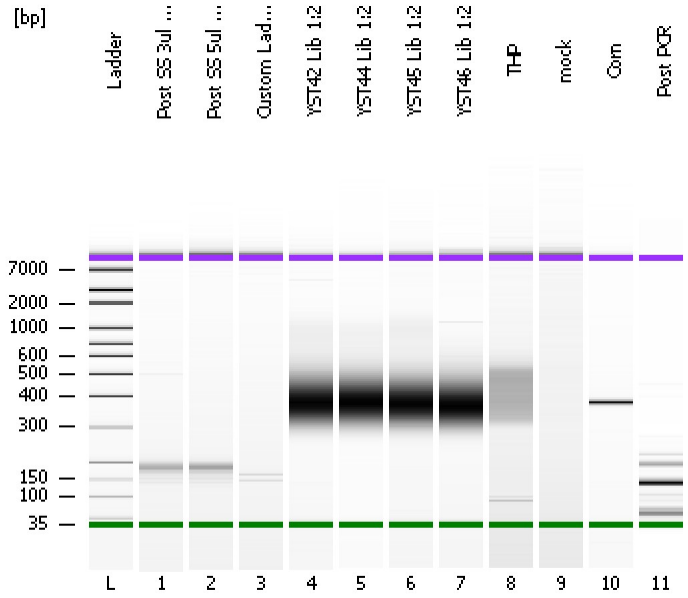
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 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

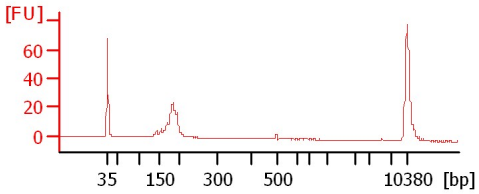
Chip Information:

Chip Lot #:

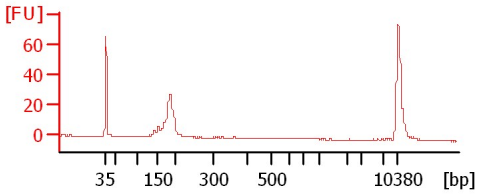
Reagent Kit Lot #:

Chip Comments:

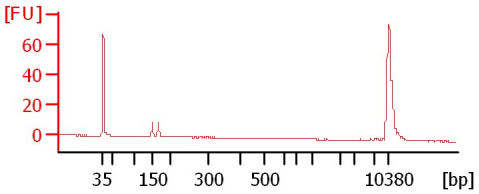
Post SS 3ul 1:4



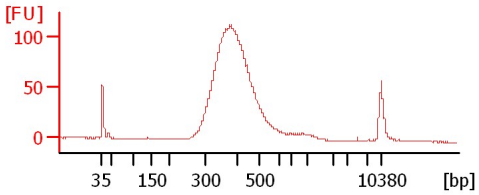
Post SS 5ul 1:9



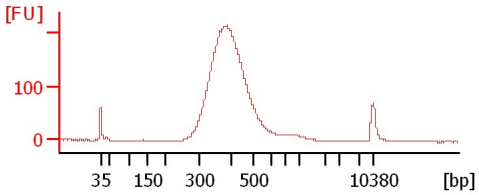
Custom Ladder 1:14



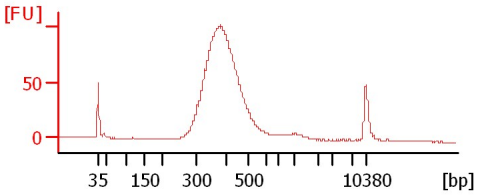
YST42 Lib 1:2



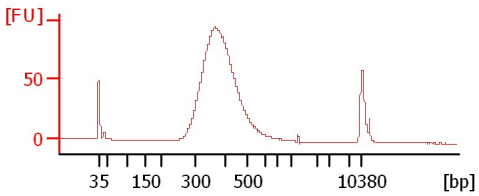
YST44 Lib 1:2



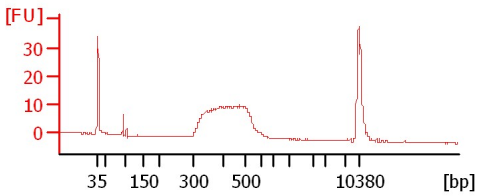
YST45 Lib 1:2



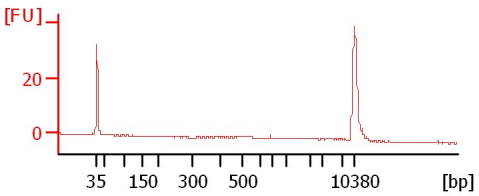
YST46 Lib 1:2



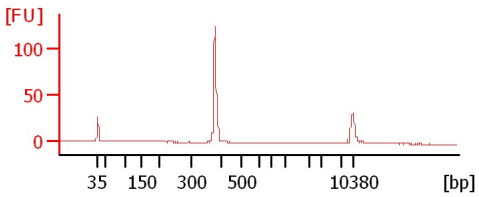
THP



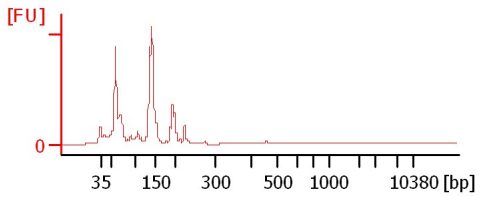
mock



Corn



Post PCR



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Post SS 3ul 1:4		☐	✔			
Post SS 5ul 1:9		☐	✔			
Custom Ladder 1:14		☐	✔			
YST42 Lib 1:2		☐	✔			
YST44 Lib 1:2		☐	✔			
YST45 Lib 1:2		☐	✔			
YST46 Lib 1:2		☐	✔			
THP		☐	✔			
mock		☐	✔			
Corn		☐	✔			
Post PCR		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 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

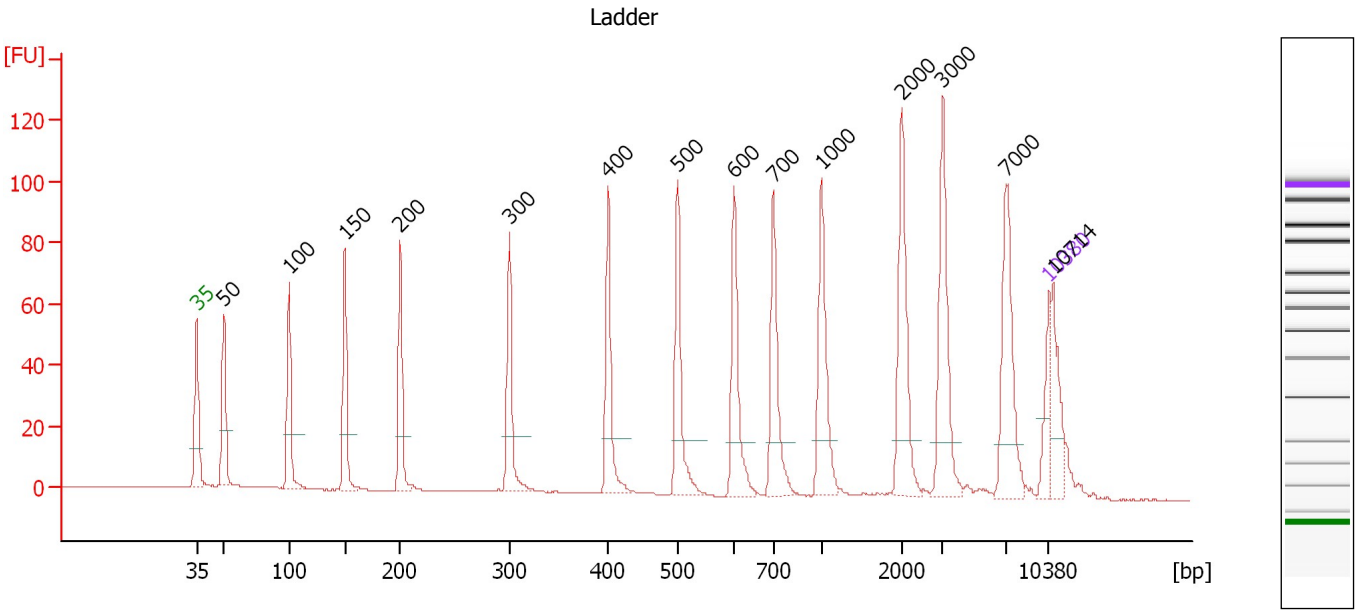
Ladder

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\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

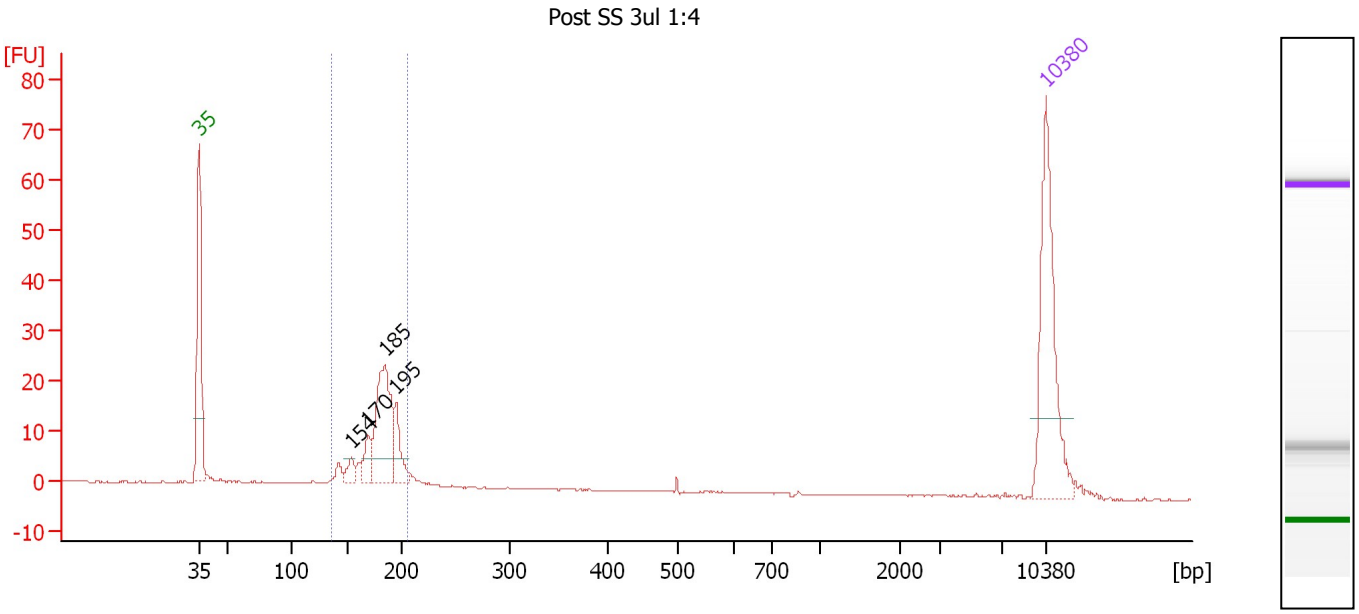
Peak table for Ladder

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
16		10,714	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Post SS 3ul 1:4

Number of peaks found:	4	Corr. Area 1:	111.0
Noise:	0.1		

Peak table for sample 1 : Post SS 3ul 1:4

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		154	10.12	99.3	
3		170	17.90	160.0	
4		185	89.52	732.6	
5		195	25.40	196.9	
6	▶	10,380	75.00	10.9	Upper Marker

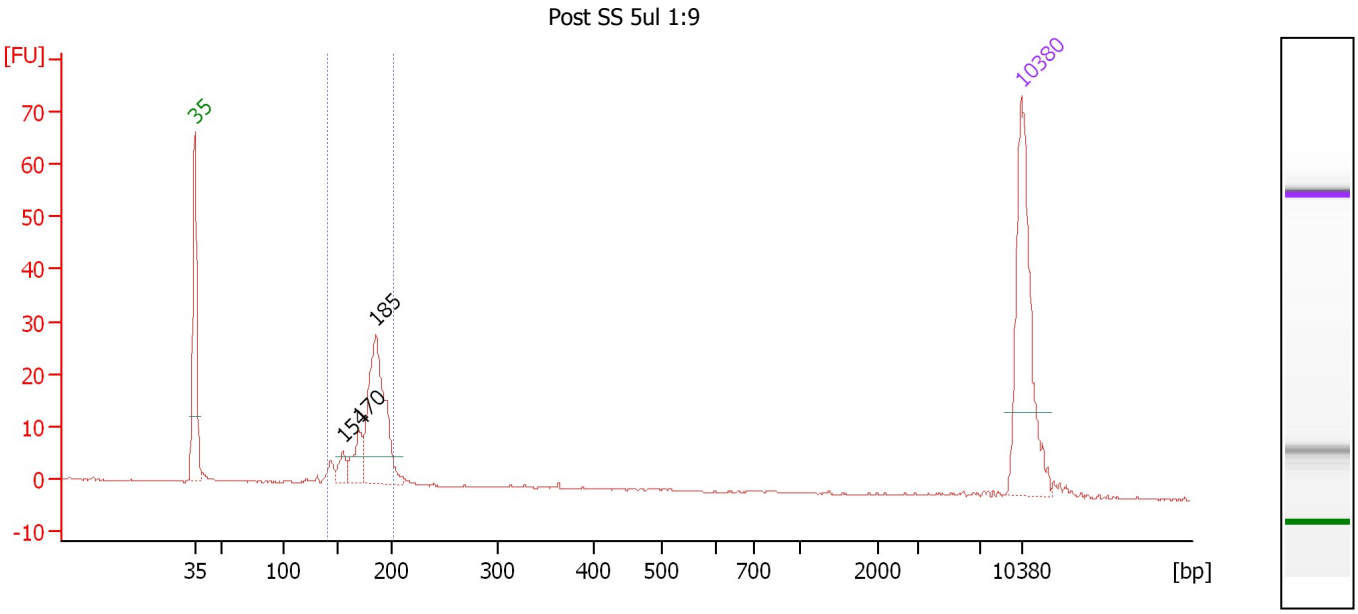
Region table for sample 1 : Post SS 3ul 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
137	206	180	1,429.5	168.43	111.0	79	8.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Post SS 5ul 1:9

Number of peaks found:	3	Corr. Area 1:	108.6
Noise:	0.1		

Peak table for sample 2 : Post SS 5ul 1:9

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		154	11.90	116.9	
3		170	24.13	215.5	
4		185	117.59	962.0	
5	▶	10,380	75.00	10.9	Upper Marker

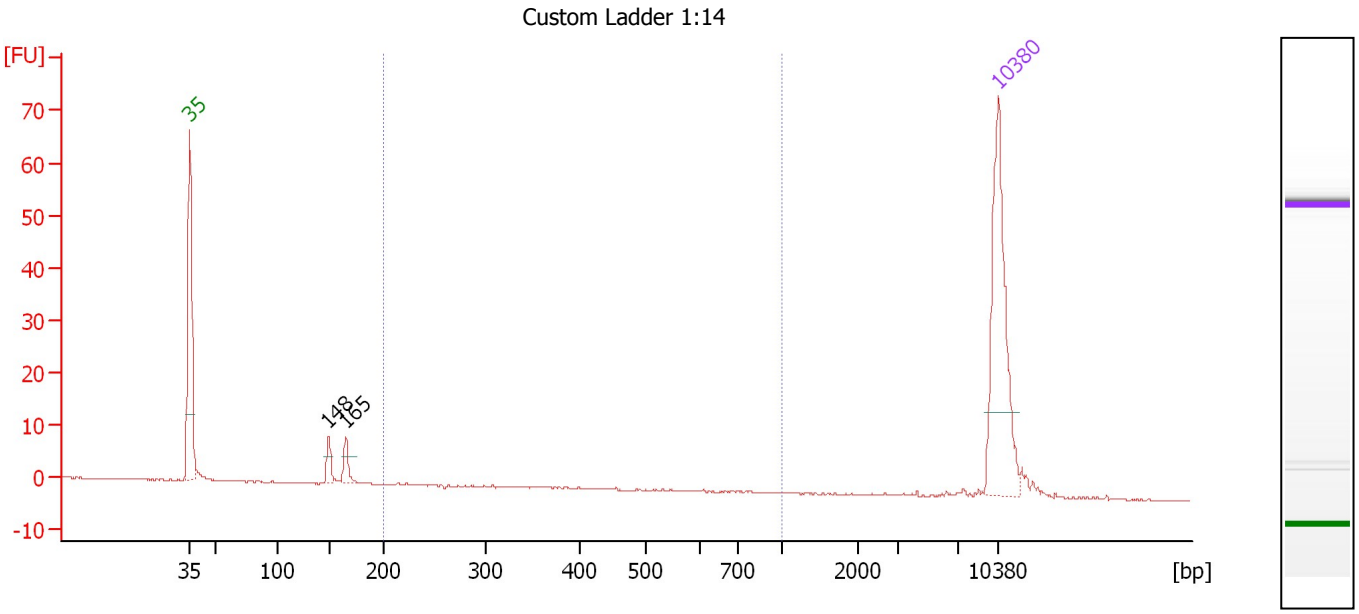
Region table for sample 2 : Post SS 5ul 1:9

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
140	201	179	1,310.4	154.55	108.6	90	7.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Custom Ladder 1:14

Number of peaks found:	2	Corr. Area 1:	1.1
Noise:	0.1		

Peak table for sample 3 : Custom Ladder 1:14

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	148	11.19	114.5	
3	165	11.22	103.1	
4	10,380	75.00	10.9	Upper Marker

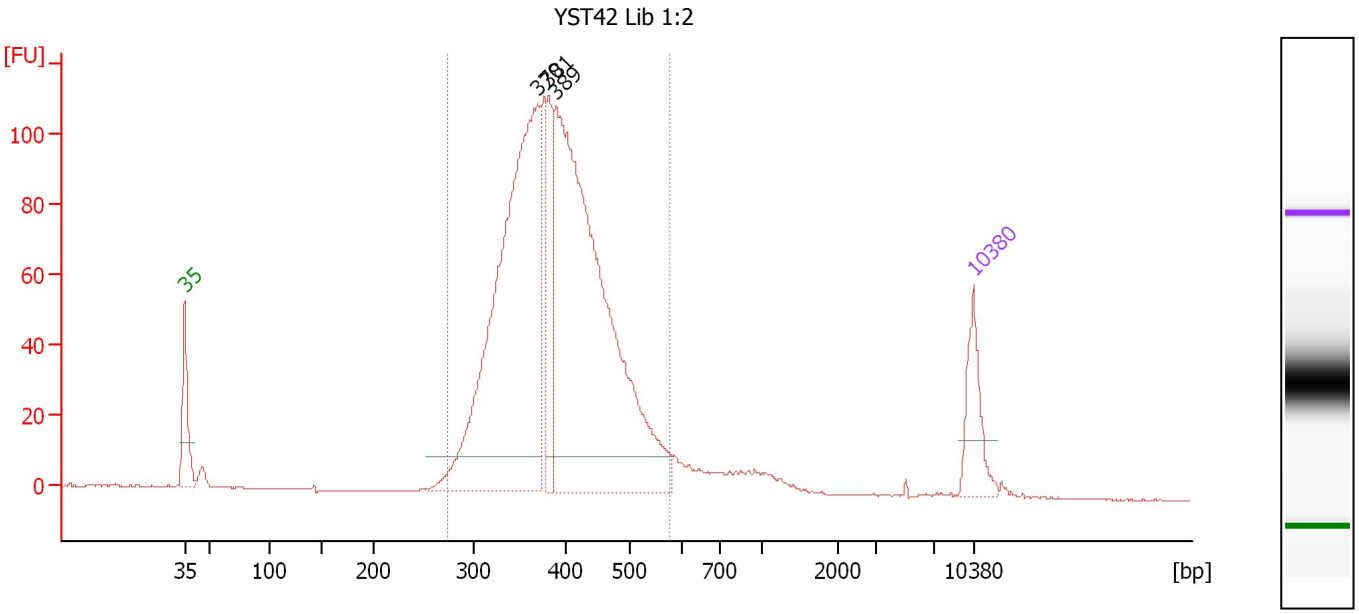
Region table for sample 3 : Custom Ladder 1:14

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	368	6.5	1.39	1.1	4	35.5	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : YST42 Lib 1:2

Height Threshold [FU] : 10

Overall Results for sample 4 : YST42 Lib 1:2

Number of peaks found:	3	Corr. Area 1:	1,563.3
Noise:	0.1		

Peak table for sample 4 : YST42 Lib 1:2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	370	1,023.71	4,189.9	
3	381	142.97	568.1	
4	389	1,156.59	4,499.7	
5	10,380	75.00	10.9	Upper Marker

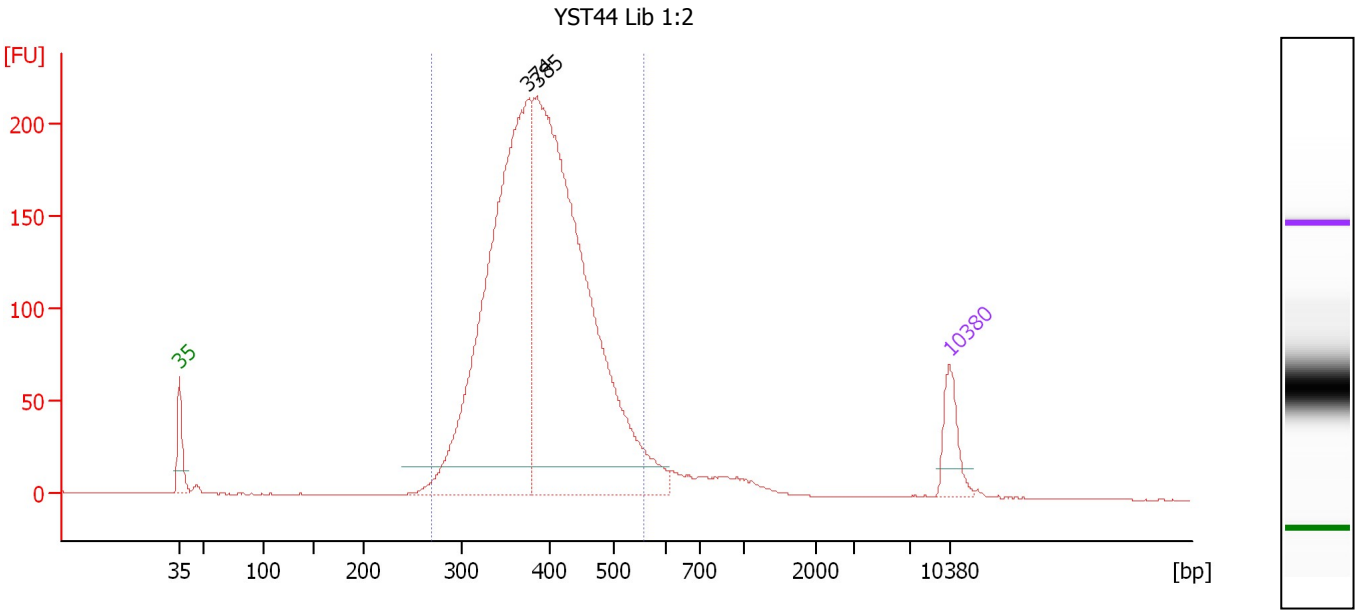
Region table for sample 4 : YST42 Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
273	574	394	9,619.9	2,435.71	1,563.3	94	15.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : YST44 Lib 1:2

Height Threshold [FU] : 15

Overall Results for sample 5 : YST44 Lib 1:2

Number of peaks found:	2	Corr. Area 1:	2,950.7
Noise:	0.2		

Peak table for sample 5 : YST44 Lib 1:2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	374	1,511.01	6,113.9	
3	385	1,875.18	7,375.4	
4	10,380	75.00	10.9	Upper Marker

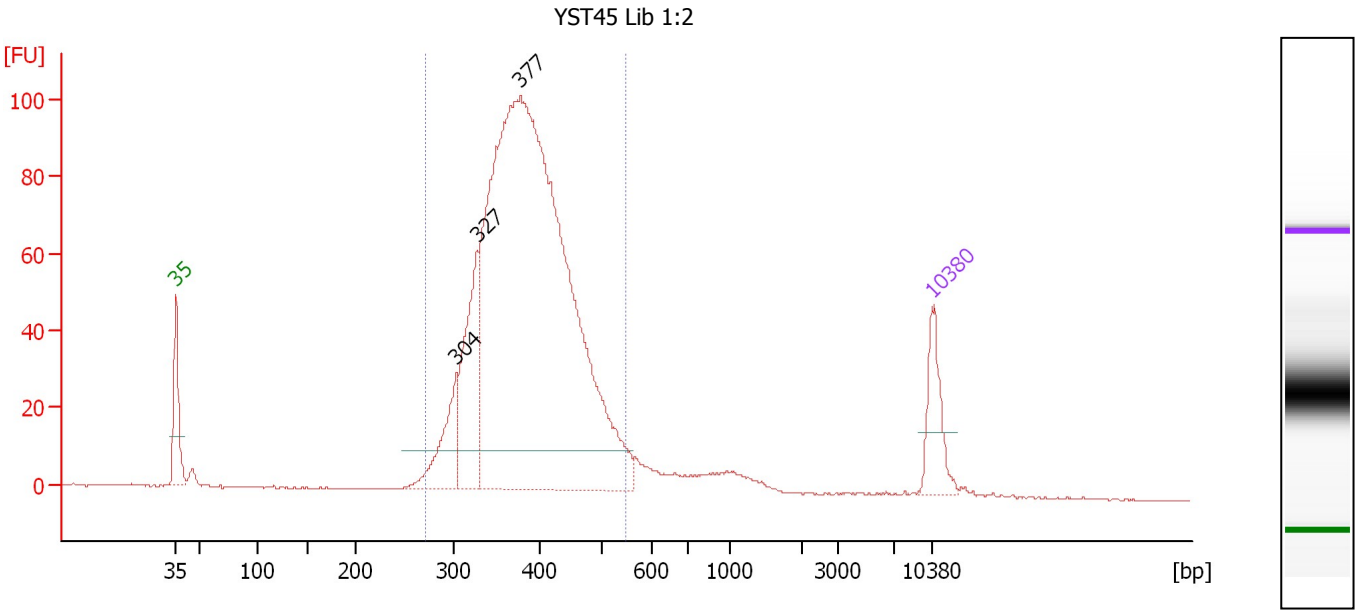
Region table for sample 5 : YST44 Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
269	558	393	13,312.7	3,366.28	2,950.7	94	14.5	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : YST45 Lib 1:2

Height Threshold [FU] : 10

Overall Results for sample 6 : YST45 Lib 1:2

Number of peaks found:	3	Corr. Area 1:	1,346.0
Noise:	0.2		

Peak table for sample 6 : YST45 Lib 1:2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	304	137.36	684.0	
3	327	236.45	1,094.2	
4	377	2,071.80	8,331.8	
5	10,380	75.00	10.9	Upper Marker

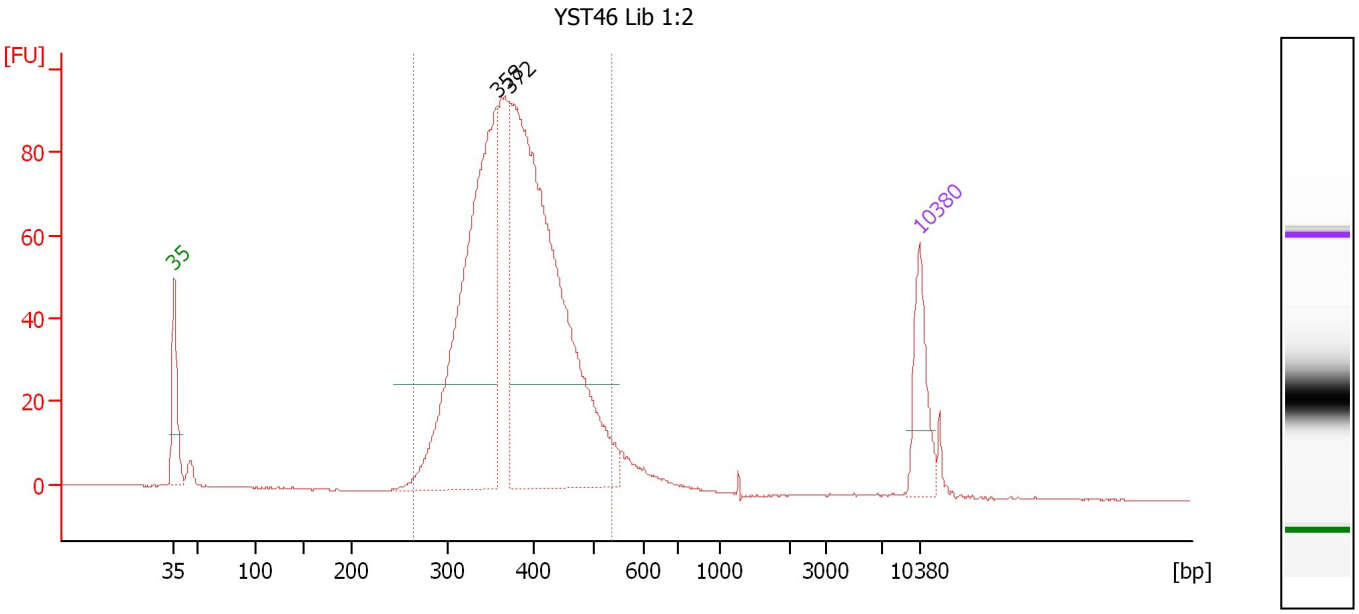
Region table for sample 6 : YST45 Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
272	547	388	9,573.2	2,393.69	1,346.0	92	14.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : YST46 Lib 1:2

Height Threshold [FU] : 25

Overall Results for sample 7 : YST46 Lib 1:2

Number of peaks found:	2	Corr. Area 1:	1,266.8
Noise:	0.1		

Peak table for sample 7 : YST46 Lib 1:2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	358	713.46	3,022.3	
3	372	1,009.03	4,111.0	
4	10,380	75.00	10.9	Upper Marker

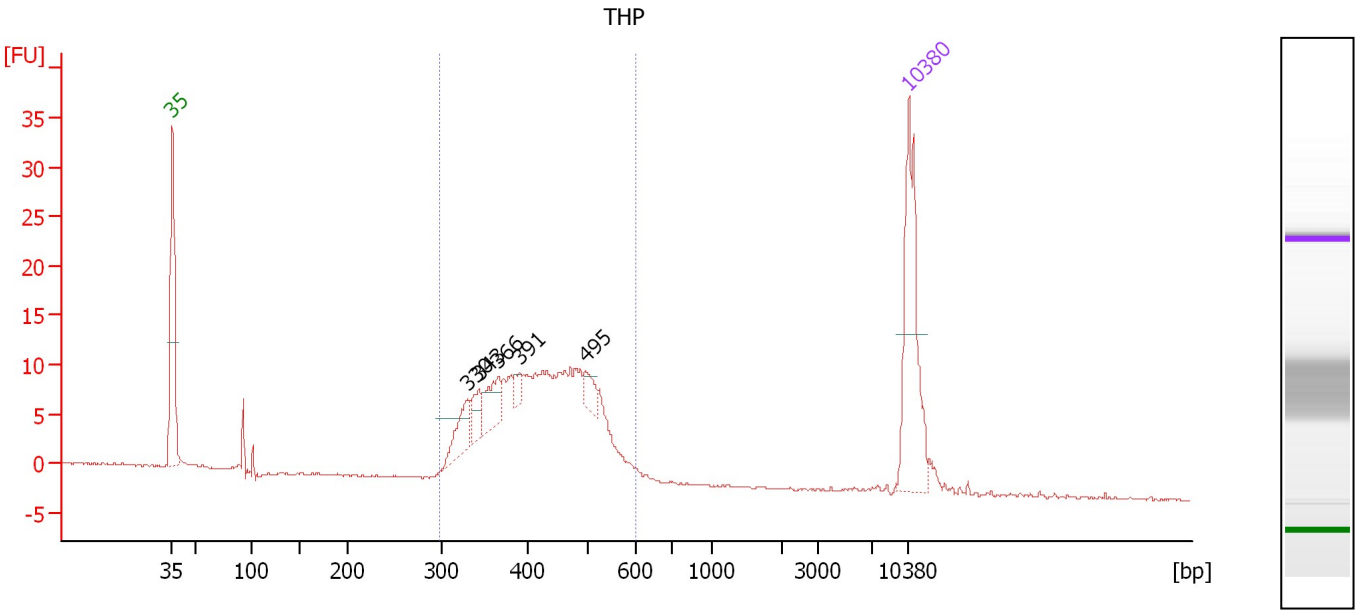
Region table for sample 7 : YST46 Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
265	534	382	7,754.4	1,908.16	1,266.8	94	14.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : THP

Height Threshold [FU] : 3

Overall Results for sample 8 : THP

Number of peaks found:	5	Corr. Area 1:	195.8
Noise:	0.1		

Peak table for sample 8 : THP

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	330	27.54	126.6	
3	343	16.35	72.2	
4	366	24.51	101.5	
5	391	7.25	28.1	
6	495	12.01	36.8	
7	10,380	75.00	10.9	Upper Marker

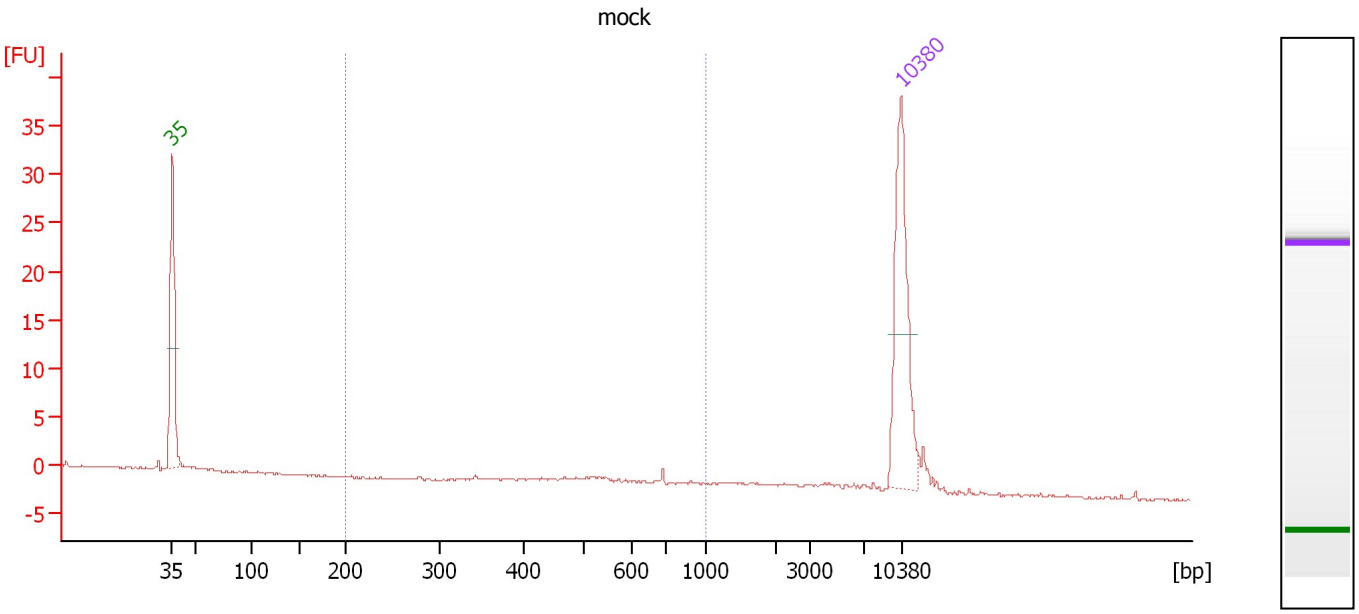
Region table for sample 8 : THP

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
297	598	424	1,665.2	450.97	195.8	92	16.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : mock

Number of peaks found:	0	Corr. Area 1:	6.1
Noise:	0.1		

Peak table for sample 9 : mock

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

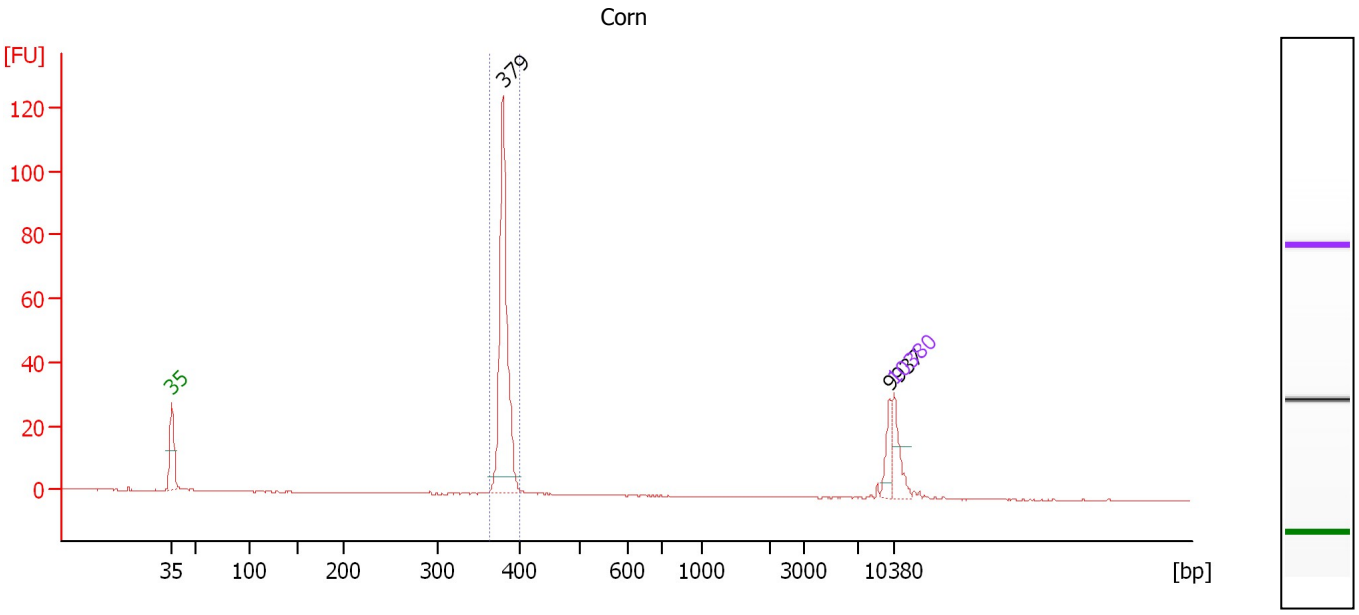
Region table for sample 9 : mock

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	583	35.4	12.63	6.1	29	25.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Corn

Number of peaks found:	2	Corr. Area 1:	138.3
Noise:	0.1		

Peak table for sample 10 : Corn

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		379	612.31	2,447.1	
3		9,937	51.89	7.9	
4	▶	10,380	75.00	10.9	Upper Marker

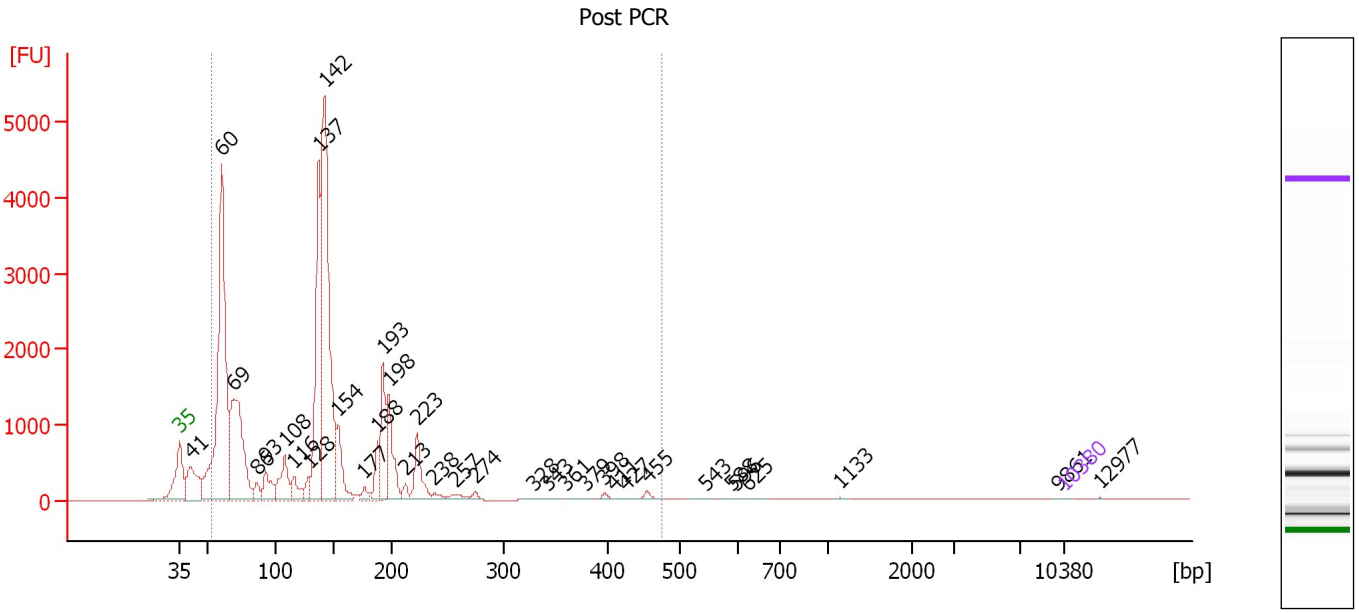
Region table for sample 10 : Corn

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
363	400	380	2,451.9	615.69	138.3	85	1.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Post PCR

Number of peaks found:	35	Corr. Area 1:	33,219.0
Noise:	0.2		

Peak table for sample 11 : Post PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	43,296.28	1,614,495.8	
3	60	263,729.84	6,648,972.5	
4	69	129,316.52	2,834,559.0	
5	86	9,709.04	171,061.0	
6	93	20,275.68	331,515.8	
7	108	31,095.77	436,677.2	
8	116	14,186.02	185,132.1	
9	128	9,225.86	108,858.2	
10	137	133,453.92	1,475,141.0	
11	142	248,217.80	2,646,846.8	
12	154	33,158.09	326,188.9	
13	177	4,962.35	42,528.0	
14	188	15,679.39	126,399.4	
15	193	42,639.20	334,632.9	
16	198	40,719.93	311,326.0	
17	213	5,056.30	36,027.6	
18	223	27,835.56	188,798.8	
19	238	3,077.00	19,561.4	
20	257	4,585.97	26,986.2	
21	274	2,201.48	12,160.5	
22	328	292.93	1,353.4	
23	343	932.96	4,122.0	
24	361	418.78	1,759.9	
25	379	190.13	759.8	
26	398	1,453.79	5,537.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Electropherogram Summary Continued ...

... Peak table for sample 11 : Post PCR

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	411	297.42	1,097.0	
28	427	241.06	855.7	
29	455	2,159.84	7,186.6	
30	543	253.08	705.8	
31	588	279.65	721.2	
32	596	222.04	564.8	
33	625	190.19	461.2	
34	1,133	193.43	258.7	
35	9,861	58.66	9.0	
36	10,380	75.00	10.9	Upper Marker
37	12,977	0.00	0.0	

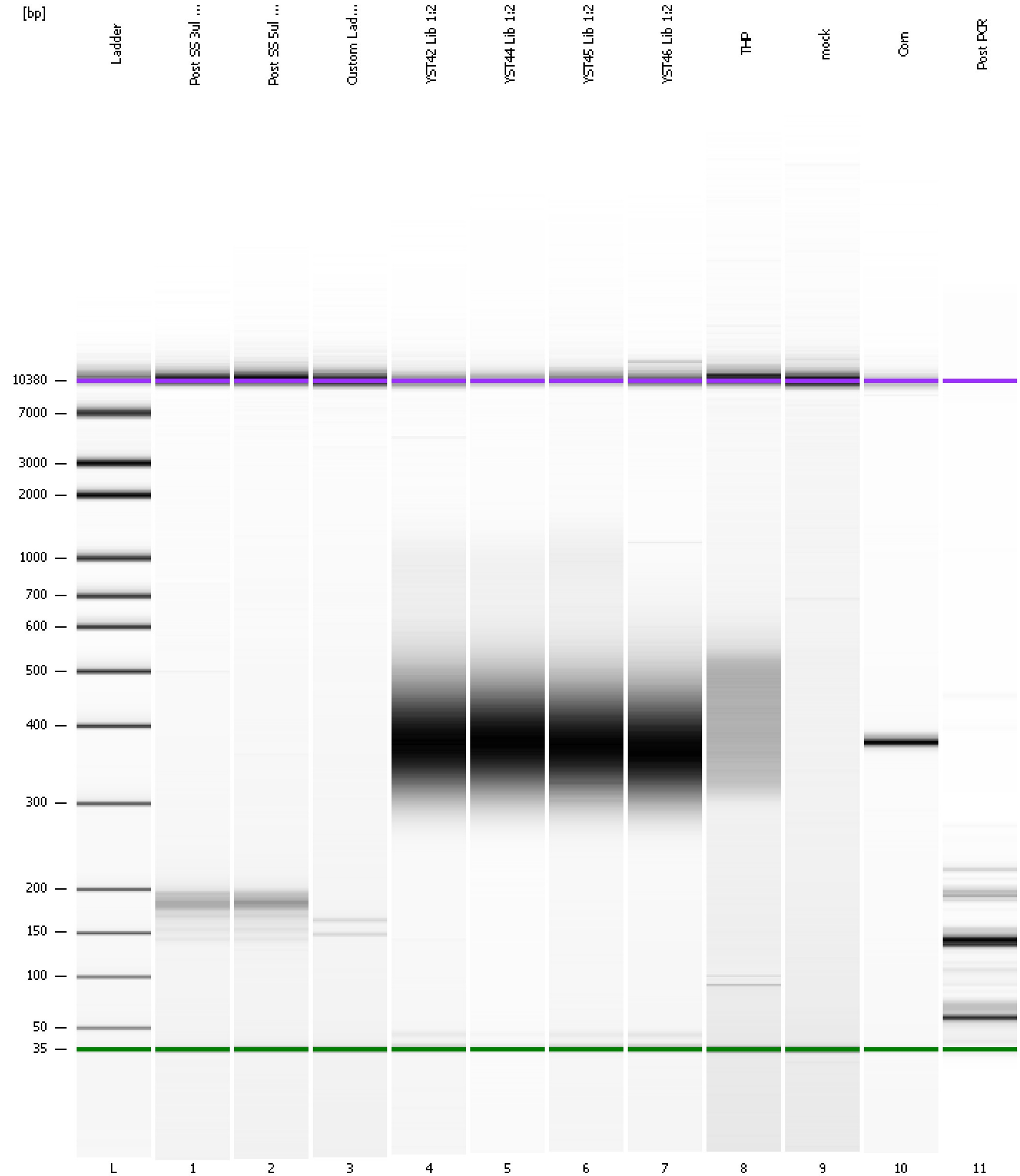
Region table for sample 11 : Post PCR

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
52	476	131	15,452,663.0	1,026,866.13	33,219.0	94	46.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad

Created: 6/28/2012 5:02:05 PM
Modified: 6/28/2012 5:45:33 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		6/28/2012 5:43:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-06-28\2012-06-28_003.xad)		Instrument	Run		6/28/2012 5:02:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/28/2012 5:02:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/28/2012 5:02:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/28/2012 5:02:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/28/2012 5:02:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/28/2012 5:02:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/28/2012 5:02:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1