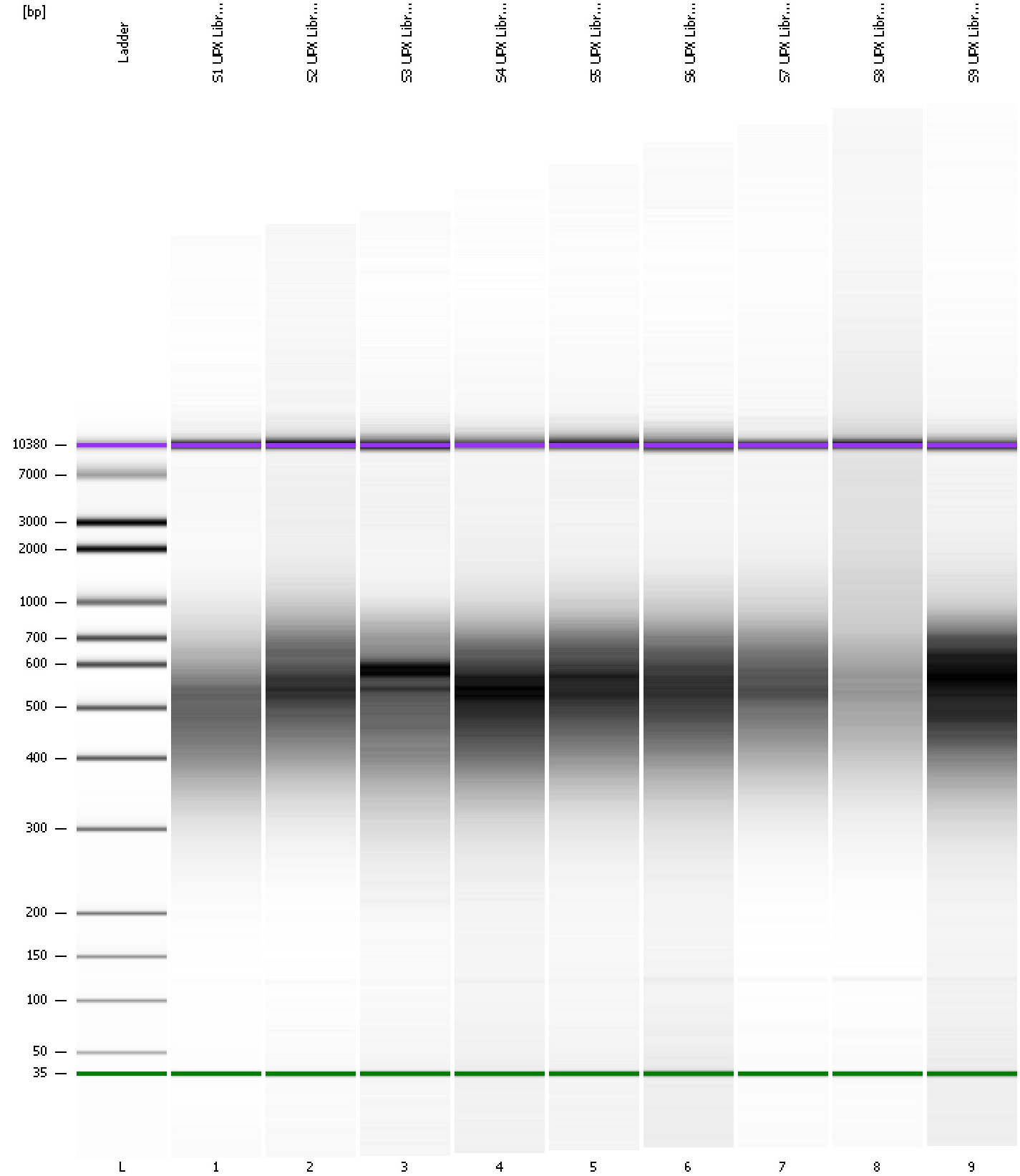
Region table for sample 9 : S9 UPX Library (1:9)

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/µl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
200	1,000	539	1,639.06	1,655.6	5,035.2	95	25.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...t\data\2019-05-09\2019-05-09_002_MiSeq851_UPX_Libraries.xad

Created: 5/9/2019 2:43:01 PM
Modified: 5/9/2019 3:32:40 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		5/9/2019 3:24:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-05-09\2019-05-09_002.xad)		Instrument	Run		5/9/2019 2:43:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		5/9/2019 2:43:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/9/2019 2:43:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/9/2019 2:43:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		5/9/2019 2:43:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/9/2019 2:43:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/9/2019 2:43:07 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1