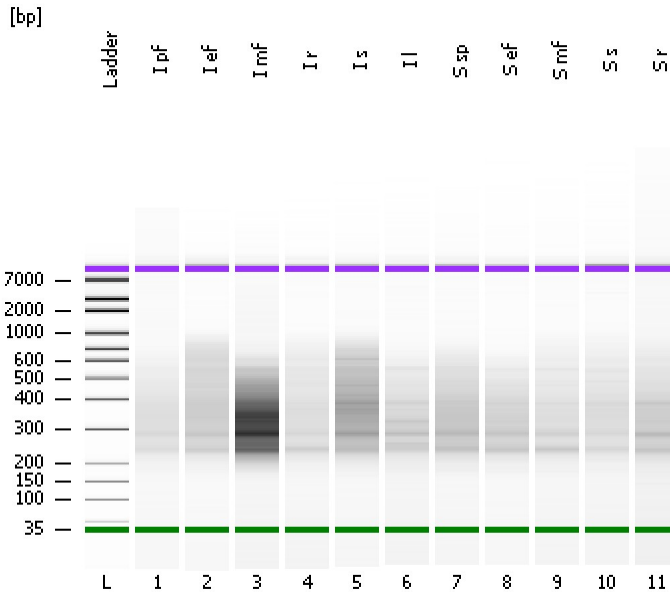


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
Modified: 4/13/2018 9:15:33 AM

Electrophoresis File Run Summary



Instrument Information:

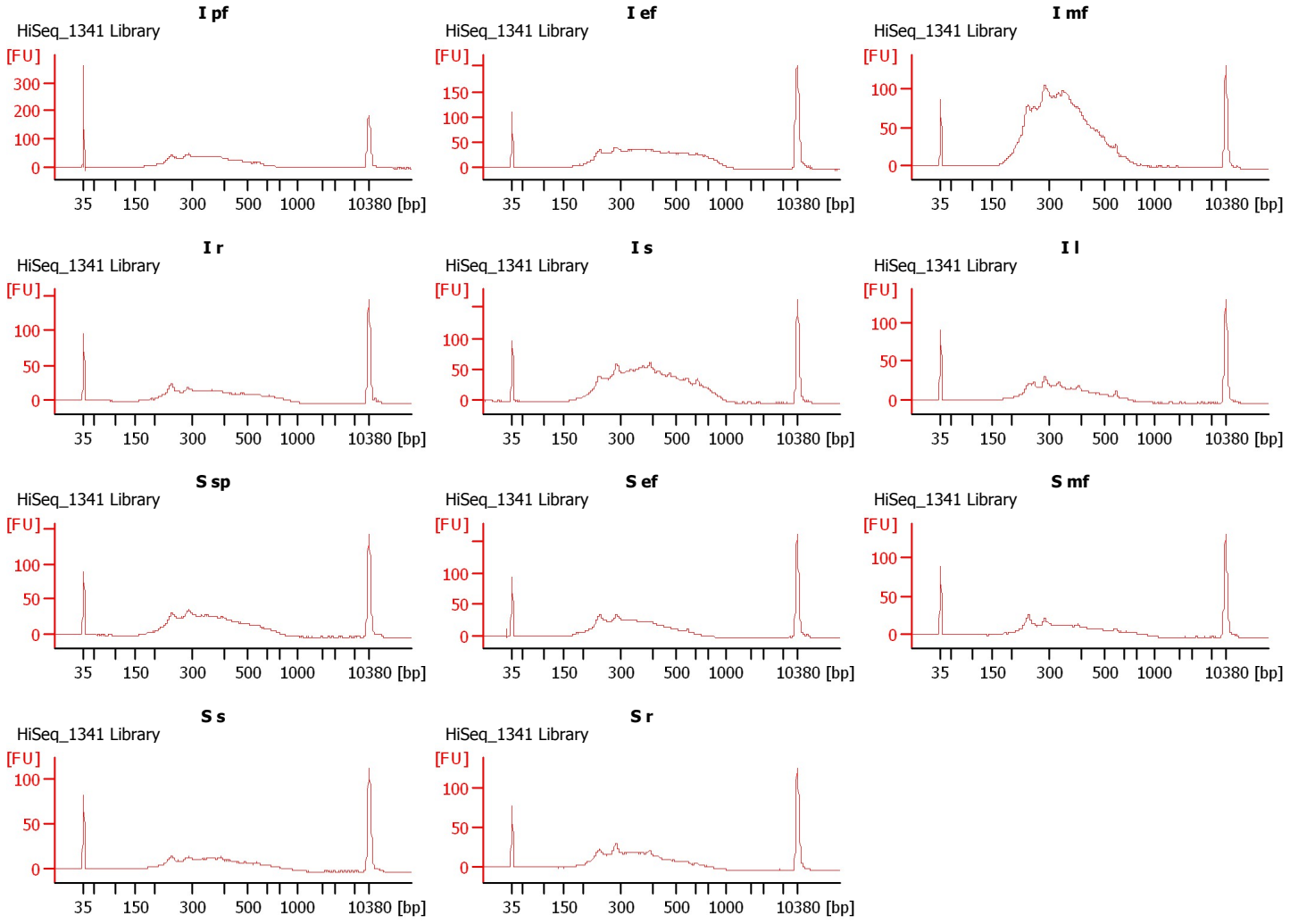
Instrument Name: DE34903152 Firmware: C.01.069
Serial#: DE34903152 Type: G2938C

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
I pf	HiSeq_1341 Library	<input type="checkbox"/>	✓			
I ef	HiSeq_1341 Library	<input type="checkbox"/>	✓			
I mf	HiSeq_1341 Library	<input type="checkbox"/>	✓			
I r	HiSeq_1341 Library	<input type="checkbox"/>	✓			
I s	HiSeq_1341 Library	<input type="checkbox"/>	✓			
I l	HiSeq_1341 Library	<input type="checkbox"/>	✓			
S sp	HiSeq_1341 Library	<input type="checkbox"/>	✓			
S ef	HiSeq_1341 Library	<input type="checkbox"/>	✓			
S mf	HiSeq_1341 Library	<input type="checkbox"/>	✓			
S s	HiSeq_1341 Library	<input type="checkbox"/>	✓			
S r	HiSeq_1341 Library	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
Modified: 4/13/2018 9:15:33 AM

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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

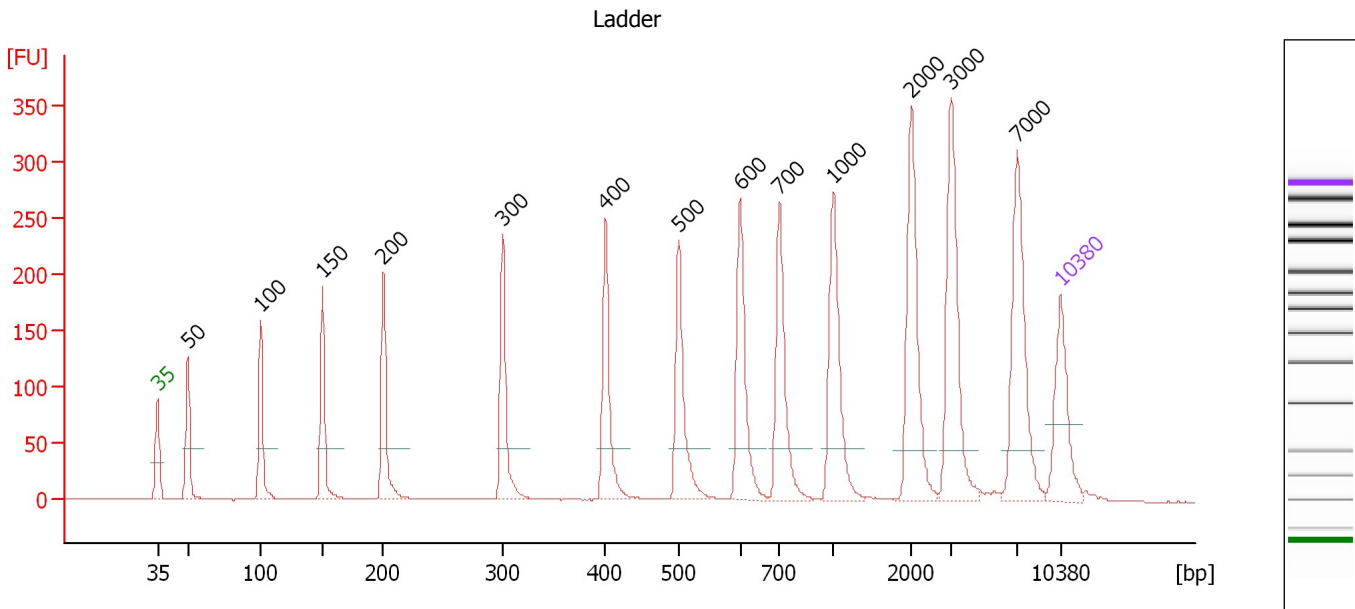
Ladder

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:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.3

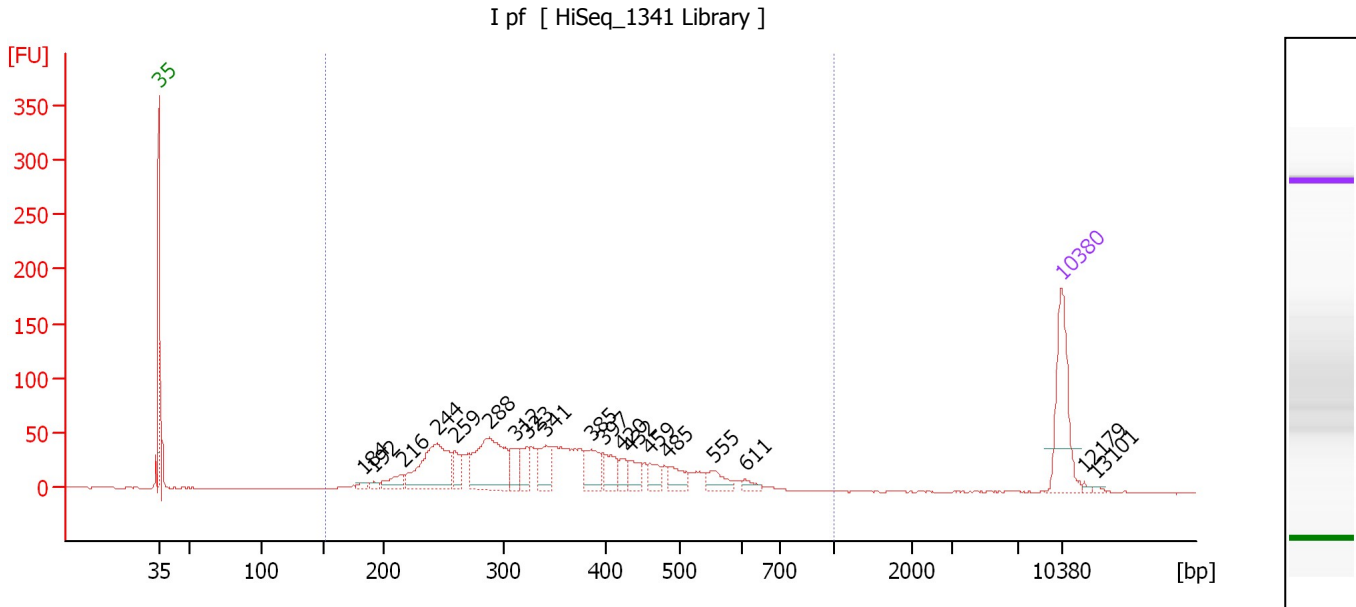
Peak table for Ladder

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	45.35
3	100	150.00	2,272.7	Ladder Peak	50.98
4	150	150.00	1,515.2	Ladder Peak	55.76
5	200	150.00	1,136.4	Ladder Peak	60.50
6	300	150.00	757.6	Ladder Peak	69.75
7	400	150.00	568.2	Ladder Peak	77.73
8	500	150.00	454.5	Ladder Peak	83.41
9	600	150.00	378.8	Ladder Peak	88.15
10	700	150.00	324.7	Ladder Peak	91.22
11	1,000	150.00	227.3	Ladder Peak	95.41
12	2,000	150.00	113.6	Ladder Peak	101.45
13	3,000	150.00	75.8	Ladder Peak	104.52
14	7,000	150.00	32.5	Ladder Peak	109.66
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : I pf

Number of peaks found: 19 Corr. Area 1: 1,219.1
 Noise: 0.3

Peak table for sample 1 : I pf

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	184	6.38	52.7		58.94
3	192	5.92	46.8		59.71
4	216	22.83	160.1		61.99
5	244	122.83	762.1		64.59
6	259	23.73	138.8		65.95
7	288	128.04	673.5		68.64
8	312	30.35	147.5		70.69
9	323	28.41	133.2		71.60
10	341	41.13	182.5		73.06
11	385	37.94	149.4		76.52
12	397	29.77	113.7		77.48
13	420	17.01	61.4		78.84
14	432	20.24	70.9		79.57
15	459	18.91	62.5		81.07
16	485	23.21	72.6		82.53
17	555	20.79	56.7		86.04
18	611	8.24	20.4		88.50
19	10,380	75.00	10.9	Upper Marker	113.00
20	12,179	0.00	0.0		114.78
21	13,101	0.00	0.0		115.69

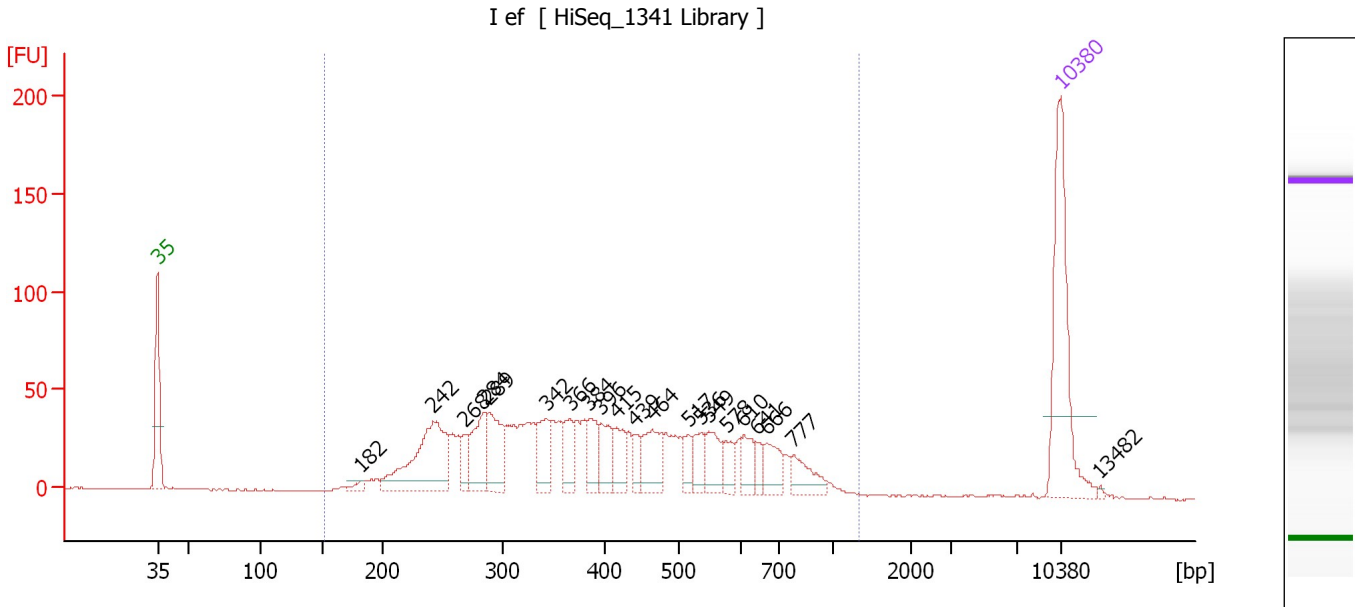
Region table for sample 1 : I pf

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
152	1,000	359	789.02	1,219.0	3,765.2	87	30.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : I ef

Number of peaks found: 21 Corr. Area 1: 1,401.6
 Noise: 0.3

Peak table for sample 2 : I ef

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	182	4.77	39.7		58.77
3	242	100.34	627.8		64.40
4	268	15.03	84.9		66.82
5	284	38.94	207.6		68.28
6	289	43.30	227.3		68.70
7	342	29.19	129.2		73.13
8	366	20.89	86.5		75.01
9	384	24.42	96.3		76.47
10	396	23.27	89.1		77.38
11	415	19.59	71.6		78.57
12	439	11.80	40.7		79.94
13	464	29.84	97.4		81.36
14	517	13.15	38.5		84.24
15	536	14.71	41.6		85.11
16	549	21.65	59.7		85.75
17	578	12.01	31.5		87.12
18	610	17.02	42.3		88.45
19	641	7.92	18.7		89.41
20	666	18.53	42.1		90.18
21	777	18.80	36.7		92.29
22	10,380	75.00	10.9	Upper Marker	113.00
23	13,482	0.00	0.0		116.06

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...

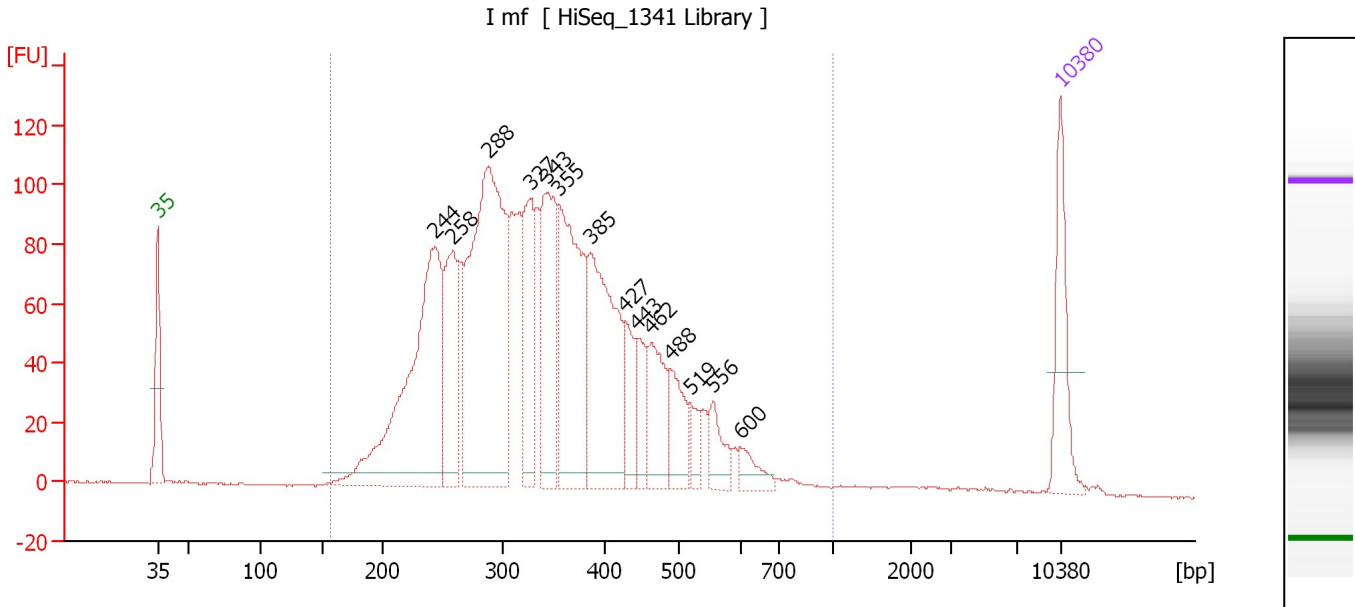
... Region table for sample 2 : I ef

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/ μ l]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
152	1,323	427	704.69	1,401.6	3,054.8	 98	39.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : I mf

Number of peaks found: 14 Corr. Area 1: 2,597.8
 Noise: 0.3

Peak table for sample 3 : I mf

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	463.29	2,882.5		64.52
3	258	160.94	944.4		65.88
4	288	537.78	2,828.7		68.64
5	327	148.54	689.1		71.87
6	343	186.30	822.9		73.18
7	355	266.64	1,138.8		74.12
8	385	256.59	1,009.2		76.55
9	427	62.41	221.5		79.26
10	443	51.47	175.9		80.20
11	462	87.99	288.3		81.28
12	488	61.14	189.9		82.73
13	519	26.67	77.8		84.32
14	556	39.53	107.8		86.05
15	600	26.02	65.7		88.15
16	10,380	75.00	10.9	Upper Marker	113.00

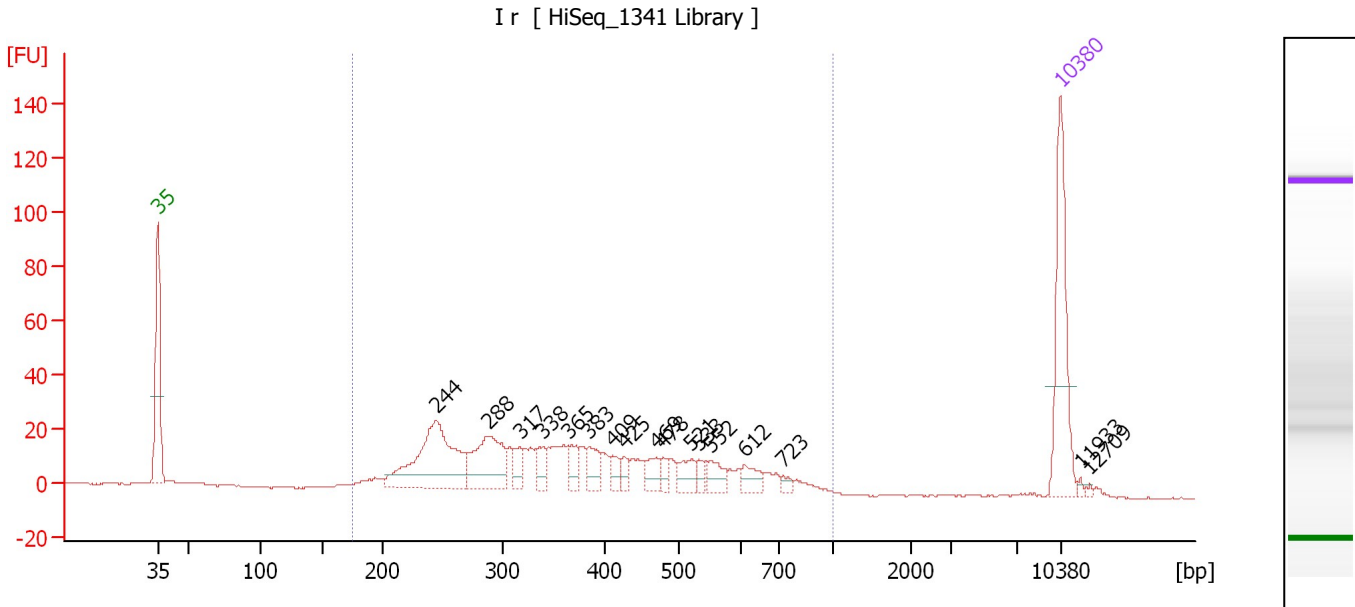
Region table for sample 3 : I mf

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
157	1,000	351	2,731.85	2,597.8	13,135.2	98	29.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : I r

Number of peaks found: 17 Corr. Area 1: 576.4
 Noise: 0.2

Peak table for sample 4 : I r

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	142.30	883.9		64.56
3	288	76.72	402.9		68.68
4	317	16.58	79.2		71.12
5	338	15.97	71.5		72.80
6	365	16.72	69.4		74.91
7	383	21.30	84.2		76.39
8	409	11.25	41.6		78.26
9	425	9.36	33.3		79.17
10	469	15.27	49.3		81.67
11	478	8.48	26.9		82.14
12	521	17.12	49.8		84.40
13	533	9.04	25.7		84.97
14	552	15.40	42.3		85.88
15	612	13.94	34.5		88.52
16	723	4.86	10.2		91.54
17	10,380	75.00	10.9	Upper Marker	113.00
18	11,933	0.00	0.0		114.53
19	12,709	0.00	0.0		115.30

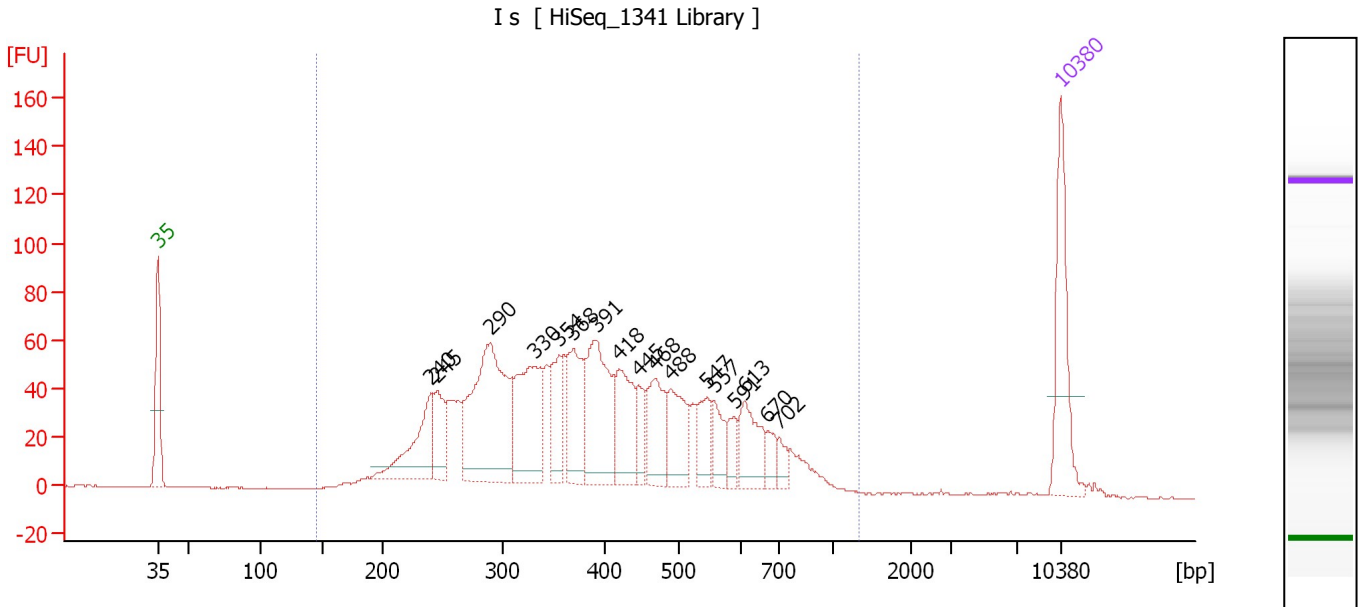
Region table for sample 4 : I r

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
175	1,000	392	547.08	576.4	2,518.2	96	37.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : I s

Number of peaks found: 17 Corr. Area 1: 1,792.8
 Noise: 0.2

Peak table for sample 5 : I s

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	240	90.38	570.0		64.22
3	245	50.68	313.4		64.66
4	290	225.94	1,181.9		68.79
5	330	124.83	572.3		72.18
6	354	53.36	228.1		74.09
7	368	83.28	342.9		75.18
8	391	123.34	478.2		76.99
9	418	72.67	263.3		78.76
10	445	27.56	93.8		80.28
11	468	63.08	204.1		81.61
12	488	61.47	190.8		82.74
13	547	37.00	102.5		85.64
14	557	31.84	86.6		86.13
15	591	18.53	47.6		87.70
16	613	51.41	127.1		88.54
17	670	16.56	37.4		90.31
18	702	13.06	28.2		91.24
19	10,380	75.00	10.9	Upper Marker	113.00

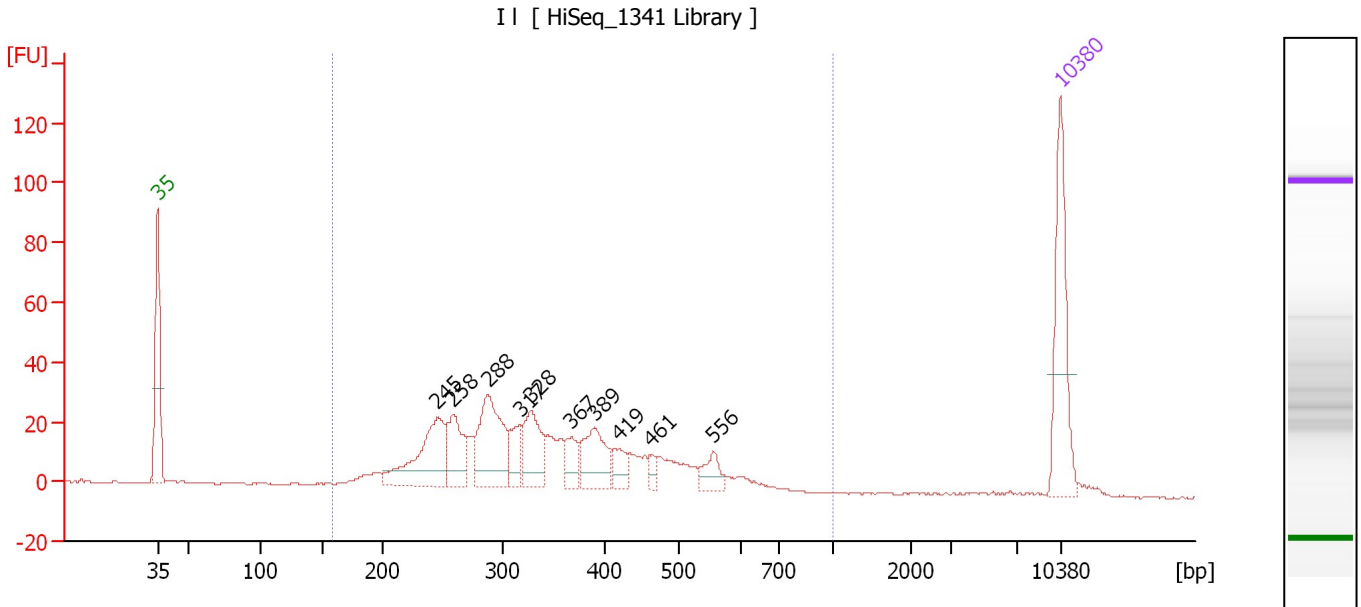
Region table for sample 5 : I s

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
146	1,325	413	1,473.19	1,792.8	6,391.9	99	36.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : I I

Number of peaks found: 10 Corr. Area 1: 602.7
 Noise: 0.3

Peak table for sample 6 : I I

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	245	104.07	643.6		64.66
3	258	51.11	300.1		65.87
4	288	103.37	544.1		68.62
5	317	27.07	129.5		71.08
6	328	54.54	251.9		71.98
7	367	25.01	103.3		75.09
8	389	52.53	204.6		76.85
9	419	18.21	65.9		78.80
10	461	8.76	28.8		81.21
11	556	19.01	51.8		86.07
12	10,380	75.00	10.9	Upper Marker	113.00

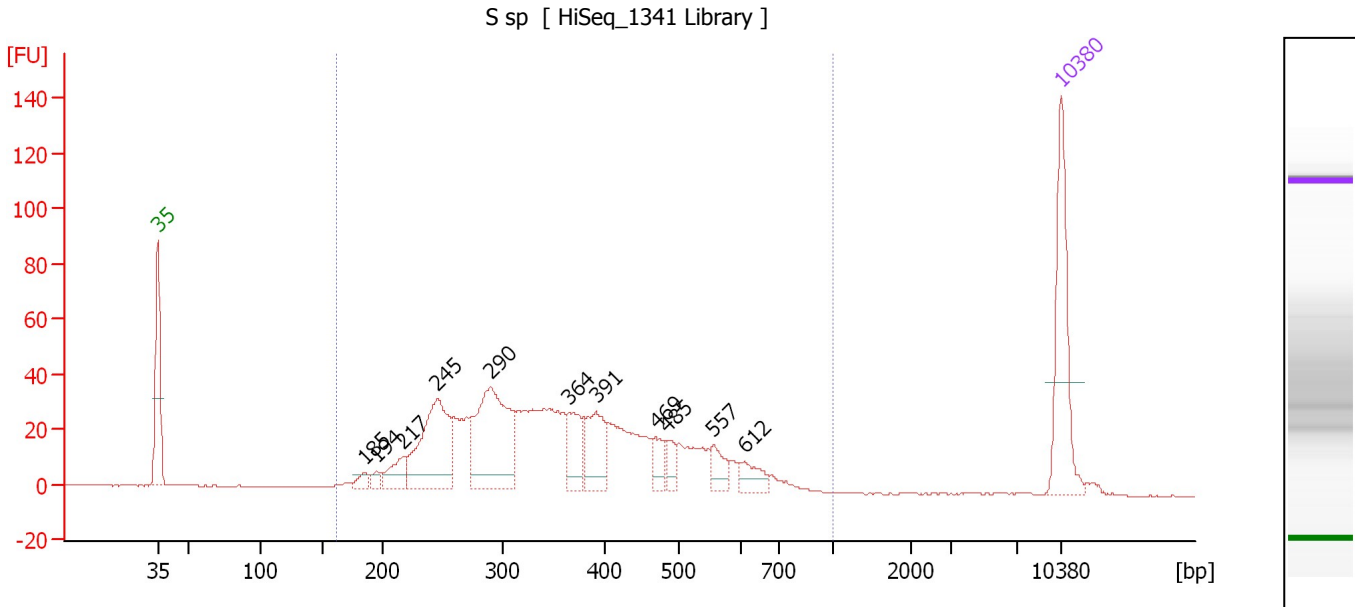
Region table for sample 6 : I I

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
158	1,000	351	624.62	602.7	3,030.2	97	29.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : S sp

Number of peaks found: 11 Corr. Area 1: 934.0
 Noise: 0.2

Peak table for sample 7 : S sp

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	185	9.87	81.0		59.04
3	194	7.78	60.6		59.96
4	217	28.29	197.7		62.06
5	245	129.92	803.3		64.66
6	290	149.32	780.7		68.80
7	364	40.45	168.2		74.88
8	391	53.77	208.6		76.98
9	469	19.35	62.6		81.63
10	485	15.28	47.8		82.55
11	557	20.23	55.0		86.12
12	612	18.74	46.4		88.53
13	10,380	75.00	10.9	Upper Marker	113.00

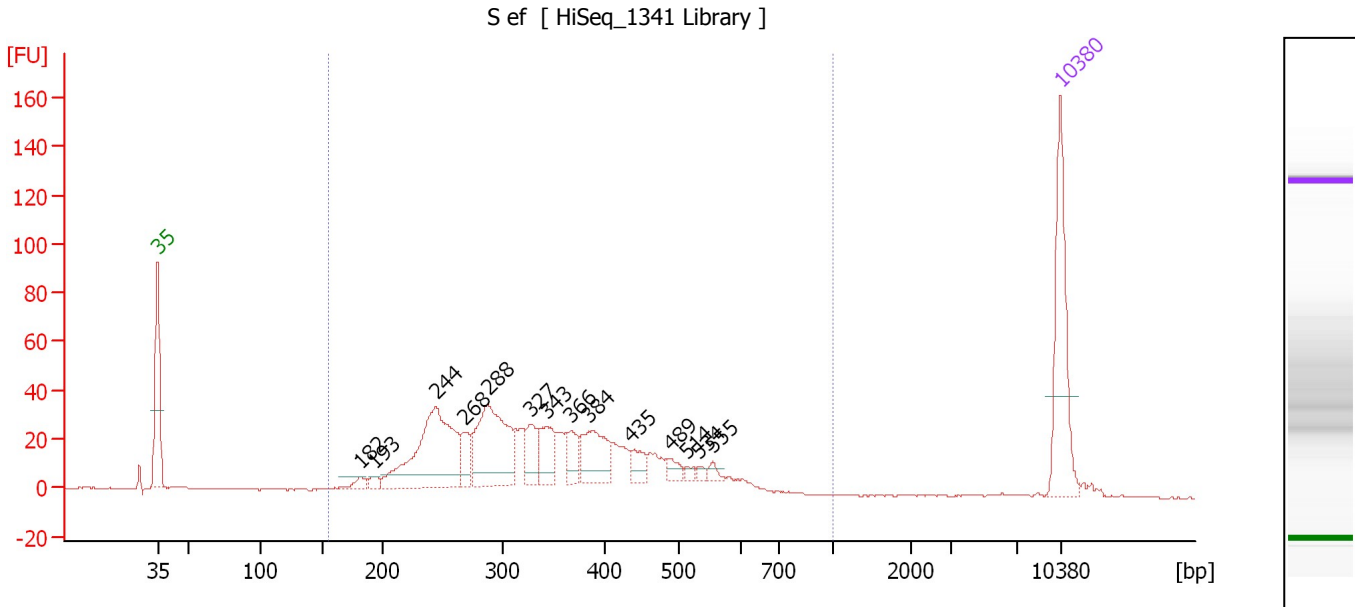
Region table for sample 7 : S sp

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]
162	1,000	371	864.73	934.0	4,059.4	97	32.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : S ef

Number of peaks found: 14 Corr. Area 1: 811.5
 Noise: 0.2

Peak table for sample 8 : S ef

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	182	9.63	80.3		58.76
3	193	7.13	56.1		59.79
4	244	163.71	1,015.4		64.59
5	268	23.51	133.0		66.76
6	288	117.83	620.2		68.62
7	327	29.88	138.3		71.93
8	343	34.57	152.8		73.17
9	366	22.52	93.2		75.03
10	384	49.76	196.2		76.48
11	435	14.86	51.7		79.73
12	489	9.70	30.1		82.78
13	514	4.11	12.1		84.07
14	534	3.83	10.9		85.00
15	555	5.17	14.1		86.03
16	10,380	75.00	10.9	Upper Marker	113.00

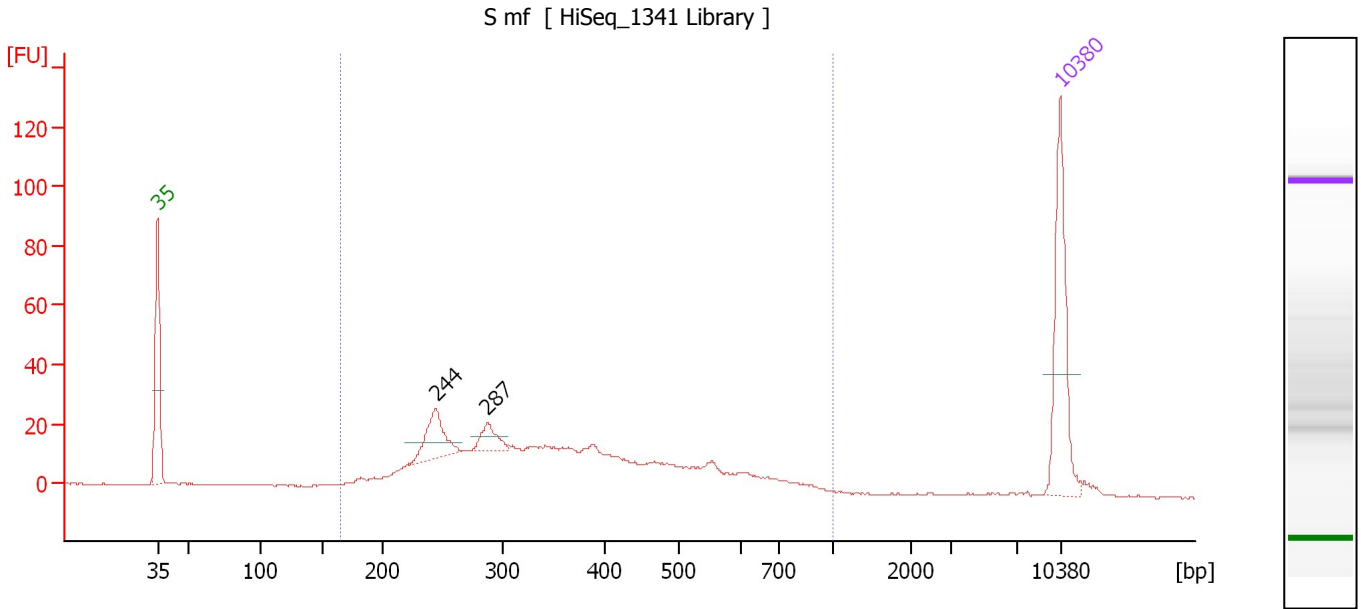
Region table for sample 8 : S ef

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
155	1,000	349	706.42	811.5	3,449.9	97	29.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : S mf

Number of peaks found: 2 Corr. Area 1: 512.7
 Noise: 0.2

Peak table for sample 9 : S mf

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	48.13	298.5		64.60
3	287	21.17	111.7		68.55
4	10,380	75.00	10.9	Upper Marker	113.00

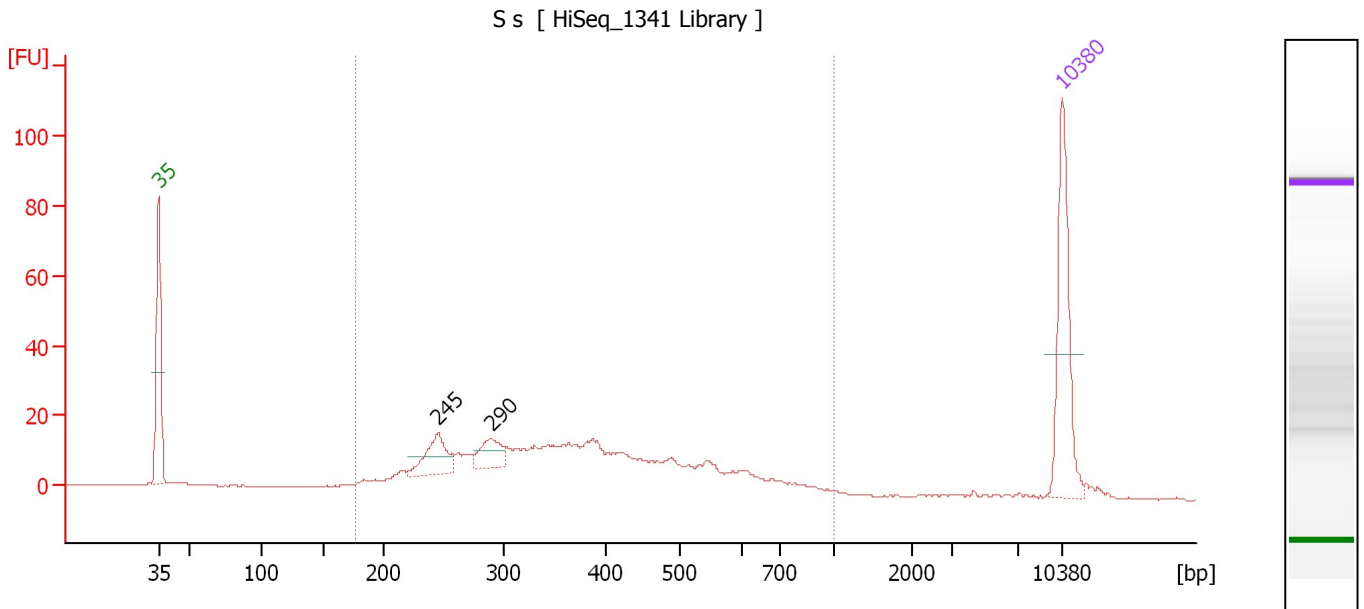
Region table for sample 9 : S mf

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
166	1,000	373	524.72	512.7	2,508.7	96	37.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : S s

Number of peaks found: 2 Corr. Area 1: 419.5
 Noise: 0.2

Peak table for sample 10 : S s

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	245	42.94	265.3		64.68
3	290	27.53	144.0		68.80
4	10,380	75.00	10.9	Upper Marker	113.00

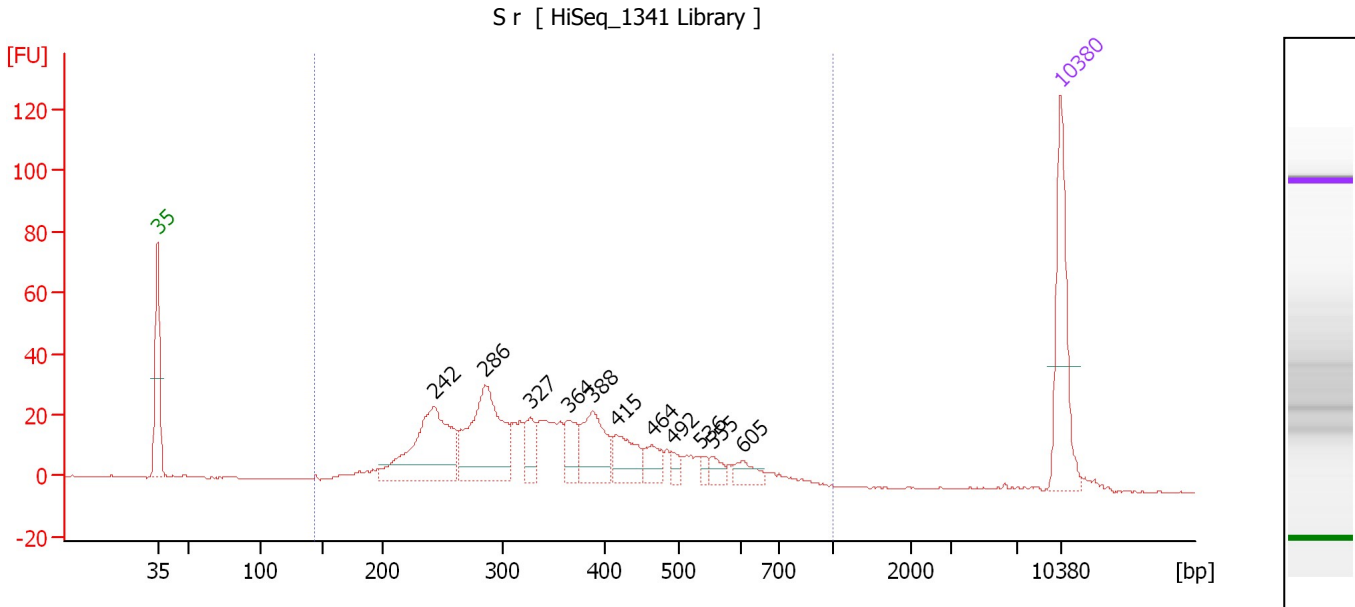
Region table for sample 10 : S s

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
176	1,000	388	471.17	419.5	2,156.3	94	35.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
 Modified: 4/13/2018 9:15:33 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : S r

Number of peaks found: 11 Corr. Area 1: 640.8
 Noise: 0.2

Peak table for sample 11 : S r

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	242	150.85	943.4		64.41
3	286	145.83	773.1		68.44
4	327	28.40	131.7		71.88
5	364	29.65	123.4		74.85
6	388	62.20	243.0		76.75
7	415	40.96	149.7		78.56
8	464	21.33	69.7		81.36
9	492	8.93	27.5		82.95
10	536	6.77	19.1		85.13
11	555	11.00	30.0		86.03
12	605	14.97	37.5		88.31
13	10,380	75.00	10.9	Upper Marker	113.00

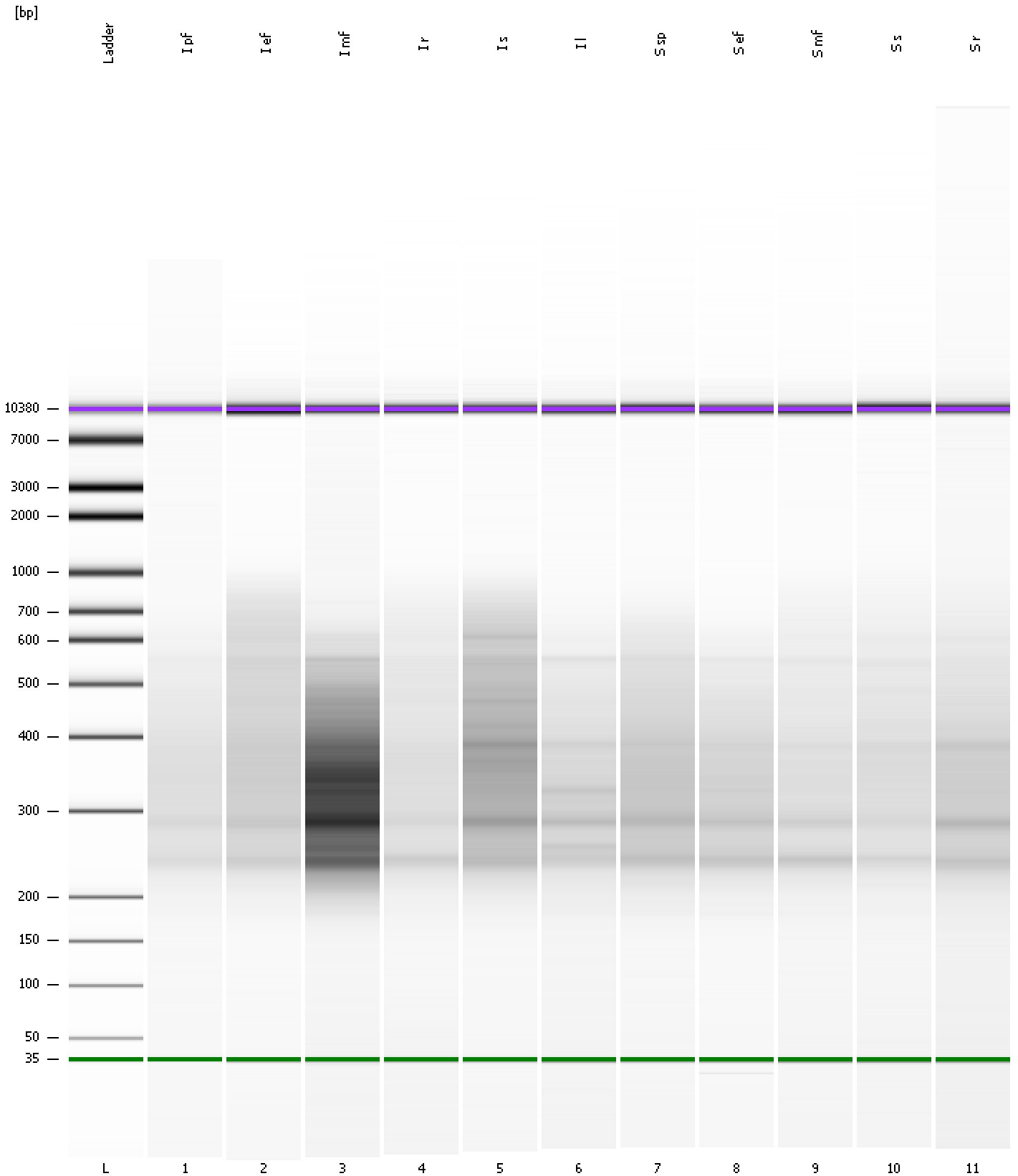
Region table for sample 11 : S r

From [bp]	To [bp]	Average Size [bp]	Conc. [pg/μl]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]
144	1,000	365	680.25	640.8	3,249.7	98	33.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
Modified: 4/13/2018 9:15:33 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2018-04-13\2018-04-13_001.xad

Created: 4/13/2018 8:30:44 AM
Modified: 4/13/2018 9:15:33 AM

Curves

Standard Curve

