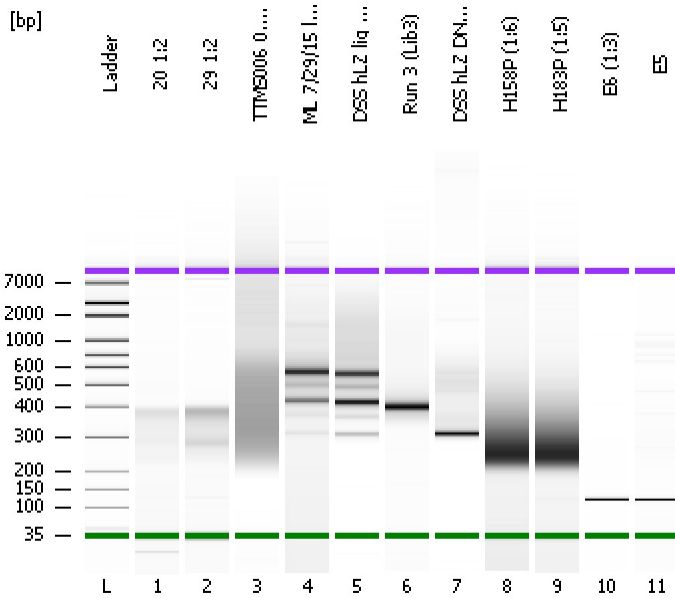


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
Modified: 8/10/2015 4:55:10 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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

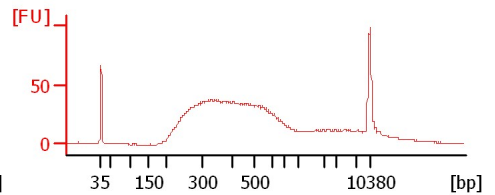
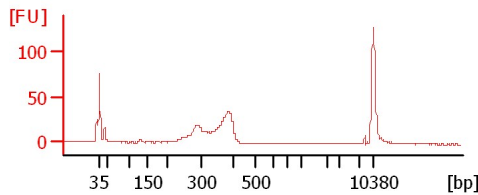
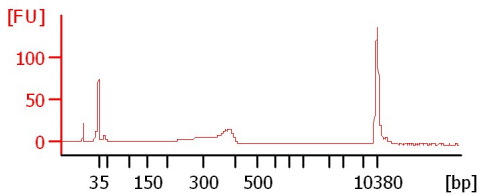
Chip Information:

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

20 1:2

29 1:2

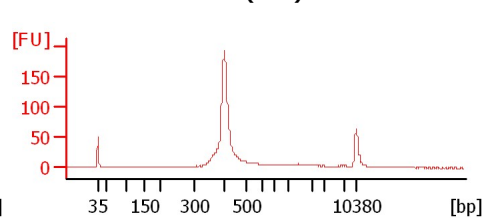
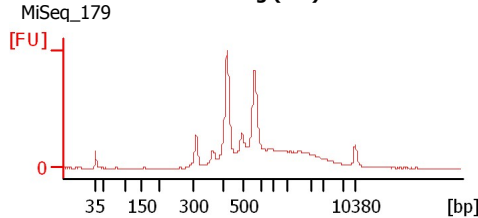
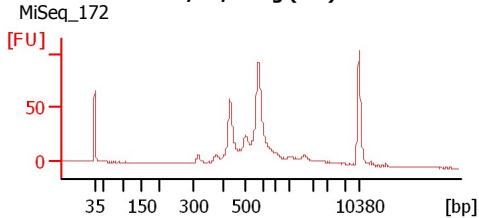
TTMS006 0.55X Right Size Selection (1:7)  
HiSeq\_182



ML 7/29/15 lig (1:6)

DSS hLZ lig (1:2)

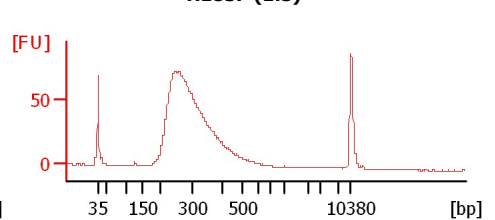
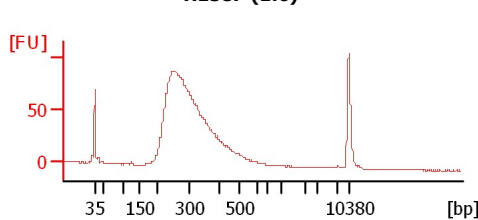
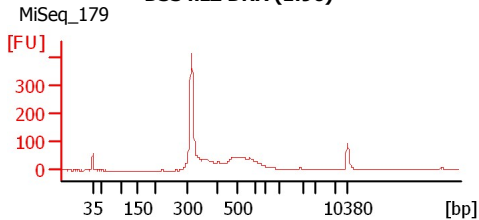
Run 3 (Lib3)



DSS hLZ DNA (1:96)

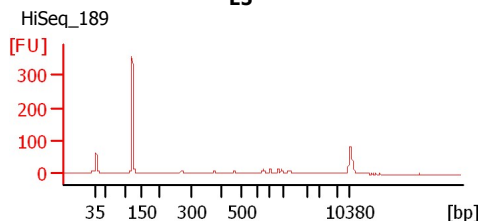
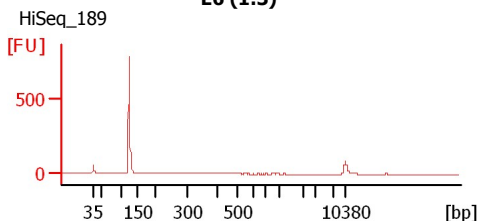
H158P (1:6)

H183P (1:5)



E6 (1:3)

E5



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
20 1:2		<input type="checkbox"/>	✓			
29 1:2		<input type="checkbox"/>	✓			
TTMS006 0.55X Right Size Selection (1:7)	HiSeq_182	<input type="checkbox"/>	✓			
ML 7/29/15 lig (1:6)	MiSeq_172	<input type="checkbox"/>	✓			
DSS hLZ lig (1:2)	MiSeq_179	<input type="checkbox"/>	✓			
Run 3 (Lib3)		<input type="checkbox"/>	✓			
DSS hLZ DNA (1:96)	MiSeq_179	<input type="checkbox"/>	✓			
H158P (1:6)		<input type="checkbox"/>	✓			
H183P (1:5)		<input type="checkbox"/>	✓			
E6 (1:3)	HiSeq_189	<input type="checkbox"/>	✓			
E5	HiSeq_189	<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
Modified: 8/10/2015 4:55:10 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

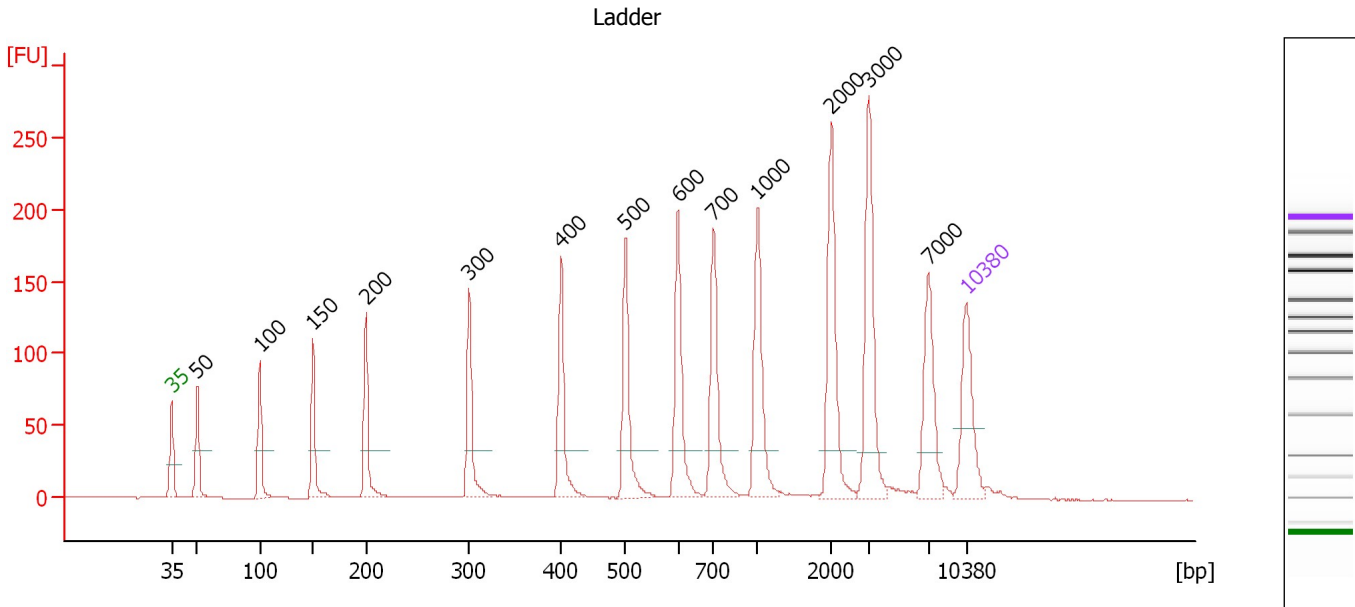
**Ladder**

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:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

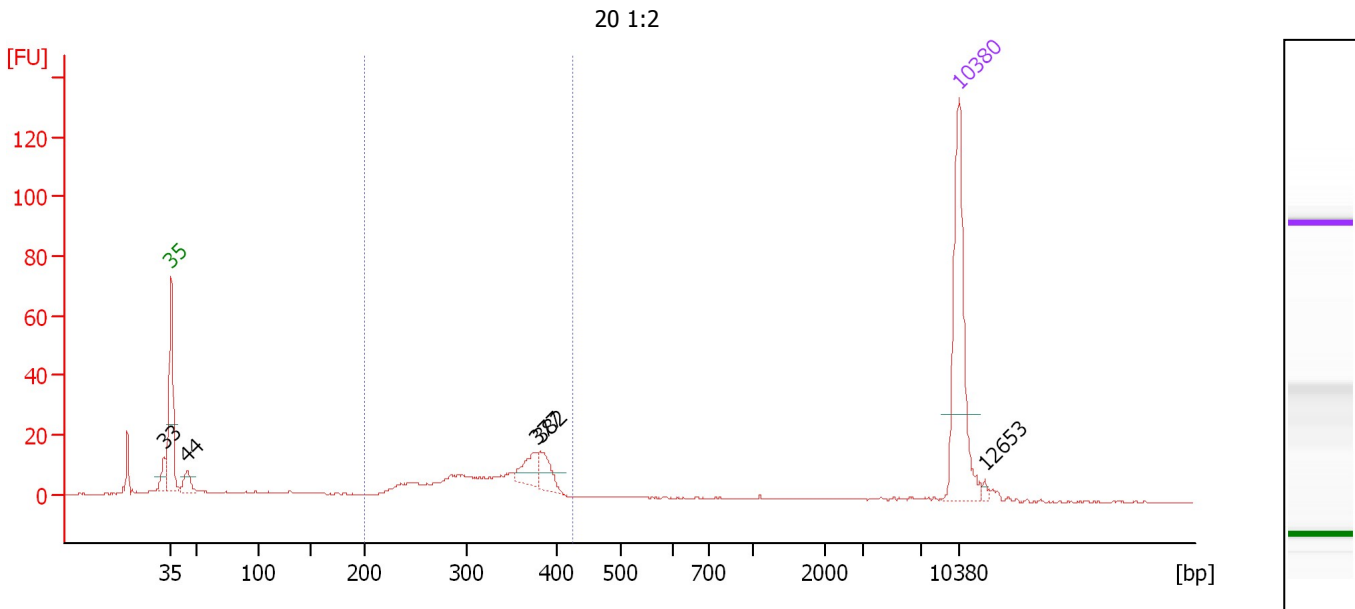
**Peak table for Ladder**

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	45.25
3	100	150.00	2,272.7	Ladder Peak	50.75
4	150	150.00	1,515.2	Ladder Peak	55.44
5	200	150.00	1,136.4	Ladder Peak	60.14
6	300	150.00	757.6	Ladder Peak	69.20
7	400	150.00	568.2	Ladder Peak	77.27
8	500	150.00	454.5	Ladder Peak	82.95
9	600	150.00	378.8	Ladder Peak	87.60
10	700	150.00	324.7	Ladder Peak	90.75
11	1,000	150.00	227.3	Ladder Peak	94.60
12	2,000	150.00	113.6	Ladder Peak	101.12
13	3,000	150.00	75.8	Ladder Peak	104.41
14	7,000	150.00	32.5	Ladder Peak	109.62
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 20 1:2**

Number of peaks found: 5                      Corr. Area 1: 172.8  
 Noise: 0.1

**Peak table for sample 1 : 20 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.38
2	35	125.00	5,411.3	Lower Marker	43.00
3	44	14.91	508.1		44.42
4	377	18.23	73.3		75.40
5	382	16.73	66.4		75.82
6	10,380	75.00	10.9	Upper Marker	113.00
7	12,653	0.00	0.0		115.27

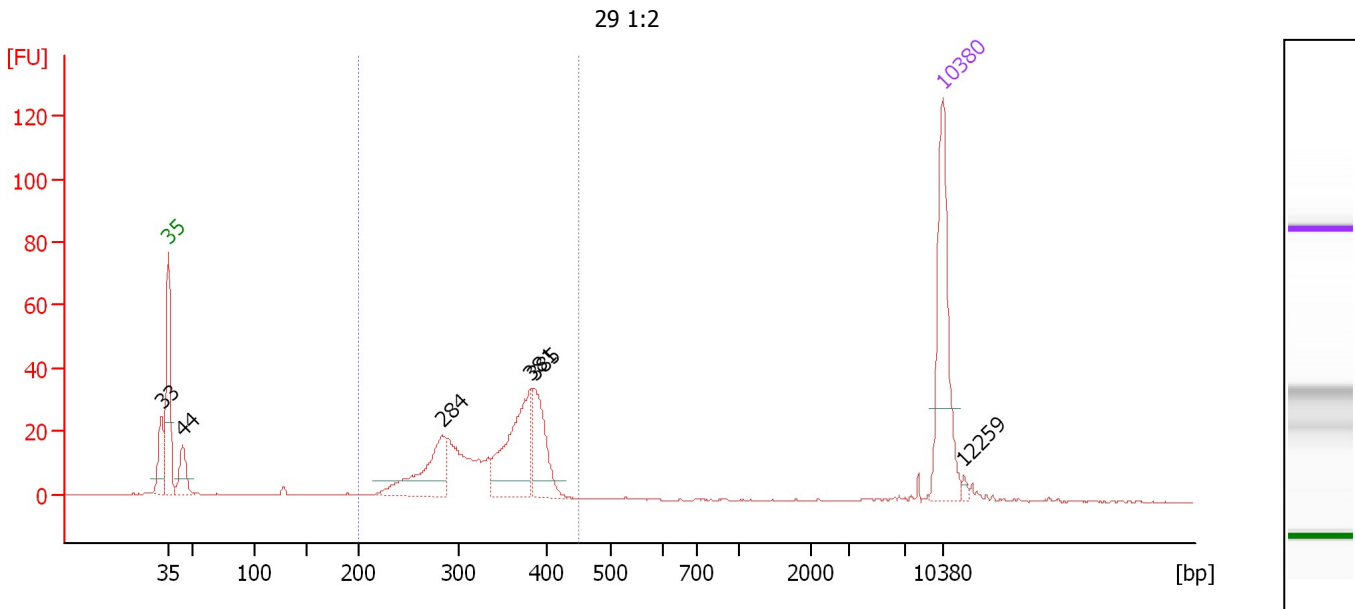
**Region table for sample 1 : 20 1:2**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	328	424	172.8	729.5	58	15.9	151.86

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 29 1:2**

Number of peaks found: 6                      Corr. Area 1: 342.4  
 Noise: 0.2

**Peak table for sample 2 : 29 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.37
2	35	125.00	5,411.3	Lower Marker	43.00
3	44	32.31	1,121.4		44.30
4	284	65.69	350.9		67.71
5	381	88.01	350.3		75.71
6	385	51.70	203.5		76.05
7	10,380	75.00	10.9	Upper Marker	113.00
8	12,259	0.00	0.0		114.88

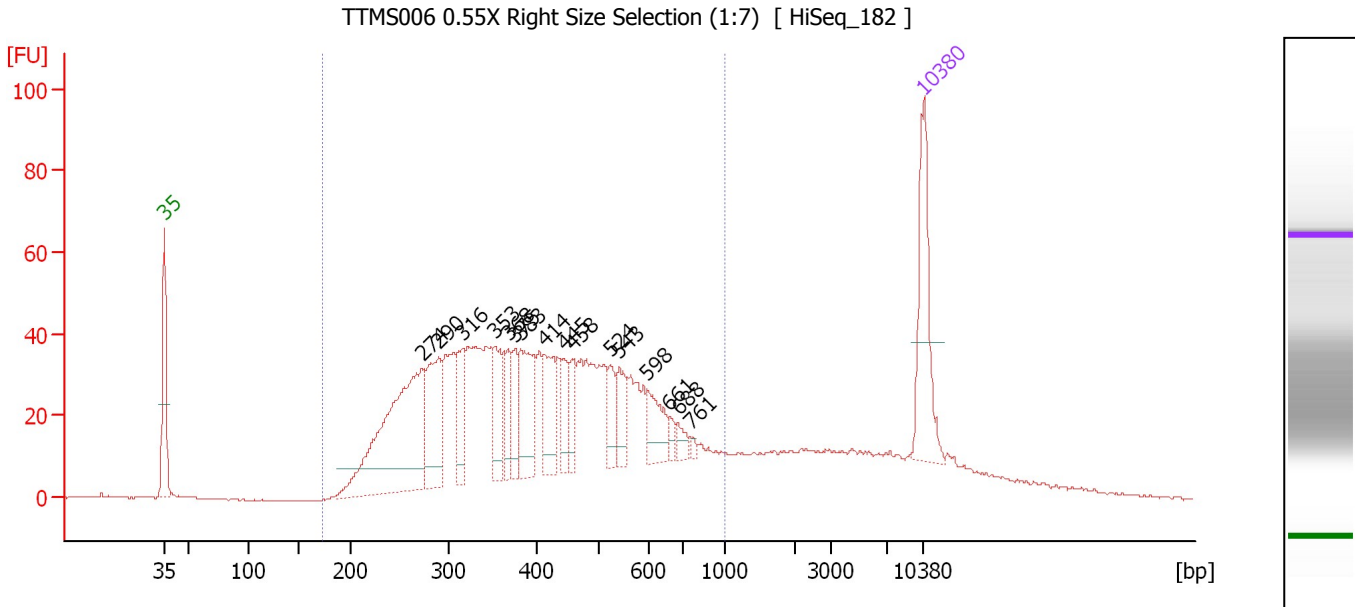
**Region table for sample 2 : 29 1:2**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
200	336	448	342.4	1,376.4	79	14.6	295.73

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : TTMS006 0.55X Right Size Selection (1:7)**

Number of peaks found: 16                      Corr. Area 1: 1,283.4  
 Noise: 0.2

**Peak table for sample 3 : TTMS006 0.55X Right Size Selection (1:7)**

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	274	277.05	1,533.1		66.82
3	290	96.14	502.2		68.30
4	316	49.94	239.3		70.51
5	353	50.14	215.0		73.51
6	368	34.34	141.4		74.68
7	375	33.65	135.9		75.27
8	383	74.25	294.1		75.86
9	414	55.91	204.6		78.07
10	445	27.20	92.6		79.84
11	458	26.55	87.8		80.58
12	524	27.06	78.3		84.07
13	543	32.64	91.1		84.95
14	598	36.70	93.0		87.51
15	661	8.93	20.5		89.52
16	688	10.82	23.8		90.35
17	761	3.81	7.6		91.53
18	10,380	75.00	10.9	Upper Marker	113.00

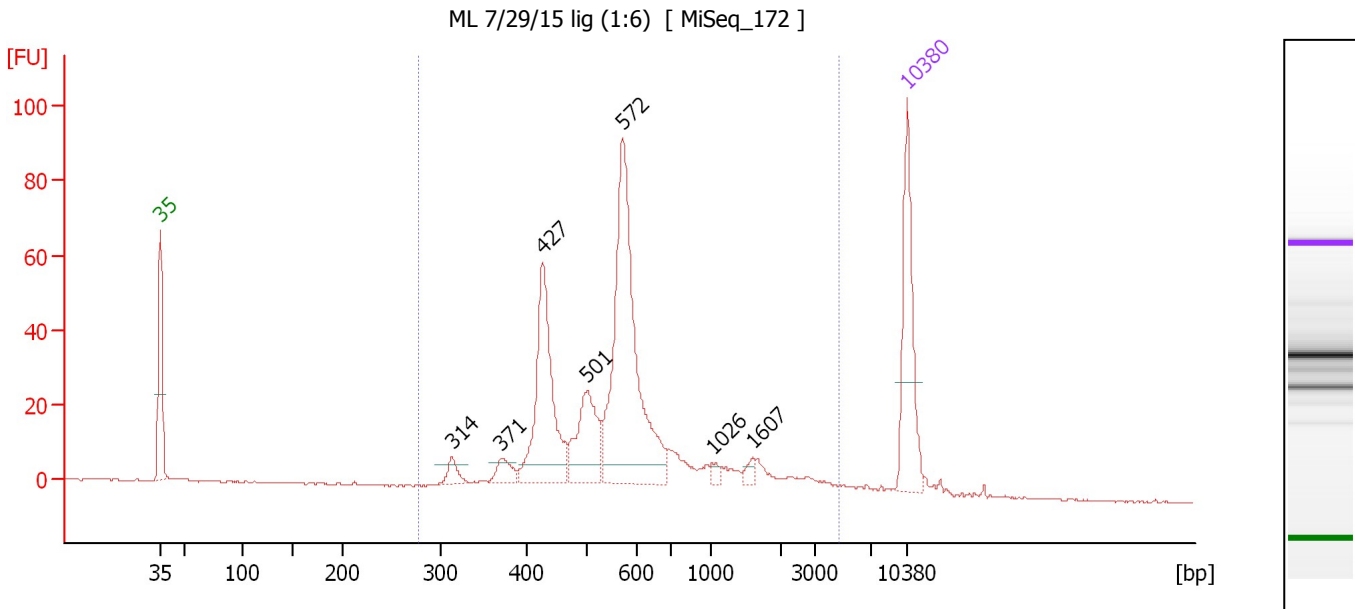
**Region table for sample 3 : TTMS006 0.55X Right Size Selection (1:7)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
174	426	1,000	1,283.4	6,755.5	83	35.9	1,608.80

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : ML 7/29/15 lig (1:6)**

Number of peaks found: 7                      Corr. Area 1: 629.9  
 Noise: 0.2

**Peak table for sample 4 : ML 7/29/15 lig (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	314	13.65	65.8		70.33
3	371	16.40	67.0		74.93
4	427	146.46	519.3		78.82
5	501	73.27	221.4		83.02
6	572	255.94	677.4		86.32
7	1,026	4.97	7.3		94.76
8	1,607	5.52	5.2		98.56
9	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : ML 7/29/15 lig (1:6)**

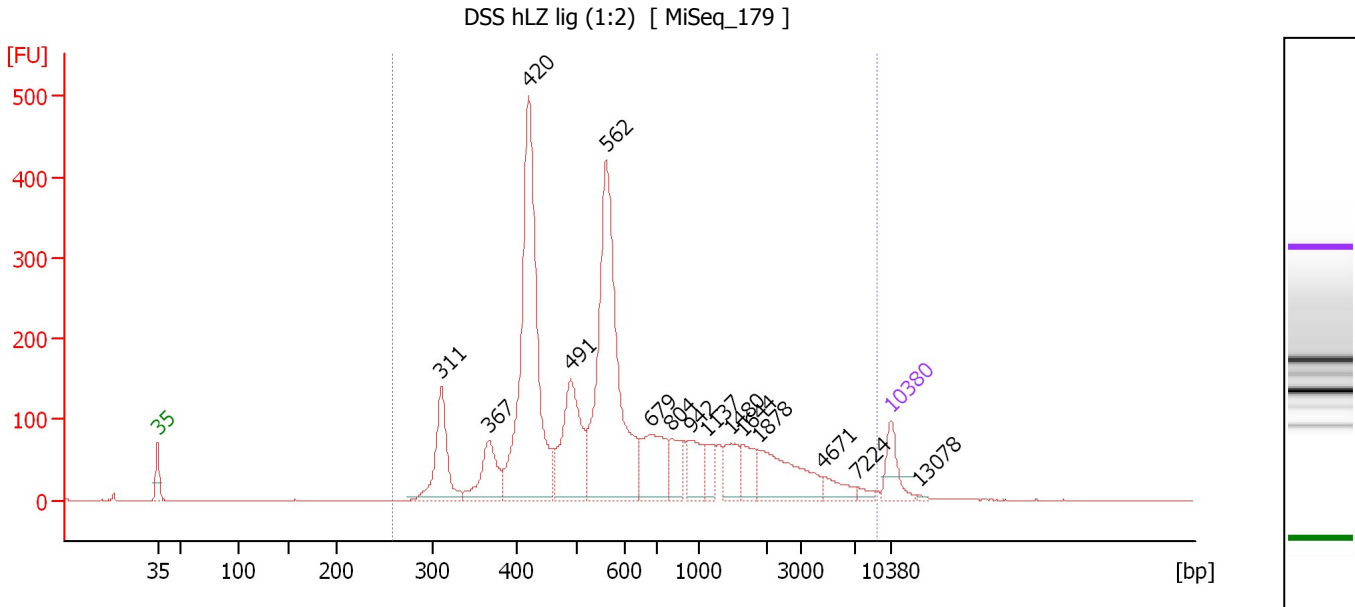
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
277	715	4,727	629.9	1,827.3	95	78.4	652.12



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : DSS hLZ lig (1:2)**

Number of peaks found: 15                      Corr. Area 1: 4,322.5  
 Noise: 0.2

**Peak table for sample 5 : DSS hLZ lig (1:2)**

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	311	282.87	1,378.2		70.08
3	367	188.42	777.7		74.61
4	420	1,051.56	3,797.7		78.38
5	491	365.15	1,126.3		82.45
6	562	953.71	2,573.2		85.81
7	679	227.04	506.5		90.09
8	804	85.57	161.3		92.08
9	942	104.50	168.0		93.86
10	1,137	54.47	72.6		95.49
11	1,480	94.16	96.4		97.73
12	1,644	74.24	68.4		98.80
13	1,878	202.31	163.3		100.32
14	4,671	45.98	14.9		106.59
15	7,224	15.04	3.2		109.84
16	10,380	75.00	10.9	Upper Marker	113.00
17	13,078	0.00	0.0		115.70

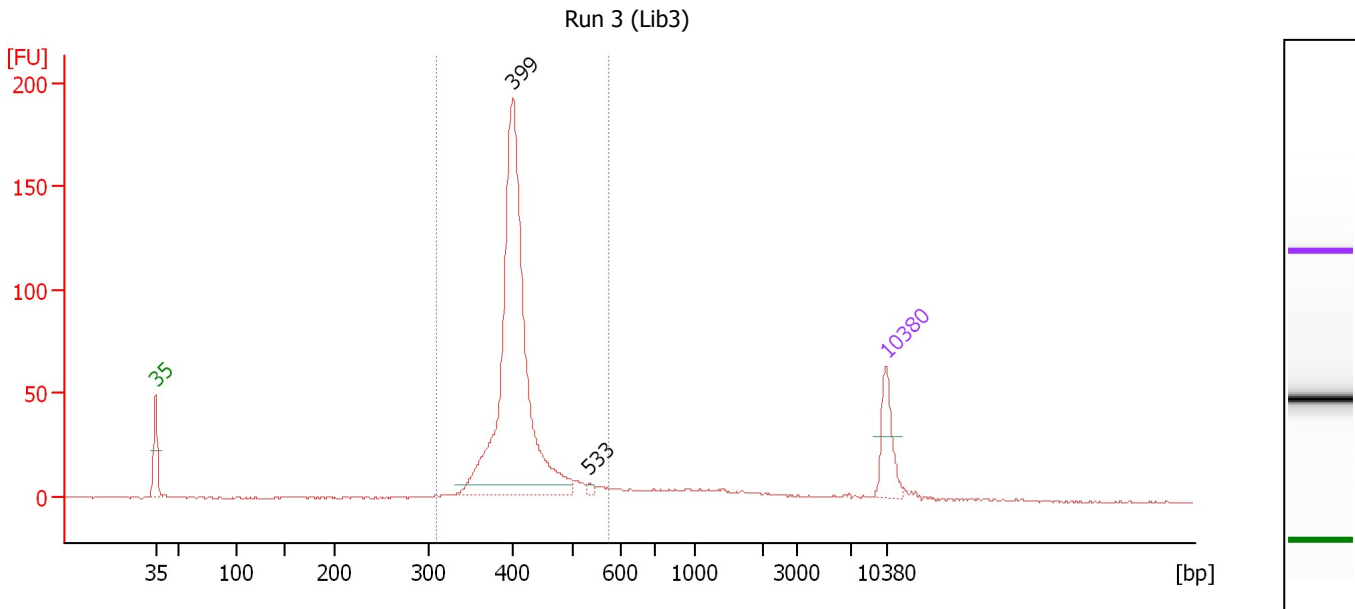
**Region table for sample 5 : DSS hLZ lig (1:2)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
259	947	9,139	4,322.5	10,754.6	99	100.0	3,796.04

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Run 3 (Lib3)**

Number of peaks found: 2                      Corr. Area 1: 695.2  
 Noise: 0.3

**Peak table for sample 6 : Run 3 (Lib3)**

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	399	997.52	3,786.0		77.21
3	533	7.66	21.8		84.51
4	10,380	75.00	10.9	Upper Marker	113.00

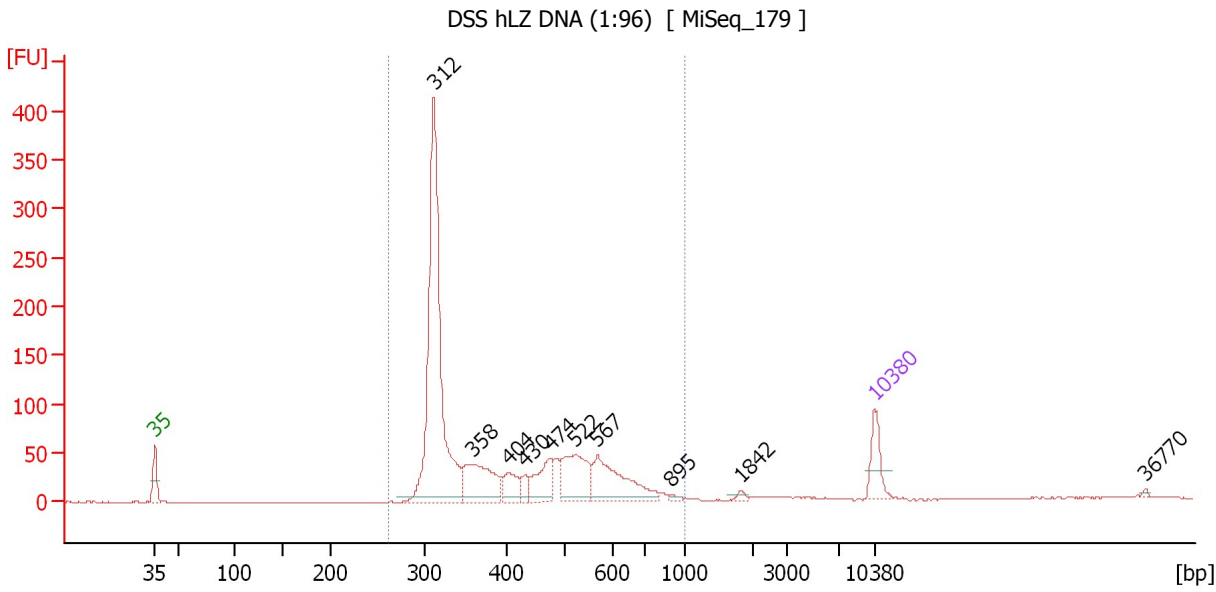
**Region table for sample 6 : Run 3 (Lib3)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
308	410	574	695.2	4,062.9	86	9.4	1,091.19

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : DSS hLZ DNA (1:96)**

Number of peaks found: 10                      Corr. Area 1: 1,537.7  
 Noise: 0.3

**Peak table for sample 7 : DSS hLZ DNA (1:96)**

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	312	1,113.18	5,405.0		70.17
3	358	231.22	977.8		73.90
4	404	78.27	293.8		77.48
5	430	32.63	114.9		78.99
6	474	120.64	385.6		81.47
7	522	197.32	573.0		83.96
8	567	223.16	595.8		86.09
9	895	7.87	13.3		93.24
10	1,842	9.21	7.6		100.09
11	10,380	75.00	10.9	Upper Marker	113.00
12	36,770	0.00	0.0		139.39

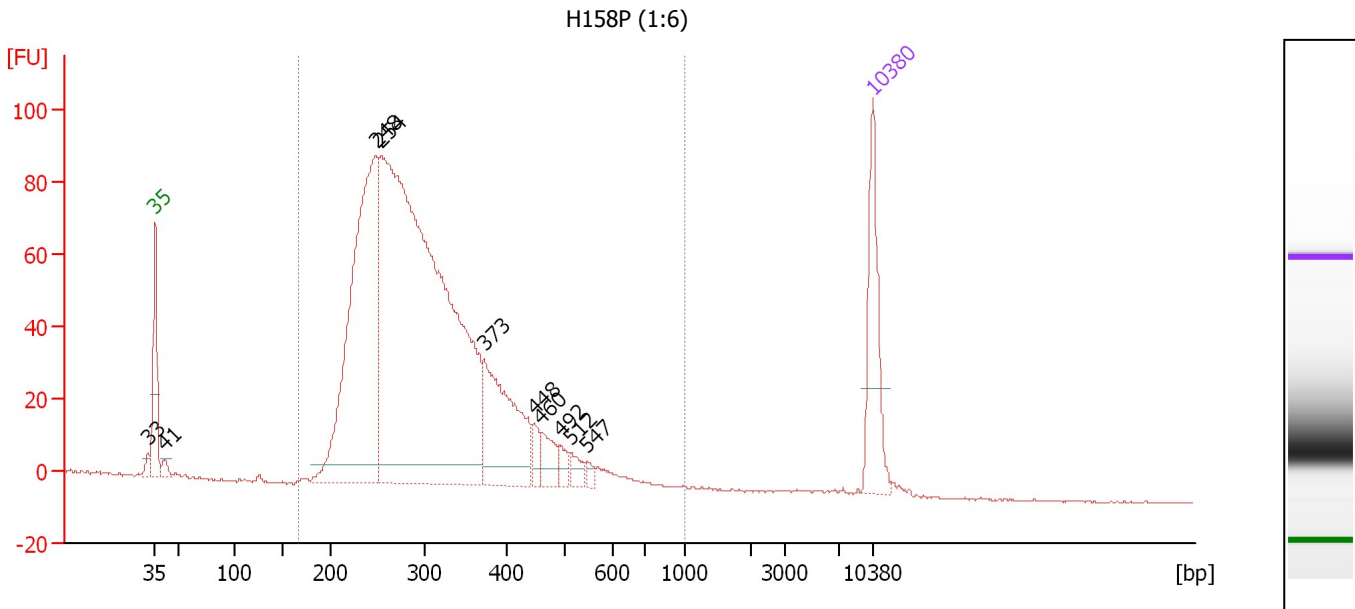
**Region table for sample 7 : DSS hLZ DNA (1:96)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
262	412	1,000	1,537.7	8,085.3	97	30.0	1,987.34

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : H158P (1:6)**

Number of peaks found: 10      Corr. Area 1: 1,637.2  
 Noise: 0.2

**Peak table for sample 8 : H158P (1:6)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.32
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	12.08	443.8		43.94
4	248	494.48	3,014.9		64.53
5	254	1,172.89	6,990.0		65.05
6	373	162.78	661.3		75.09
7	448	16.88	57.1		79.98
8	460	27.04	89.0		80.70
9	492	12.73	39.2		82.52
10	512	13.60	40.2		83.51
11	547	5.70	15.8		85.12
12	10,380	75.00	10.9	Upper Marker	113.00

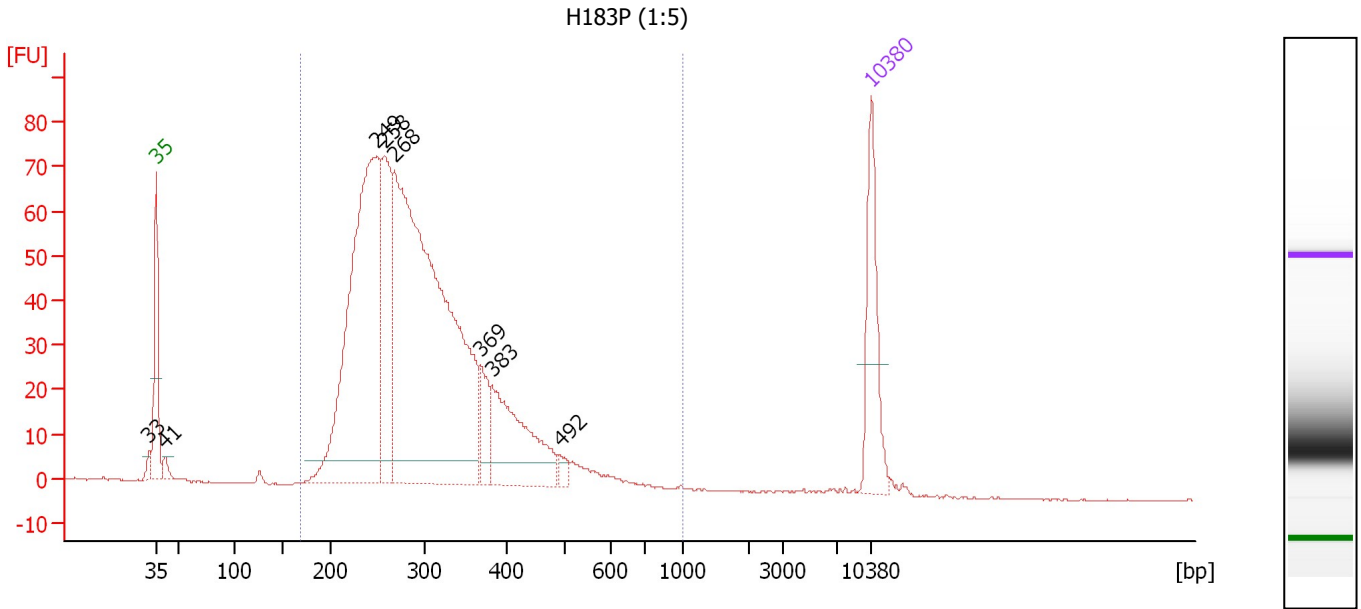
**Region table for sample 8 : H158P (1:6)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
167	312	1,000	1,637.2	9,540.4	98	27.5	1,817.05

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : H183P (1:5)**

Number of peaks found: 8                      Corr. Area 1: 1,306.3  
 Noise: 0.2

**Peak table for sample 9 : H183P (1:5)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	33	0.00	0.0		42.32
2	35	125.00	5,411.3	Lower Marker	43.00
3	41	13.19	492.7		43.84
4	249	545.38	3,321.2		64.56
5	258	168.64	990.3		65.39
6	268	829.93	4,685.2		66.33
7	369	41.85	172.0		74.74
8	383	142.05	562.2		75.89
9	492	9.33	28.7		82.52
10	10,380	75.00	10.9	Upper Marker	113.00

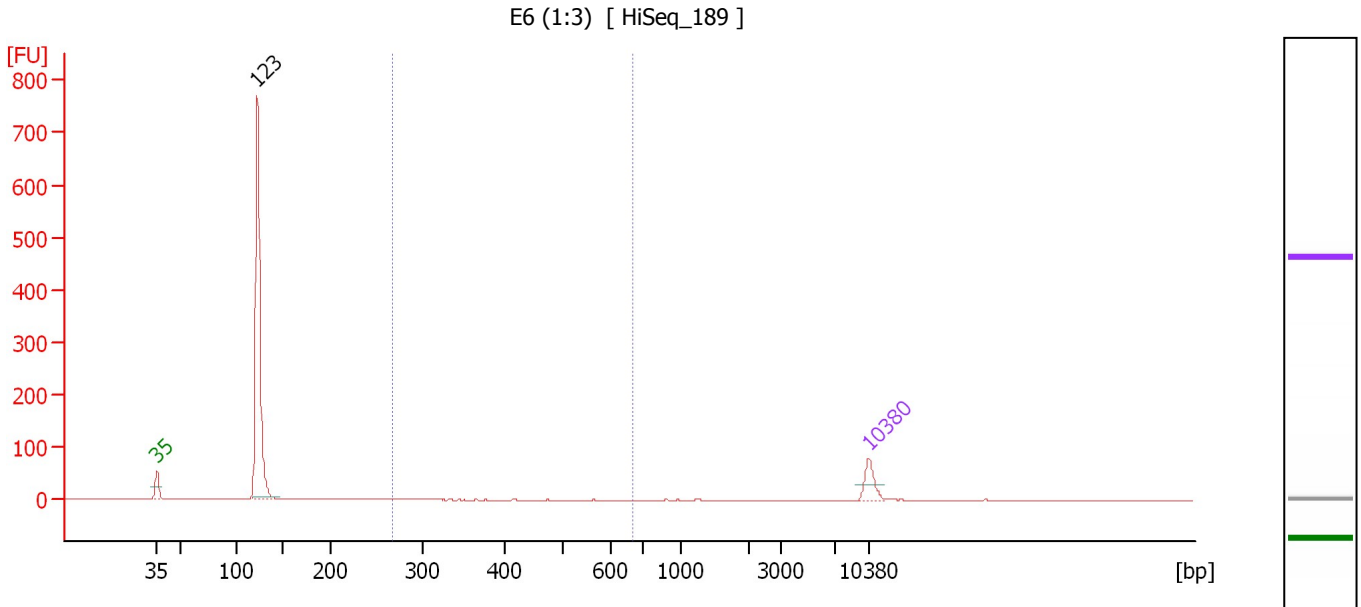
**Region table for sample 9 : H183P (1:5)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
169	304	1,000	1,306.3	9,281.0	98	26.3	1,737.83

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : E6 (1:3)**

Number of peaks found: 1                      Corr. Area 1: 0.7  
 Noise: 0.1

**Peak table for sample 10 : E6 (1:3)**

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	123	1,452.48	17,897.4		52.90
3	10,380	75.00	10.9	Upper Marker	113.00

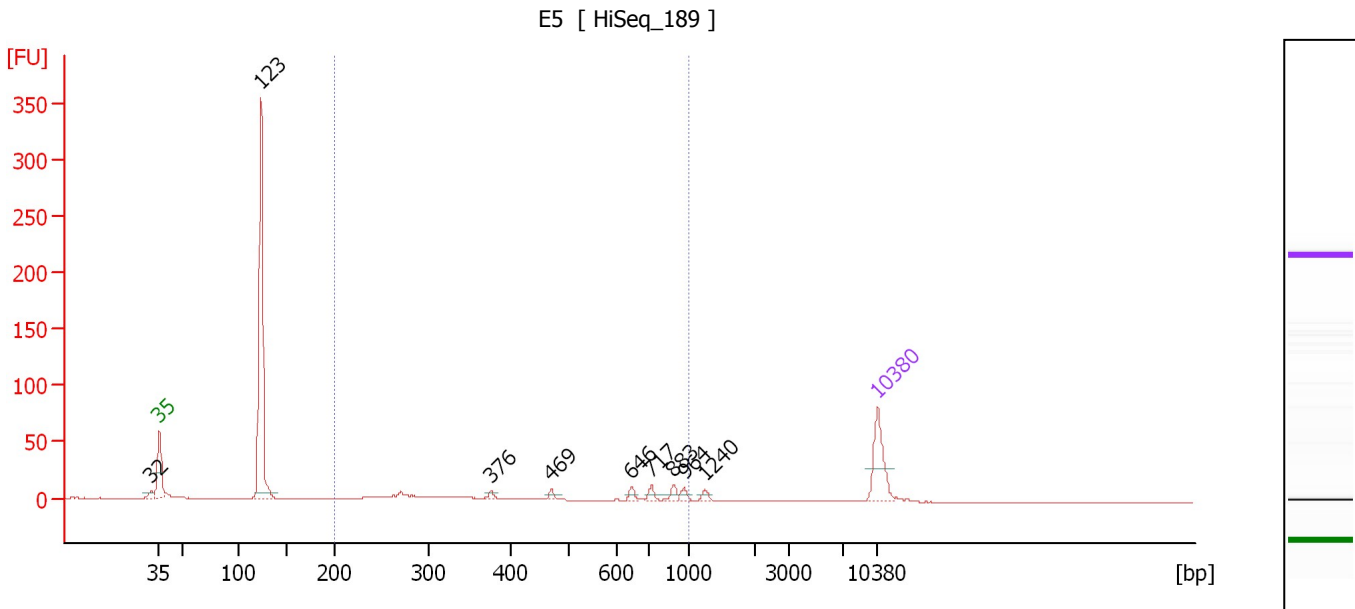
**Region table for sample 10 : E6 (1:3)**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of Ior Total	Size distribution in CV [%]	Conc. [pg/μl]
267	426	671	0.7	3.9	0	21.3	1.02

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
 Modified: 8/10/2015 4:55:10 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : E5**

Number of peaks found: 9                      Corr. Area 1: 102.1  
 Noise: 0.2

**Peak table for sample 11 : E5**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	32	0.00	0.0		42.22
2	35	125.00	5,411.3	Lower Marker	43.00
3	123	584.64	7,189.5		52.93
4	376	6.49	26.2		75.32
5	469	8.31	26.8		81.20
6	646	10.39	24.4		89.04
7	717	11.51	24.3		90.97
8	883	12.67	21.7		93.10
9	964	9.27	14.6		94.14
10	1,240	7.97	9.7		96.16
11	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : E5**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/μl]
200	531	1,000	102.1	547.5	23	47.3	139.00

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-08-10\2015-08-10\_002.xad

Created: 8/10/2015 4:13:52 PM  
Modified: 8/10/2015 4:55:10 PM

**Gel Image**

