

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-11-07\2017-11-07\_003.xad

Created: 11/7/2017 12:49:41 PM  
Modified: 11/7/2017 1:30:59 PM

**Electrophoresis File Run Summary**

Instrument Information:

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

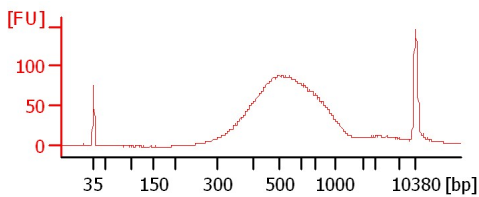
Assay Information:

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

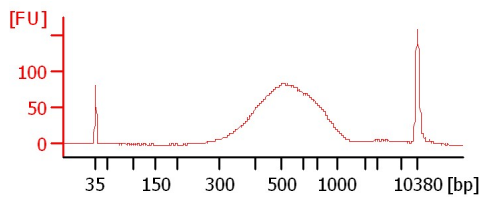
Chip Information:

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

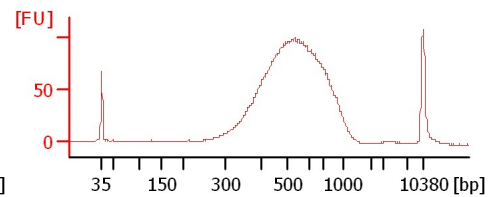
HiSeq1126 - 3kb MP lib (1:7)



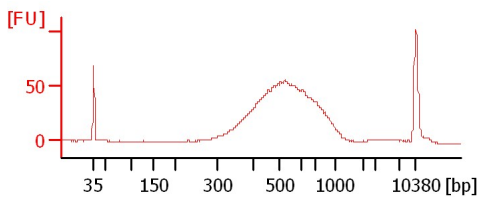
HiSeq1126 - 6kb MP lib (1:7)



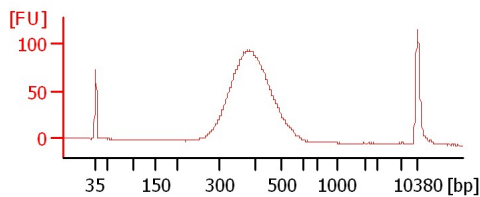
HiSeq1126 - 8kb MP lib (1:2)



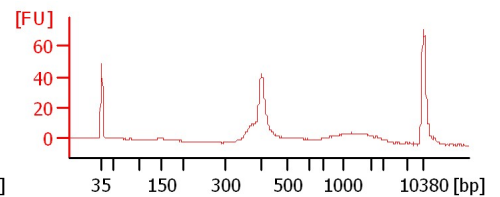
H1126P (1:4)



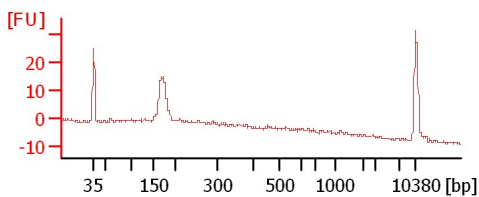
BMAG053



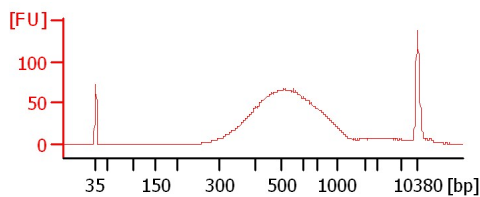
Igwe sample 1:5



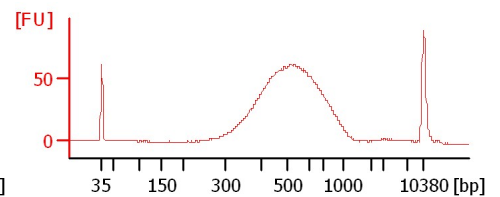
Bovine smRNA pool



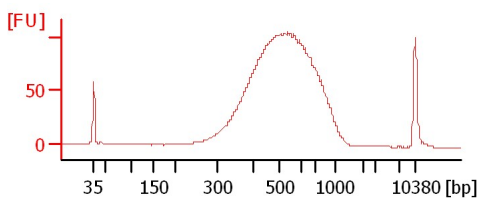
HiSeq1126 - 3kb MP lib (1:7)



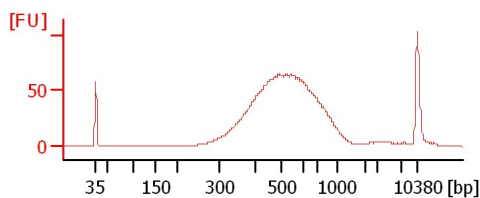
HiSeq1126 - 6kb MP lib (1:7)



HiSeq1126 - 8kb MP lib (1:2)



H1126P (1:4)



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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
HiSeq1126 - 3kb MP lib (1:7)		<input type="checkbox"/>	✓			
HiSeq1126 - 6kb MP lib (1:7)		<input type="checkbox"/>	✓			
HiSeq1126 - 8kb MP lib (1:2)		<input type="checkbox"/>	✓			
H1126P (1:4)		<input type="checkbox"/>	✓			
BMAG053		<input type="checkbox"/>	✓			
Igwe sample 1:5		<input type="checkbox"/>	✓			
Bovine smRNA pool		<input type="checkbox"/>	✓			
HiSeq1126 - 3kb MP lib (1:7)		<input type="checkbox"/>	✓			
HiSeq1126 - 6kb MP lib (1:7)		<input type="checkbox"/>	✓			
HiSeq1126 - 8kb MP lib (1:2)		<input type="checkbox"/>	✓			
H1126P (1:4)		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

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**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

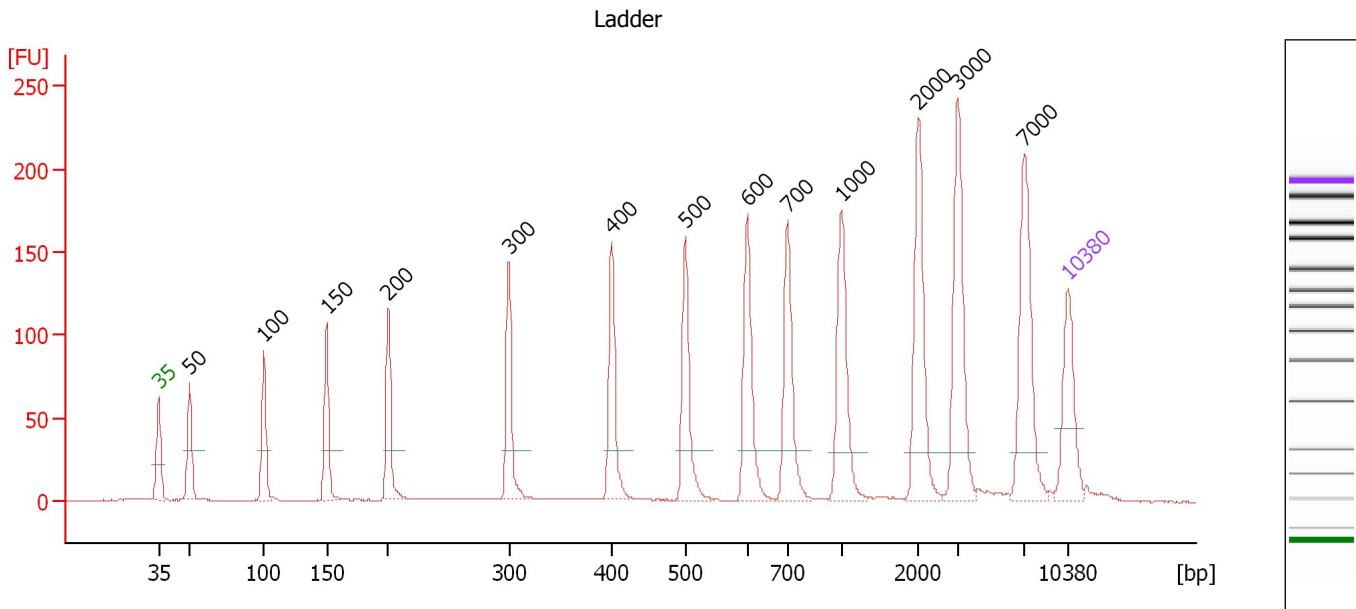
**Ladder**

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

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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

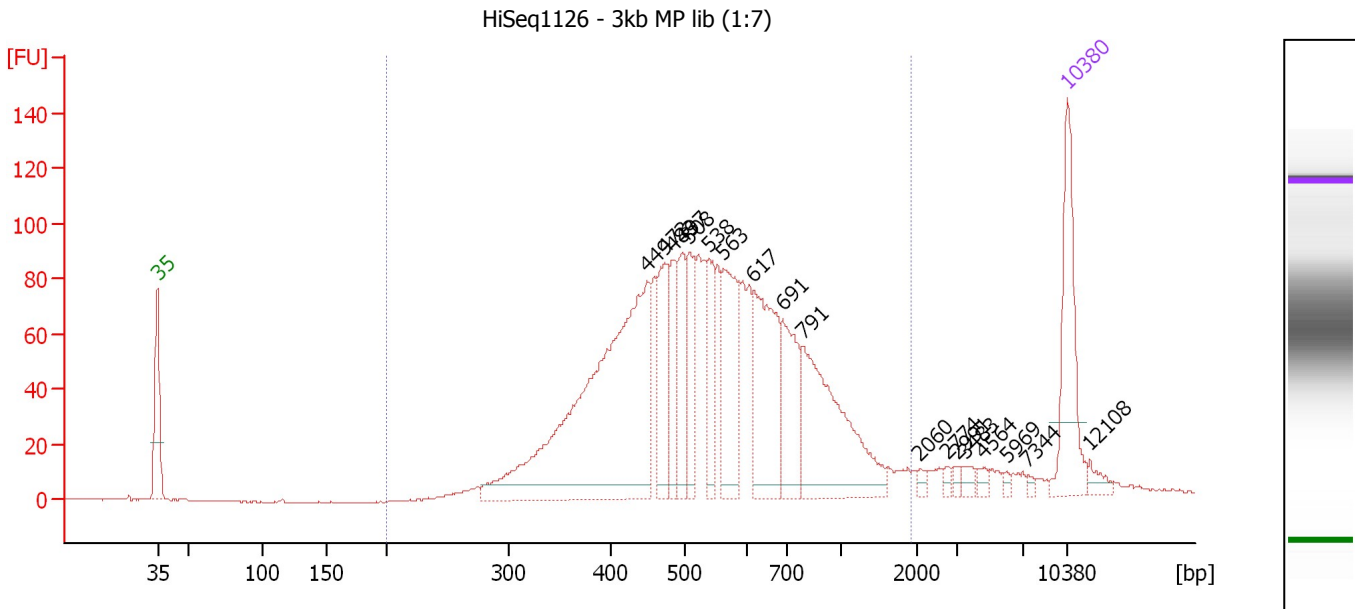
**Peak table for Ladder**

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	45.39
3	100	150.00	2,272.7	Ladder Peak	51.10
4	150	150.00	1,515.2	Ladder Peak	55.93
5	200	150.00	1,136.4	Ladder Peak	60.67
6	300	150.00	757.6	Ladder Peak	69.97
7	400	150.00	568.2	Ladder Peak	77.88
8	500	150.00	454.5	Ladder Peak	83.55
9	600	150.00	378.8	Ladder Peak	88.33
10	700	150.00	324.7	Ladder Peak	91.42
11	1,000	150.00	227.3	Ladder Peak	95.56
12	2,000	150.00	113.6	Ladder Peak	101.49
13	3,000	150.00	75.8	Ladder Peak	104.49
14	7,000	150.00	32.5	Ladder Peak	109.64
15	10,380	75.00	10.9	Upper Marker	113.00

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**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : HiSeq1126 - 3kb MP lib (1:7)**

Number of peaks found: 18                      Corr. Area 1: 1,935.0  
 Noise: 0.2

**Peak table for sample 1 : HiSeq1126 - 3kb MP lib (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	449	438.70	1,481.1		80.65
3	473	71.18	227.8		82.04
4	483	49.49	155.2		82.60
5	497	61.48	187.4		83.38
6	508	53.34	159.0		83.94
7	538	56.51	159.0		85.38
8	563	96.54	260.0		86.54
9	617	120.72	296.4		88.86
10	691	72.41	158.8		91.14
11	791	157.03	300.9		92.67
12	2,060	4.64	3.4		101.67
13	2,774	4.11	2.2		103.81
14	2,991	3.62	1.8		104.46
15	3,483	6.64	2.9		105.11
16	4,564	4.94	1.6		106.50
17	5,969	2.80	0.7		108.31
18	7,344	2.61	0.5		109.98
19	10,380	75.00	10.9	Upper Marker	113.00
20	12,108	0.00	0.0		114.72

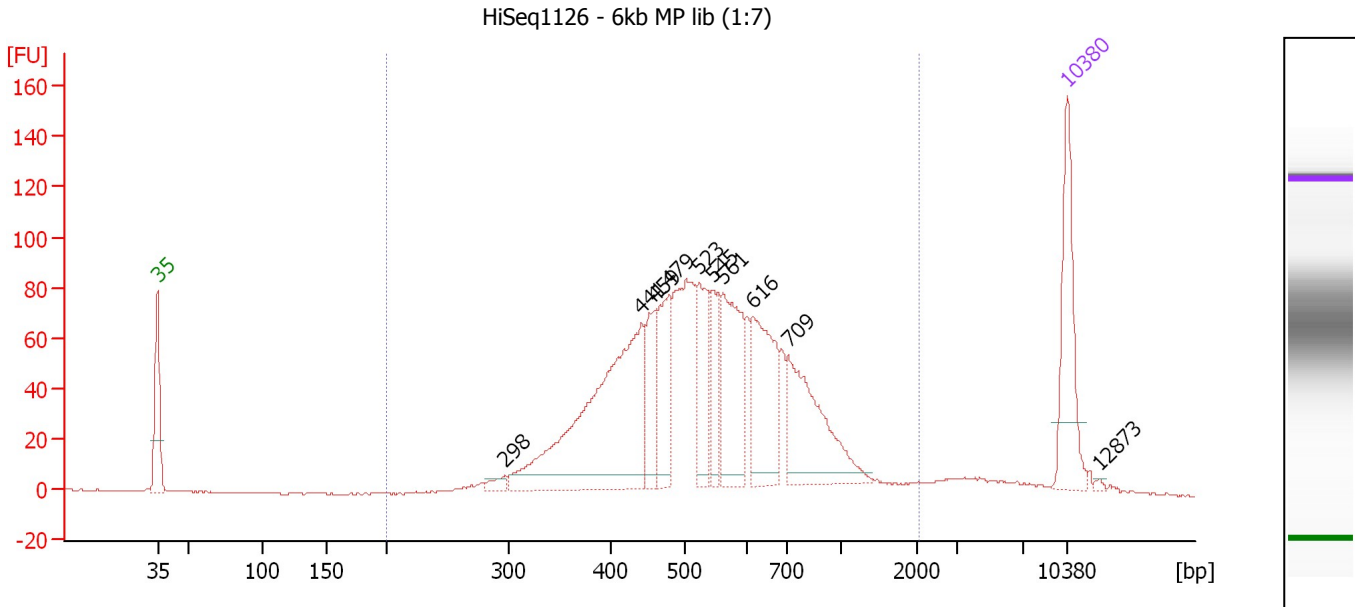
**Region table for sample 1 : HiSeq1126 - 3kb MP lib (1:7)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,918	589	1,935.0	4,259.7	1,417.48	93	41.7

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**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : HiSeq1126 - 6kb MP lib (1:7)**

Number of peaks found: 10                      Corr. Area 1: 1,712.2  
 Noise: 0.3

**Peak table for sample 2 : HiSeq1126 - 6kb MP lib (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	298	10.25	52.2		69.75
3	441	316.66	1,087.3		80.22
4	459	55.00	181.4		81.25
5	479	81.21	256.7		82.37
6	523	72.77	210.7		84.66
7	545	43.71	121.6		85.69
8	561	110.20	297.4		86.49
9	616	112.16	275.9		88.82
10	709	128.30	274.3		91.54
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,873	0.00	0.0		115.48

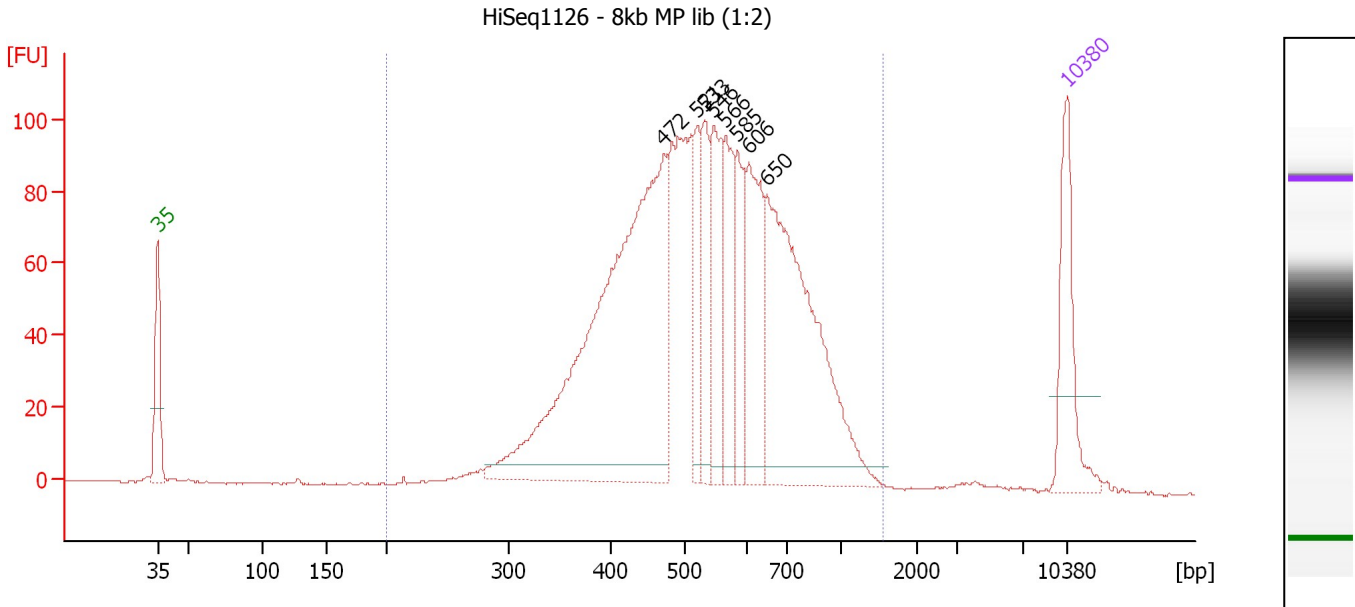
**Region table for sample 2 : HiSeq1126 - 6kb MP lib (1:7)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	2,057	571	1,712.2	3,758.4	1,240.84	95	38.9

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**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : HiSeq1126 - 8kb MP lib (1:2)**

Number of peaks found: 8                      Corr. Area 1: 2,064.3  
 Noise: 0.2

**Peak table for sample 3 : HiSeq1126 - 8kb MP lib (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	472	636.53	2,044.8		81.94
3	521	70.73	205.8		84.54
4	533	74.99	213.3		85.10
5	546	100.81	279.6		85.76
6	566	85.87	229.8		86.71
7	585	71.40	185.0		87.61
8	606	120.91	302.5		88.50
9	650	343.66	801.2		89.87
10	10,380	75.00	10.9	Upper Marker	113.00

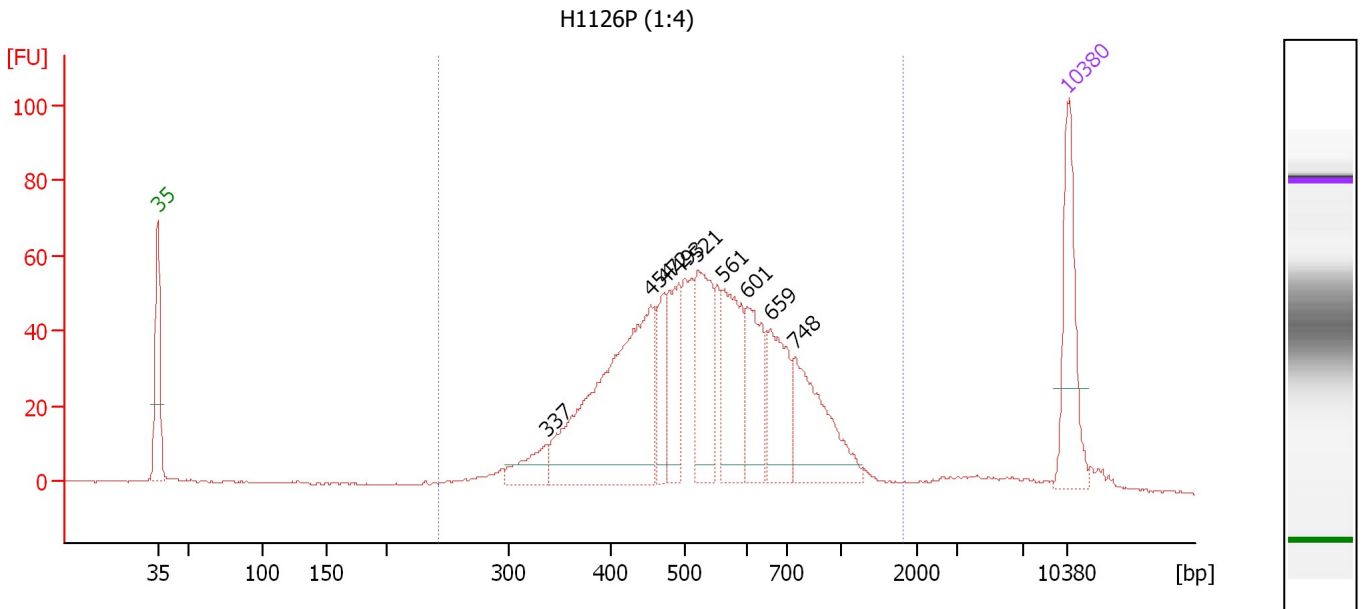
**Region table for sample 3 : HiSeq1126 - 8kb MP lib (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,546	555	2,064.3	5,608.8	1,834.44	97	31.0

Assay Class: High Sensitivity DNA Assay  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : H1126P (1:4)**

Number of peaks found: 9                      Corr. Area 1: 1,163.9  
 Noise: 0.2

**Peak table for sample 4 : H1126P (1:4)**

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	337	37.26	167.3		72.92
3	454	314.24	1,048.0		80.96
4	472	50.01	160.5		81.97
5	493	74.45	229.0		83.12
6	521	108.98	316.7		84.57
7	561	103.15	278.8		86.44
8	601	80.16	202.0		88.37
9	659	83.12	191.2		90.15
10	748	110.98	224.9		92.07
11	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : H1126P (1:4)**

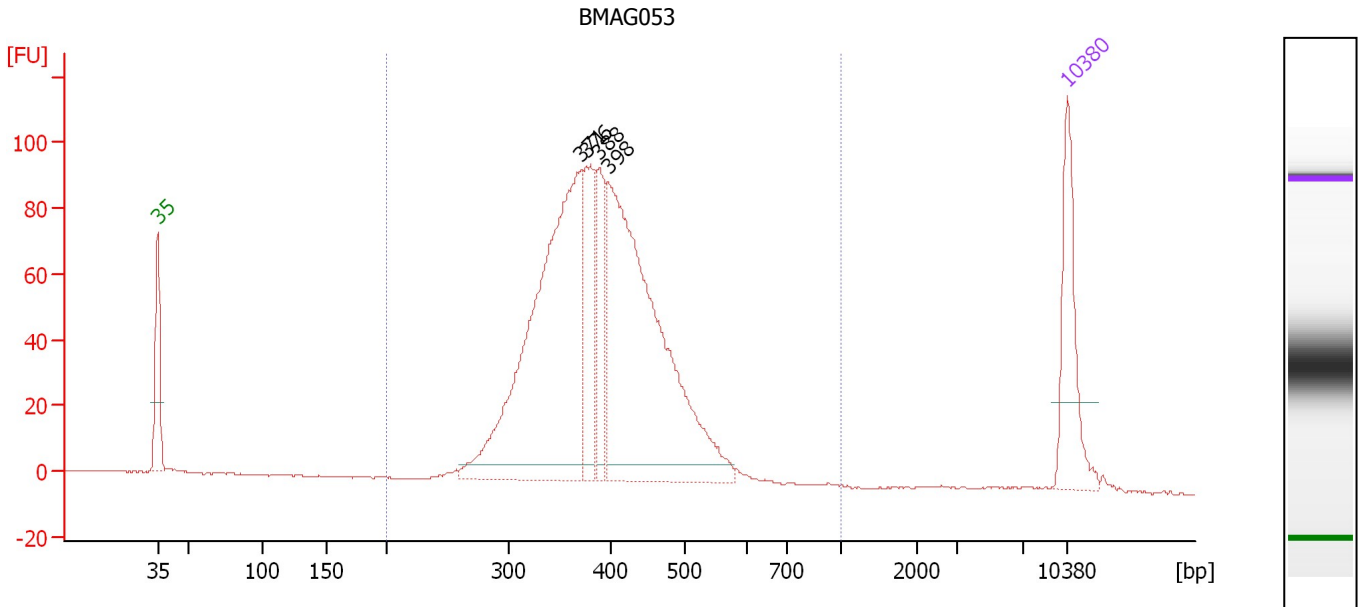
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
243	1,816	565	1,163.9	3,619.8	1,188.27	91	35.5



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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : BMAG053**

Number of peaks found: 4                      Corr. Area 1: 1,394.7  
 Noise: 0.2

**Peak table for sample 5 : BMAG053**

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	371	494.14	2,017.4		75.60
3	376	105.58	425.4		75.99
4	388	74.42	290.4		76.96
5	398	481.10	1,831.1		77.73
6	10,380	75.00	10.9	Upper Marker	113.00

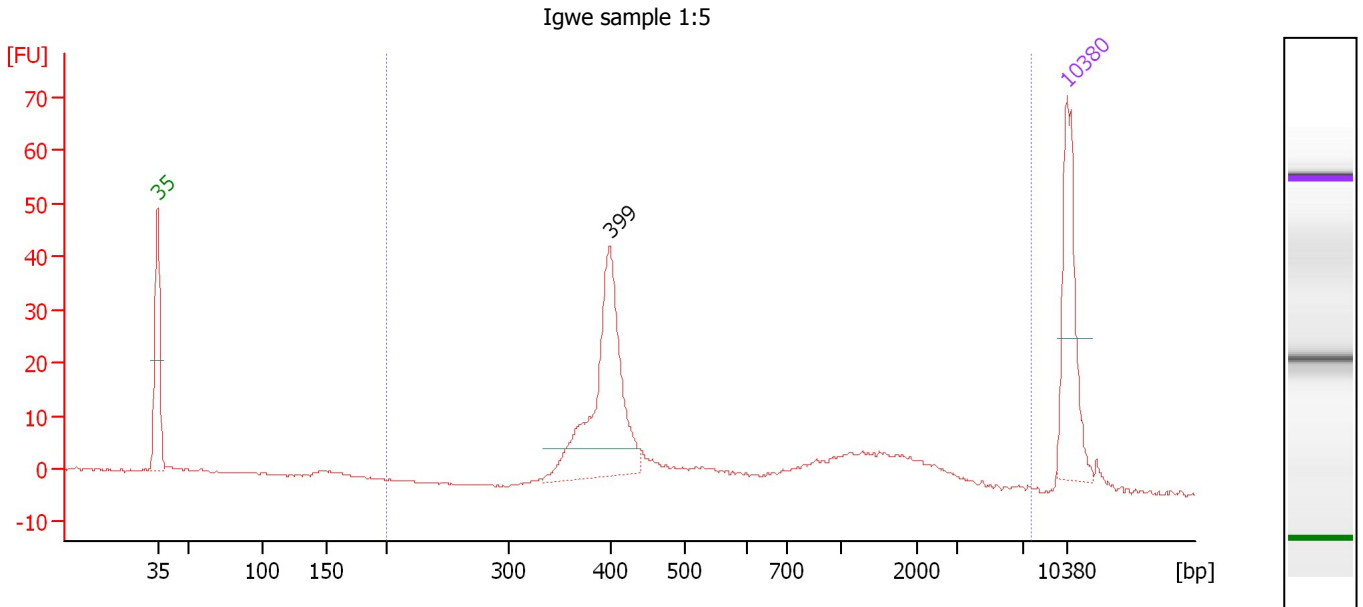
**Region table for sample 5 : BMAG053**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	397	1,394.7	4,915.7	1,239.60	96	18.4

Assay Class: High Sensitivity DNA Assay  
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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Igwe sample 1:5**

Number of peaks found: 1                      Corr. Area 1: 256.9  
 Noise: 0.2

**Peak table for sample 6 : Igwe sample 1:5**

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	193.94	736.5		77.81
3	10,380	75.00	10.9	Upper Marker	113.00

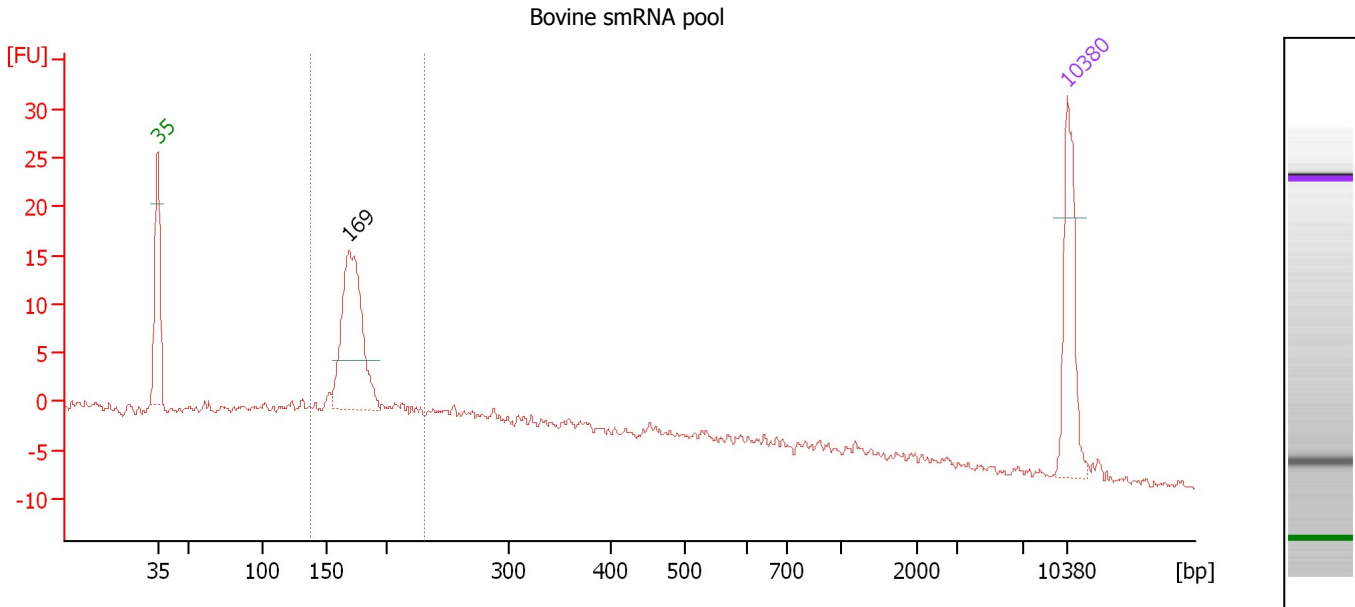
**Region table for sample 6 : Igwe sample 1:5**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	7,581	903	256.9	1,053.6	351.25	94	100.0

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**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Bovine smRNA pool**

Number of peaks found: 1                      Corr. Area 1: 77.5  
 Noise: 0.3

**Peak table for sample 7 : Bovine smRNA pool**

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	169	222.34	1,989.1		57.77
3	10,380	75.00	10.9	Upper Marker	113.00

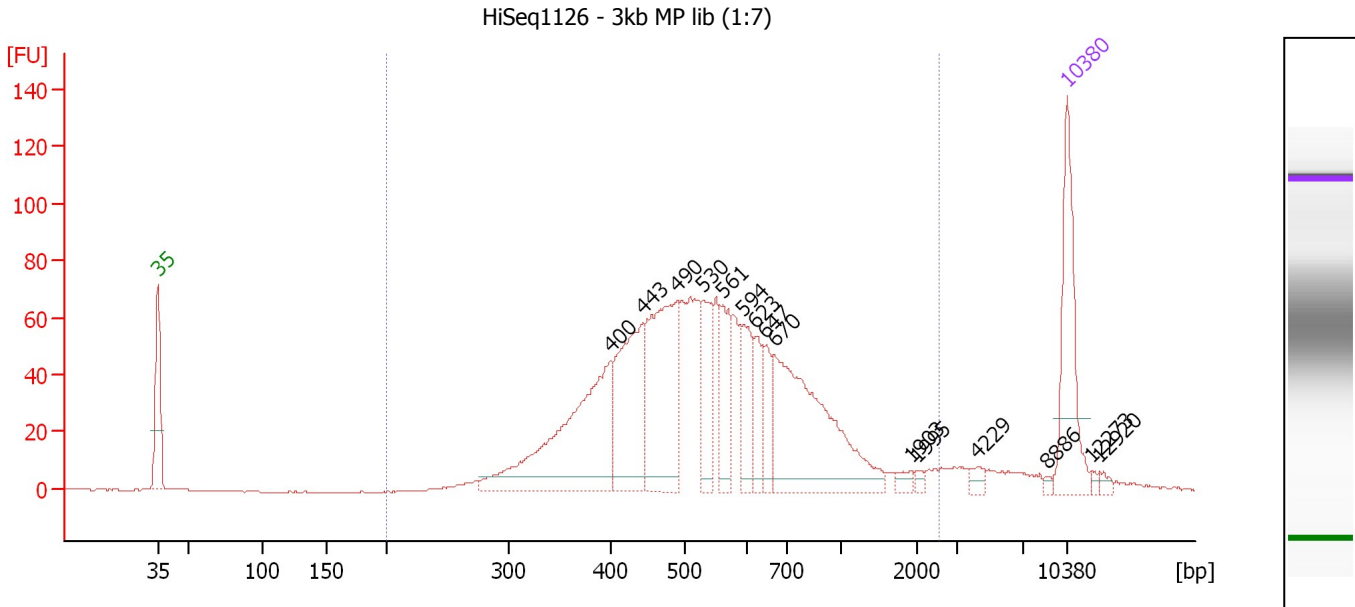
**Region table for sample 7 : Bovine smRNA pool**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
139	230	176	77.5	2,757.7	317.84	49	9.9

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**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : HiSeq1126 - 3kb MP lib (1:7)**

Number of peaks found: 15                      Corr. Area 1: 1,507.2  
 Noise: 0.1

**Peak table for sample 8 : HiSeq1126 - 3kb MP lib (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	400	215.60	817.5		77.85
3	443	127.78	436.9		80.33
4	490	166.21	513.6		83.00
5	530	53.17	152.0		84.98
6	561	51.57	139.3		86.47
7	594	48.85	124.6		88.05
8	623	34.05	82.8		89.04
9	647	27.70	64.9		89.78
10	670	202.16	457.5		90.48
11	1,903	6.65	5.3		100.92
12	1,995	3.55	2.7		101.47
13	4,229	6.29	2.3		106.07
14	8,886	2.14	0.4		111.51
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,273	0.00	0.0		114.88
17	12,920	0.00	0.0		115.52

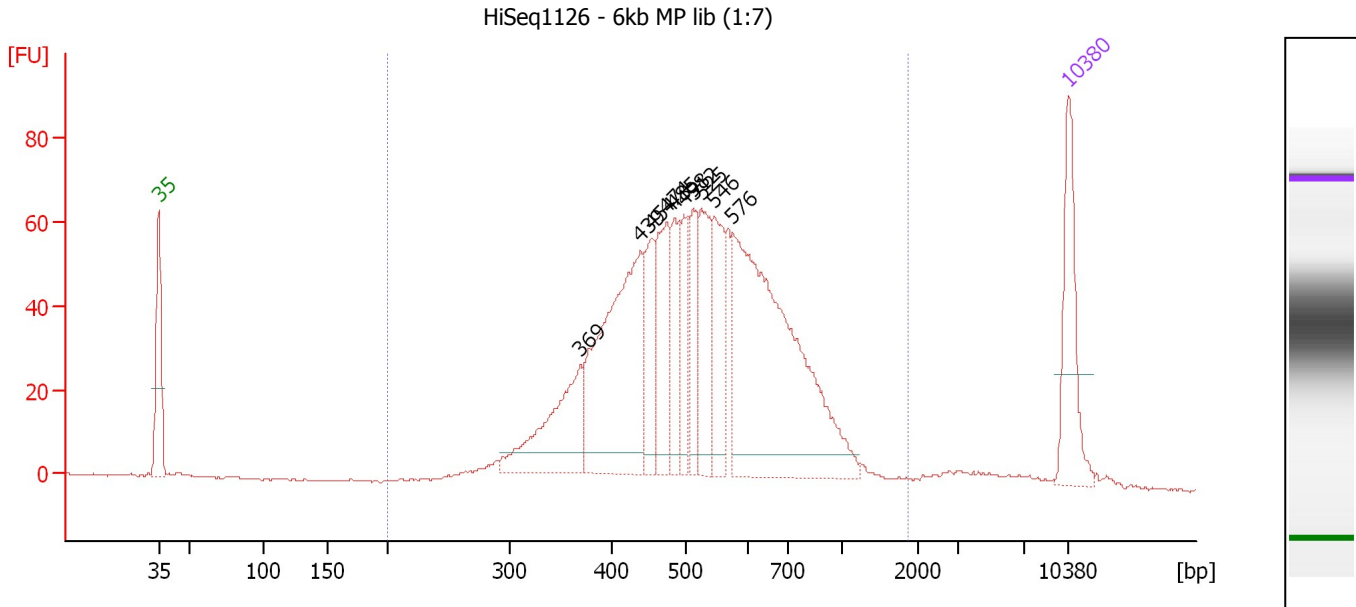
**Region table for sample 8 : HiSeq1126 - 3kb MP lib (1:7)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	2,553	602	1,507.2	3,634.7	1,192.15	92	52.3

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**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : HiSeq1126 - 6kb MP lib (1:7)**

Number of peaks found: 10                      Corr. Area 1: 1,319.7  
 Noise: 0.3

**Peak table for sample 9 : HiSeq1126 - 6kb MP lib (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	369	133.86	549.3		75.45
3	439	291.87	1,006.8		80.11
4	454	71.18	237.5		80.95
5	474	100.44	320.9		82.09
6	485	62.74	196.1		82.68
7	498	58.46	177.9		83.42
8	512	67.69	200.3		84.12
9	525	83.57	241.0		84.76
10	546	82.33	228.4		85.75
11	576	410.99	1,080.8		87.19
12	10,380	75.00	10.9	Upper Marker	113.00

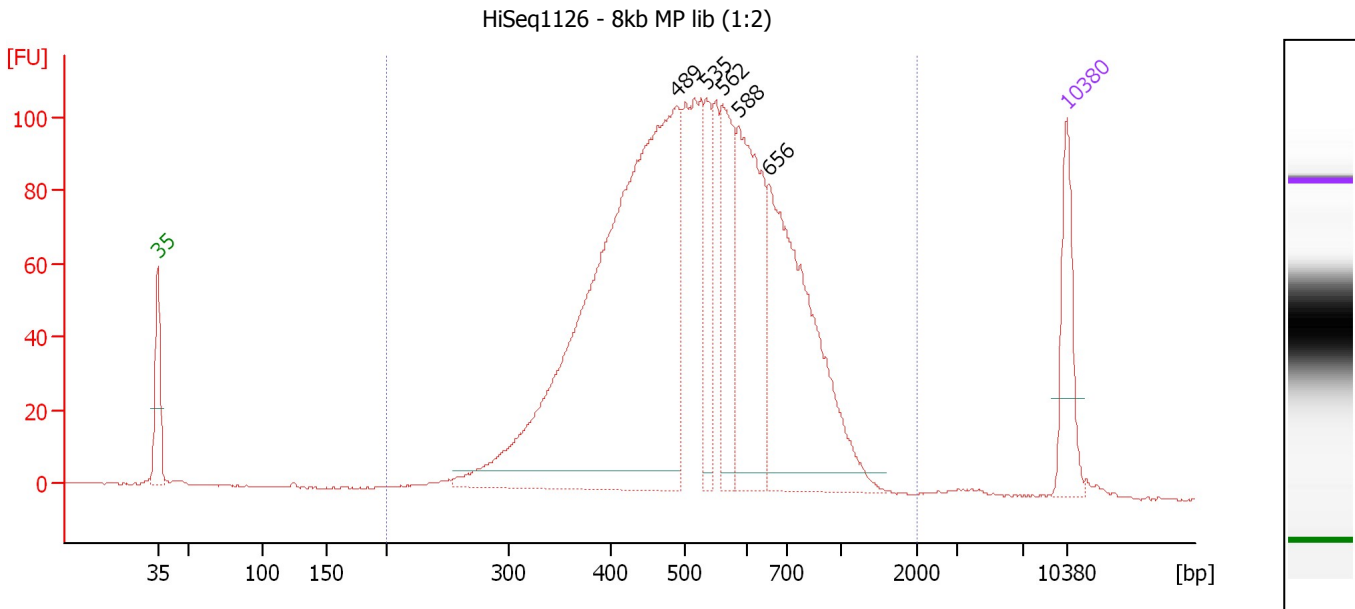
**Region table for sample 9 : HiSeq1126 - 6kb MP lib (1:7)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,871	547	1,319.7	4,936.8	1,583.29	95	34.6

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-11-07\2017-11-07\_003.xad

Created: 11/7/2017 12:49:41 PM  
 Modified: 11/7/2017 1:30:59 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : HiSeq1126 - 8kb MP lib (1:2)**

Number of peaks found: 5                      Corr. Area 1: 2,222.3  
 Noise: 0.1

**Peak table for sample 10 : HiSeq1126 - 8kb MP lib (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	489	1,139.80	3,530.8		82.93
3	535	97.73	276.9		85.21
4	562	155.55	419.6		86.50
5	588	269.82	695.8		87.73
6	656	411.38	950.0		90.06
7	10,380	75.00	10.9	Upper Marker	113.00

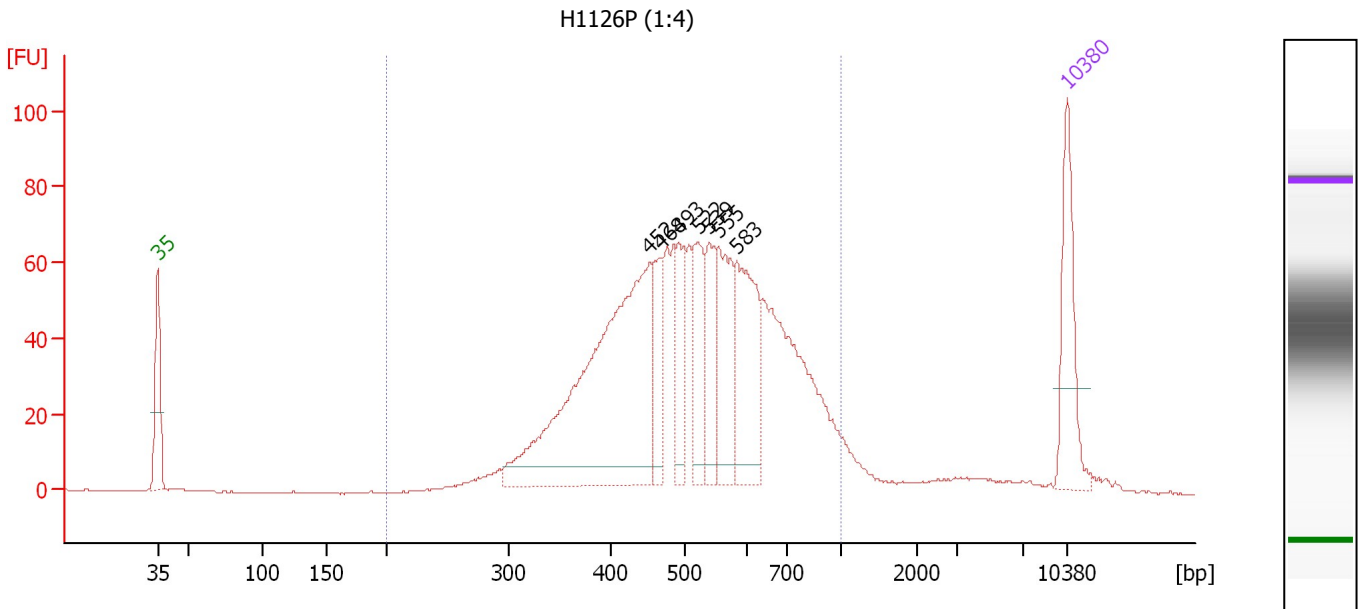
**Region table for sample 10 : HiSeq1126 - 8kb MP lib (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,987	542	2,222.3	7,867.1	2,521.37	99	30.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\data\2017-11-07\2017-11-07\_003.xad

Created: 11/7/2017 12:49:41 PM  
 Modified: 11/7/2017 1:30:59 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : H1126P (1:4)**

Number of peaks found: 7      Corr. Area 1: 1,355.9  
 Noise: 0.1

**Peak table for sample 11 : H1126P (1:4)**

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	452	469.05	1,571.7		80.84
3	468	61.63	199.5		81.73
4	493	60.03	184.6		83.13
5	522	78.00	226.2		84.62
6	539	71.62	201.3		85.42
7	555	101.05	276.0		86.17
8	583	137.16	356.6		87.51
9	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : H1126P (1:4)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	529	1,355.9	4,757.3	1,505.75	93	27.2

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2017-11-07\2017-11-07\_003.xad

Created: 11/7/2017 12:49:41 PM  
Modified: 11/7/2017 1:30:59 PM

**Gel Image**