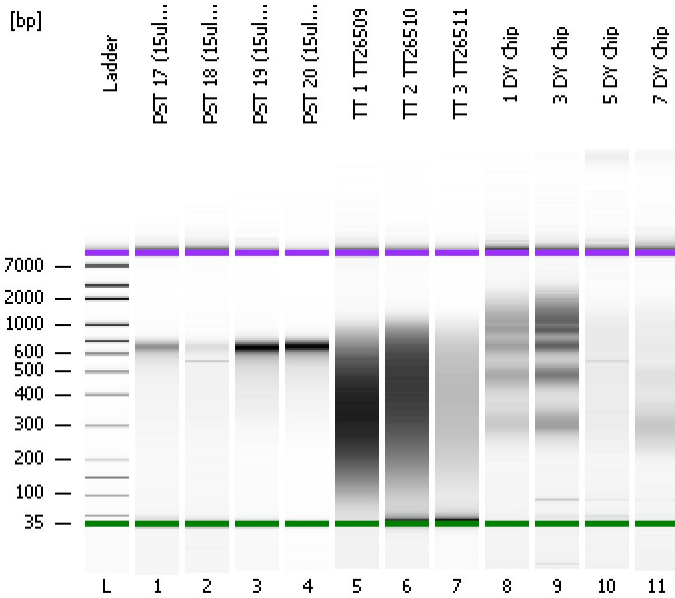


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
Modified: 3/12/2012 5:02:50 PM

Electrophoresis File Run Summary



Instrument Information:

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

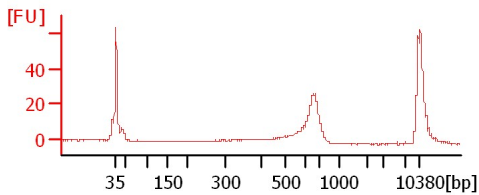
Assay Information:

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

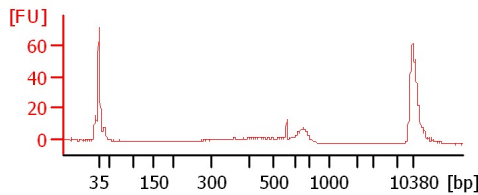
Chip Information:

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

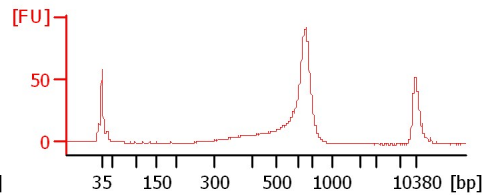
PST 17 (15ul, 12cycles)



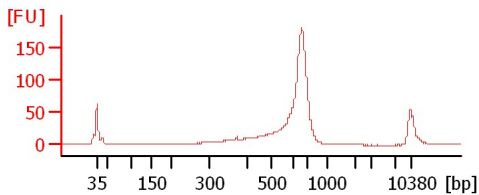
PST 18 (15ul, 12cycles)



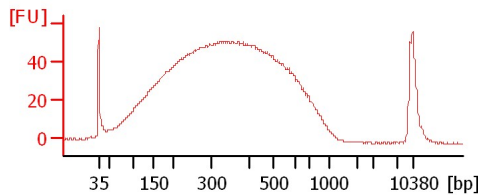
PST 19 (15ul, 12cycles)



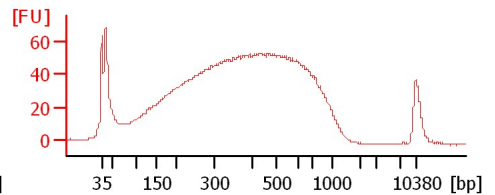
PST 20 (15ul, 12cycles)



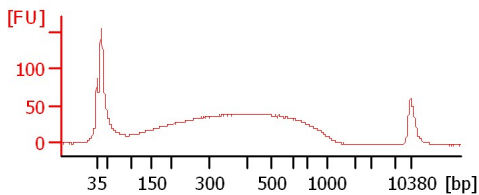
TT 1 TT26509



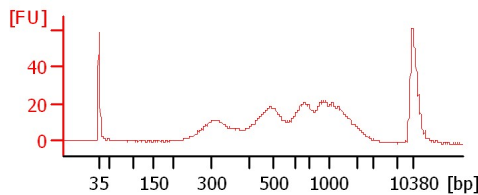
TT 2 TT26510



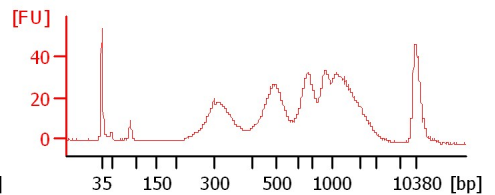
TT 3 TT26511



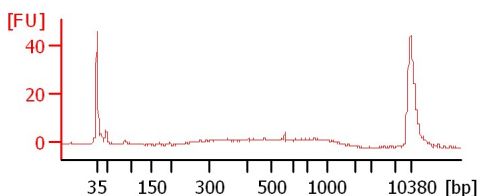
1 DY Chip



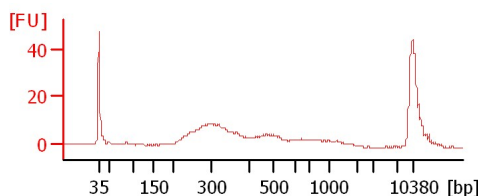
3 DY Chip



5 DY Chip



7 DY Chip



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
PST 17 (15ul, 12cycles)		<input type="checkbox"/>	✓			
PST 18 (15ul, 12cycles)		<input type="checkbox"/>	✓			
PST 19 (15ul, 12cycles)		<input type="checkbox"/>	✓			
PST 20 (15ul, 12cycles)		<input type="checkbox"/>	✓			
TT 1 TT26509		<input type="checkbox"/>	✓			
TT 2 TT26510		<input type="checkbox"/>	✓			
TT 3 TT26511		<input type="checkbox"/>	✓			
1 DY Chip		<input type="checkbox"/>	✓			
3 DY Chip		<input type="checkbox"/>	✓			
5 DY Chip		<input type="checkbox"/>	✓			
7 DY Chip		<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\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
Modified: 3/12/2012 5:02:50 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

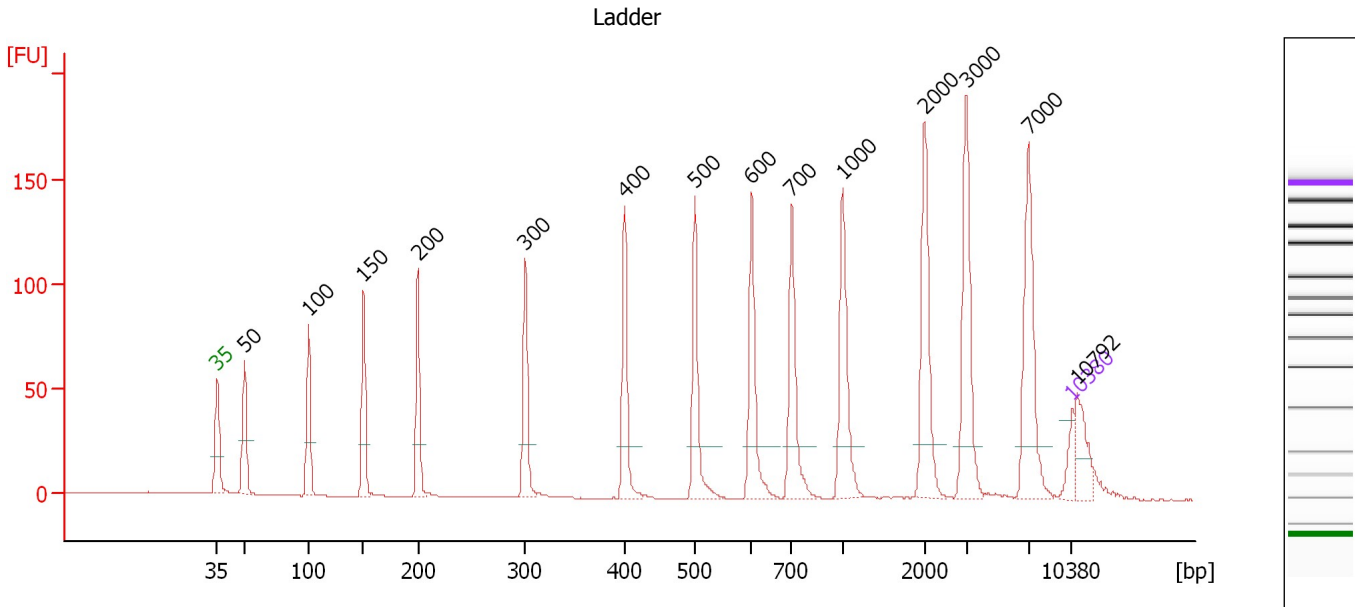
Ladder

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\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

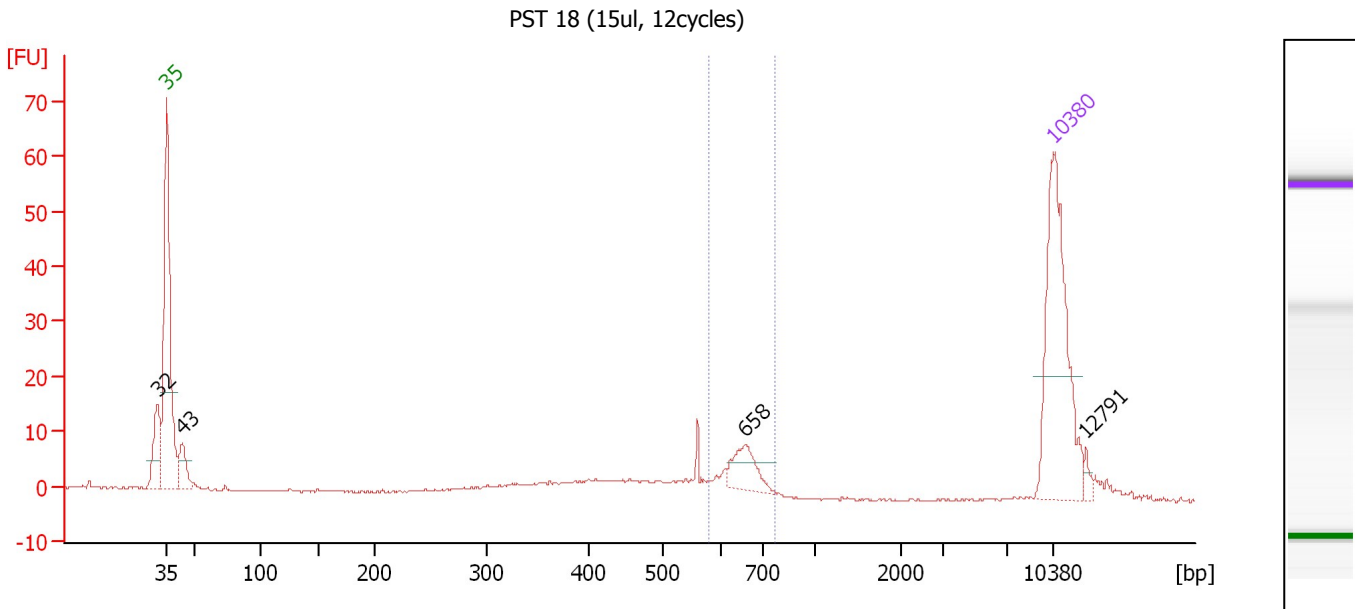
Peak table for Ladder

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	10,792	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : PST 18 (15ul, 12cycles)

Number of peaks found: 4 Corr. Area 1: 29.8
 Noise: 0.2

Peak table for sample 2 : PST 18 (15ul, 12cycles)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	43	20.06	699.4	
4	658	19.35	44.5	
5	10,380	75.00	10.9	Upper Marker
6	12,791	0.00	0.0	

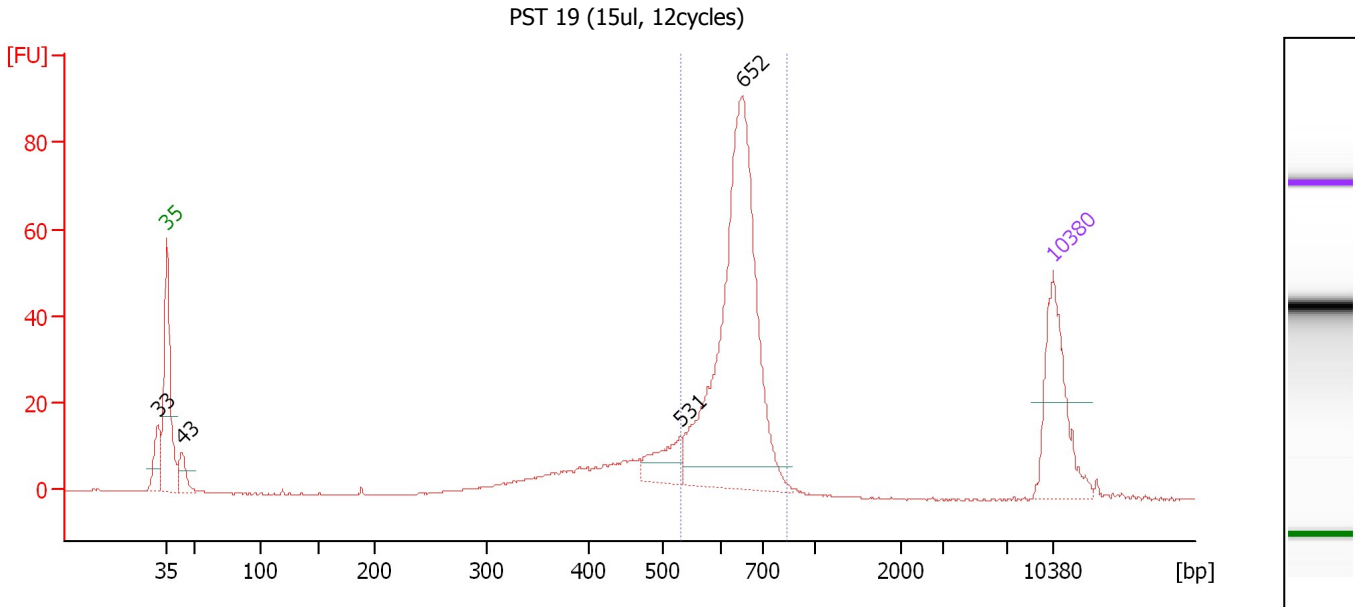
Region table for sample 2 : PST 18 (15ul, 12cycles)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
579	64.9	648	27.70	771	29.8	23	5.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : PST 19 (15ul, 12cycles)

Number of peaks found: 4 Corr. Area 1: 354.4
 Noise: 0.2

Peak table for sample 3 : PST 19 (15ul, 12cycles)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	33	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	43	27.12	954.0	
4	531	34.49	98.3	
5	652	376.66	874.9	
6	10,380	75.00	10.9	Upper Marker

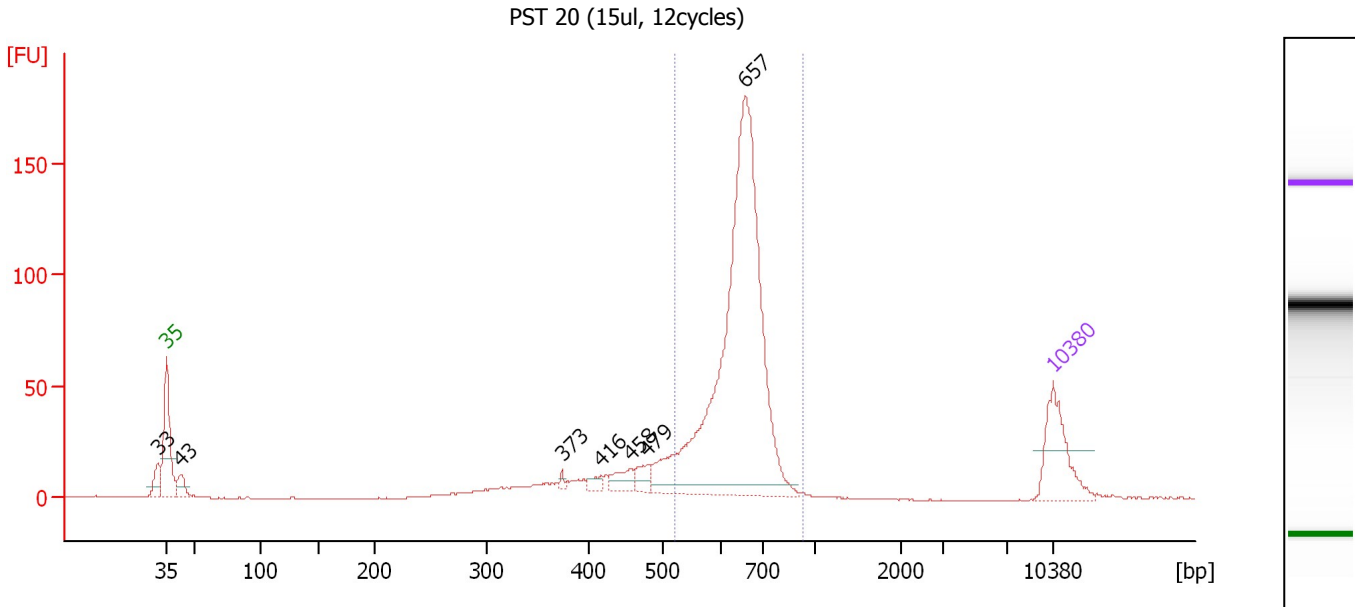
Region table for sample 3 : PST 19 (15ul, 12cycles)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
530	963.4	638	403.40	839	354.4	67	7.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : PST 20 (15ul, 12cycles)

Number of peaks found: 7 Corr. Area 1: 702.9
 Noise: 0.2

Peak table for sample 4 : PST 20 (15ul, 12cycles)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	33	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	43	30.09	1,067.2	
4	373	5.02	20.4	
5	416	11.46	41.7	
6	458	27.19	90.0	
7	479	20.55	64.9	
8	657	789.68	1,820.4	
9	10,380	75.00	10.9	Upper Marker

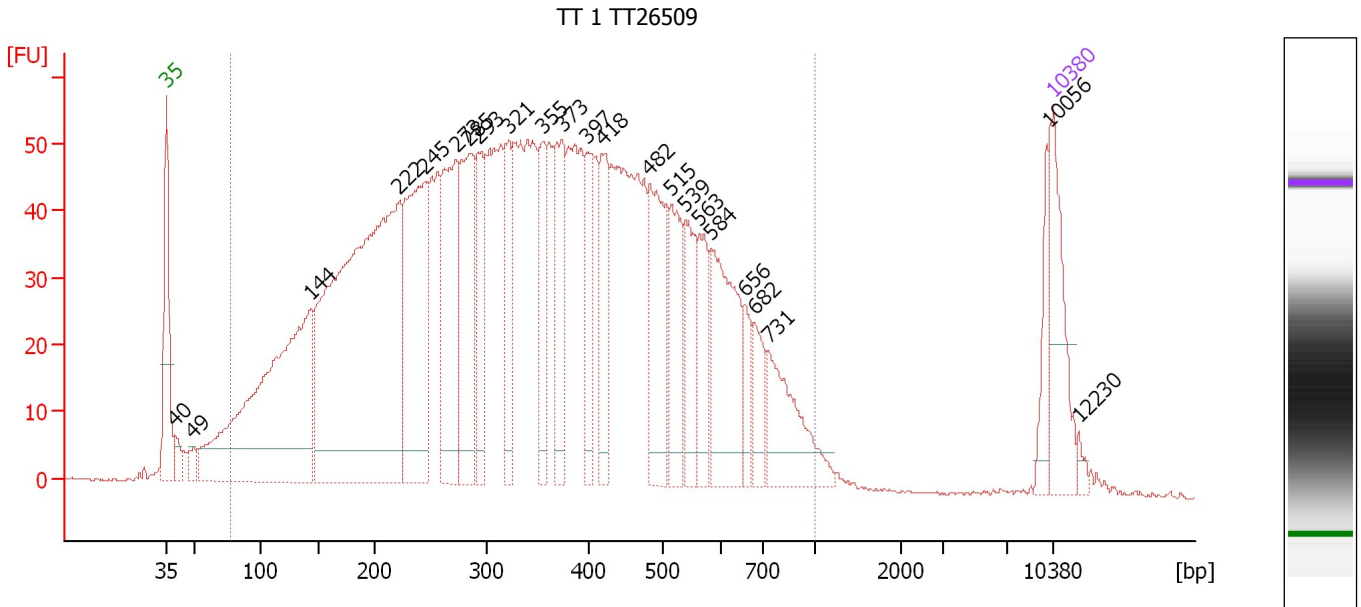
Region table for sample 4 : PST 20 (15ul, 12cycles)

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
520	1,858.6	647	787.86	934	702.9	73	9.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : TT 1 TT26509

Number of peaks found: 23 Corr. Area 1: 2,421.7
 Noise: 0.2

Peak table for sample 5 : TT 1 TT26509

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	25.69	982.3	
3	49	17.82	549.0	
4	144	559.43	5,891.6	
5	222	821.14	5,615.5	
6	245	288.66	1,786.1	
7	273	201.92	1,122.1	
8	285	174.24	926.8	
9	293	110.48	570.9	
10	321	86.71	409.3	
11	355	79.90	340.7	
12	373	111.99	454.4	
13	397	70.91	270.7	
14	418	89.65	325.1	
15	482	128.62	404.0	
16	515	84.69	249.1	
17	539	69.62	195.6	
18	563	64.43	173.5	
19	584	142.70	370.3	
20	656	34.24	79.0	
21	682	37.81	84.0	
22	731	100.86	209.0	
23	10,056	36.47	5.5	
24	10,380	75.00	10.9	Upper Marker
25	12,230	0.00	0.0	


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...

... Region table for sample 5 :

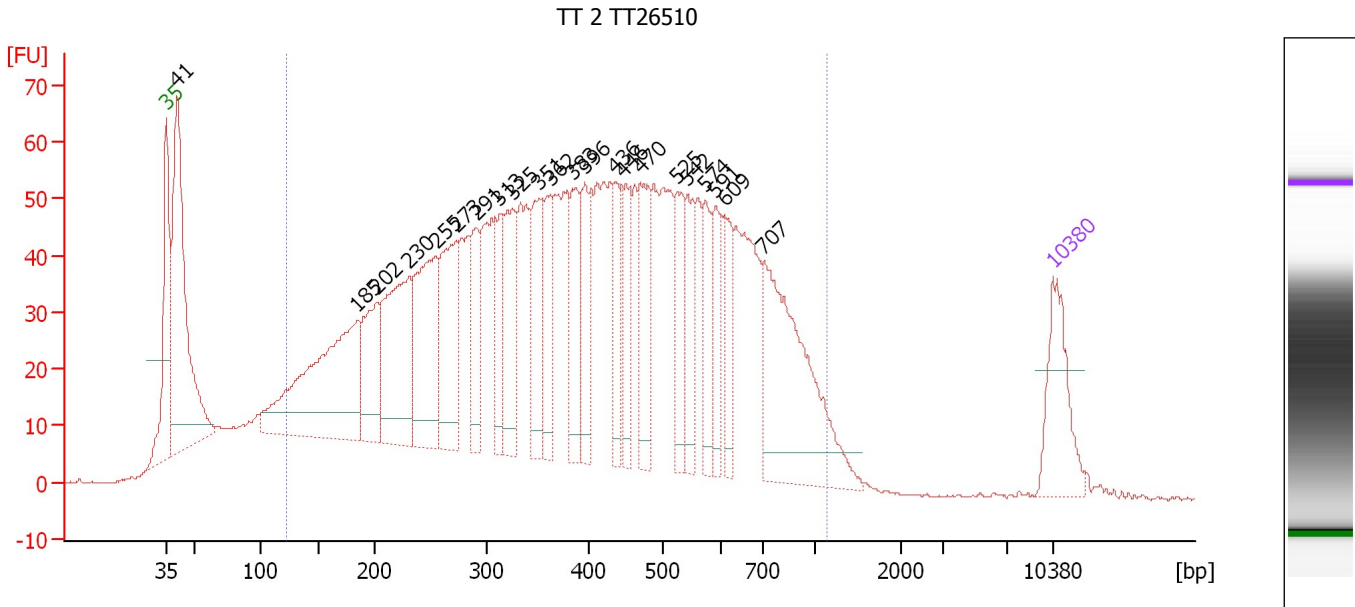
TT 1 TT26509

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
76	28,172.1	365	4,643.97	1,000	2,421.7	95	46.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : TT 2 TT26510

Number of peaks found: 22 Corr. Area 1: 2,407.1
 Noise: 0.2

Peak table for sample 6 : TT 2 TT26510

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	434.21	16,162.7	
3	185	352.28	2,891.6	
4	202	124.78	936.2	
5	230	223.11	1,468.6	
6	255	199.64	1,186.0	
7	273	155.32	861.7	
8	291	76.28	397.7	
9	313	72.25	350.3	
10	325	110.31	513.6	
11	351	103.72	447.5	
12	362	87.12	364.5	
13	383	91.24	360.9	
14	396	89.77	343.5	
15	436	67.88	236.0	
16	446	77.03	261.6	
17	470	97.00	312.5	
18	525	75.51	217.7	
19	542	63.53	177.7	
20	574	63.38	167.3	
21	591	61.19	156.8	
22	609	54.75	136.3	
23	707	270.09	578.6	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...

... Region table for sample 6 :

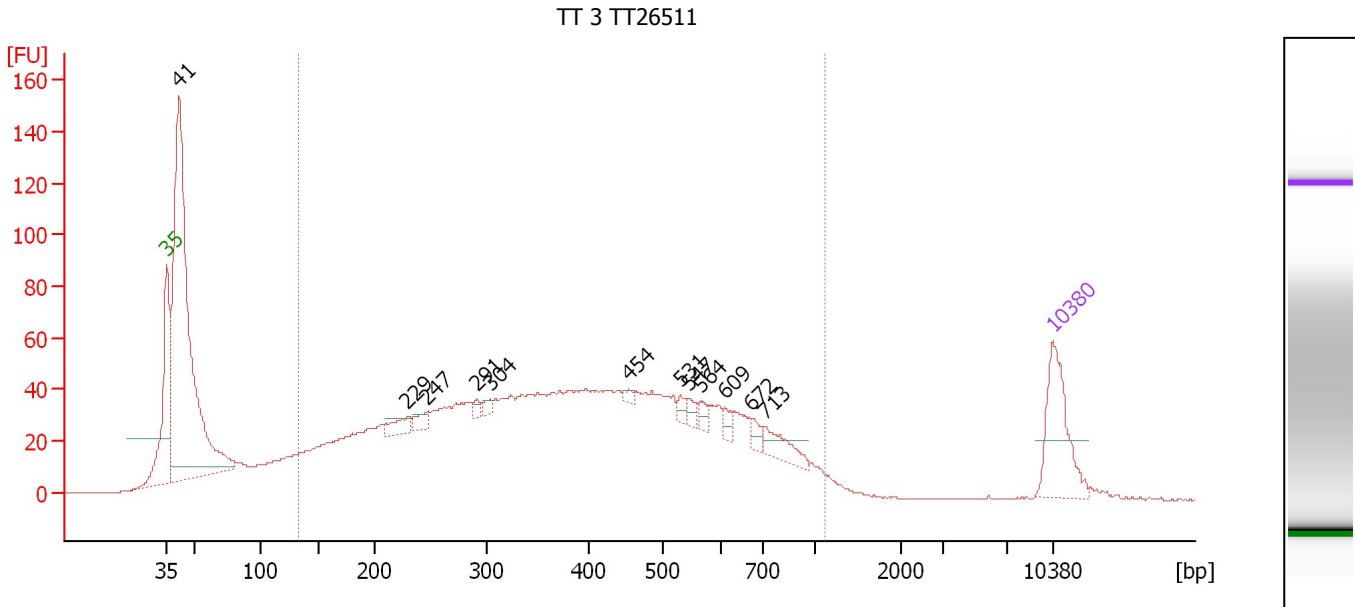
TT 2 TT26510

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
122	21,360.1	424	4,303.01	1,139	2,407.1	86	45.4	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : TT 3 TT26511

Number of peaks found: 12 Corr. Area 1: 1,807.1
 Noise: 0.2

Peak table for sample 7 : TT 3 TT26511

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	770.39	28,180.2	
3	229	22.57	149.0	
4	247	14.18	87.0	
5	291	7.08	36.8	
6	304	7.92	39.5	
7	454	5.65	18.8	
8	531	8.23	23.5	
9	547	10.30	28.5	
10	564	10.18	27.3	
11	609	9.67	24.1	
12	672	11.78	26.6	
13	713	30.32	64.4	
14	10,380	75.00	10.9	Upper Marker

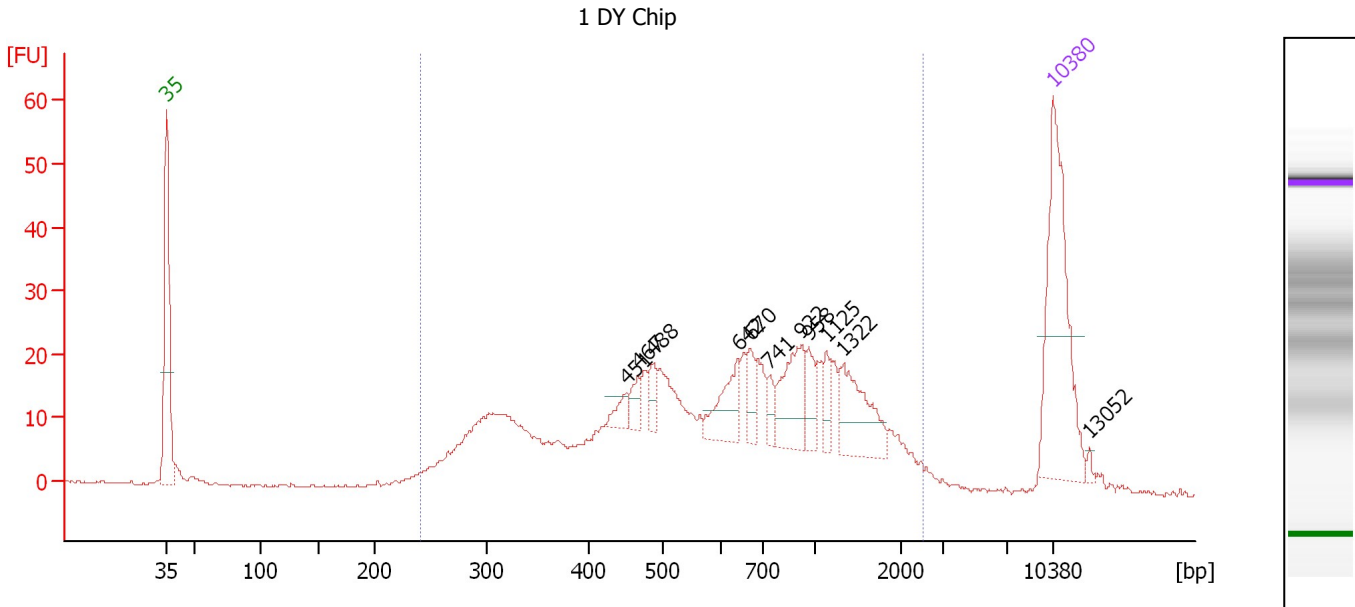
Region table for sample 7 : TT 3 TT26511

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
134	10,242.7	414	2,068.77	1,120	1,807.1	72	44.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 1 DY Chip

Number of peaks found: 11 Corr. Area 1: 600.7
 Noise: 0.2

Peak table for sample 8 : 1 DY Chip

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	451	8.51	28.6	
3	467	9.22	29.9	
4	488	10.77	33.5	
5	642	24.87	58.7	
6	670	12.78	28.9	
7	741	7.93	16.2	
8	922	33.35	54.8	
9	958	13.87	21.9	
10	1,125	9.50	12.8	
11	1,322	34.80	39.9	
12	10,380	75.00	10.9	Upper Marker
13	13,052	0.00	0.0	

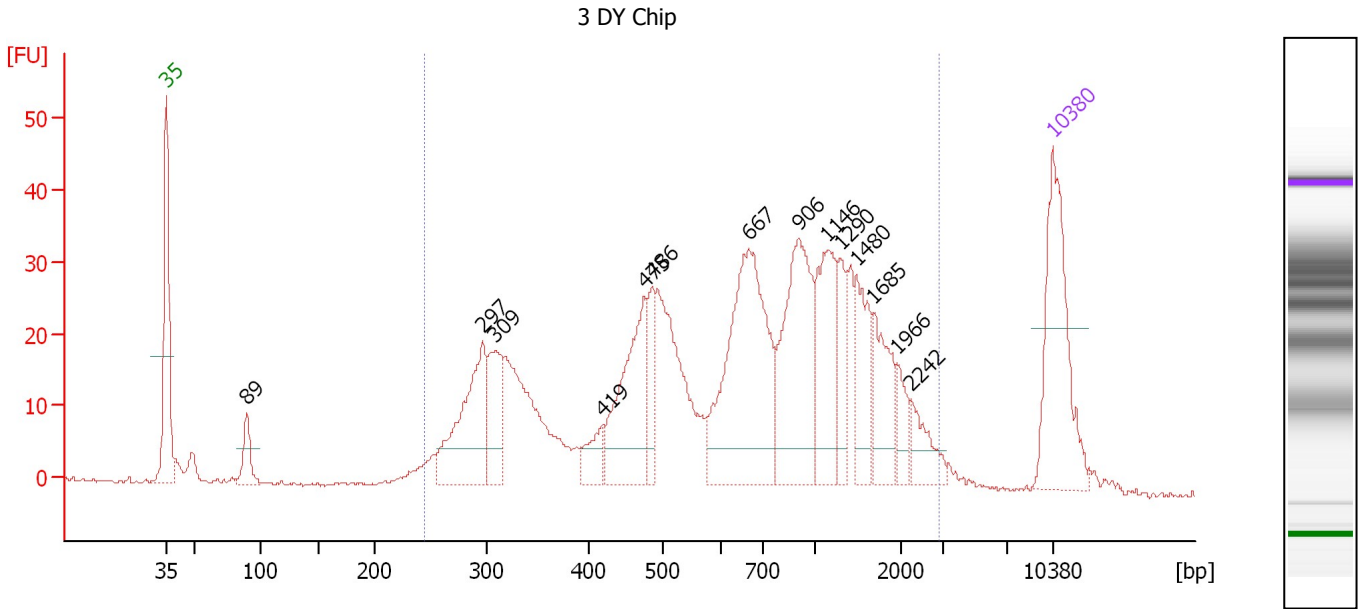
Region table for sample 8 : 1 DY Chip

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
242	1,907.0	768	647.59	2,515	600.7	95	60.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : 3 DY Chip

Number of peaks found: 14 Corr. Area 1: 828.5
 Noise: 0.3

Peak table for sample 9 : 3 DY Chip

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	89	24.02	410.0	
3	297	97.07	495.6	
4	309	45.19	221.6	
5	419	19.26	69.7	
6	475	89.27	284.7	
7	486	28.53	88.9	
8	667	165.08	374.9	
9	906	105.54	176.5	
10	1,146	64.45	85.2	
11	1,290	25.73	30.2	
12	1,480	36.81	37.7	
13	1,685	37.45	33.7	
14	1,966	13.53	10.4	
15	2,242	19.54	13.2	
16	10,380	75.00	10.9	Upper Marker

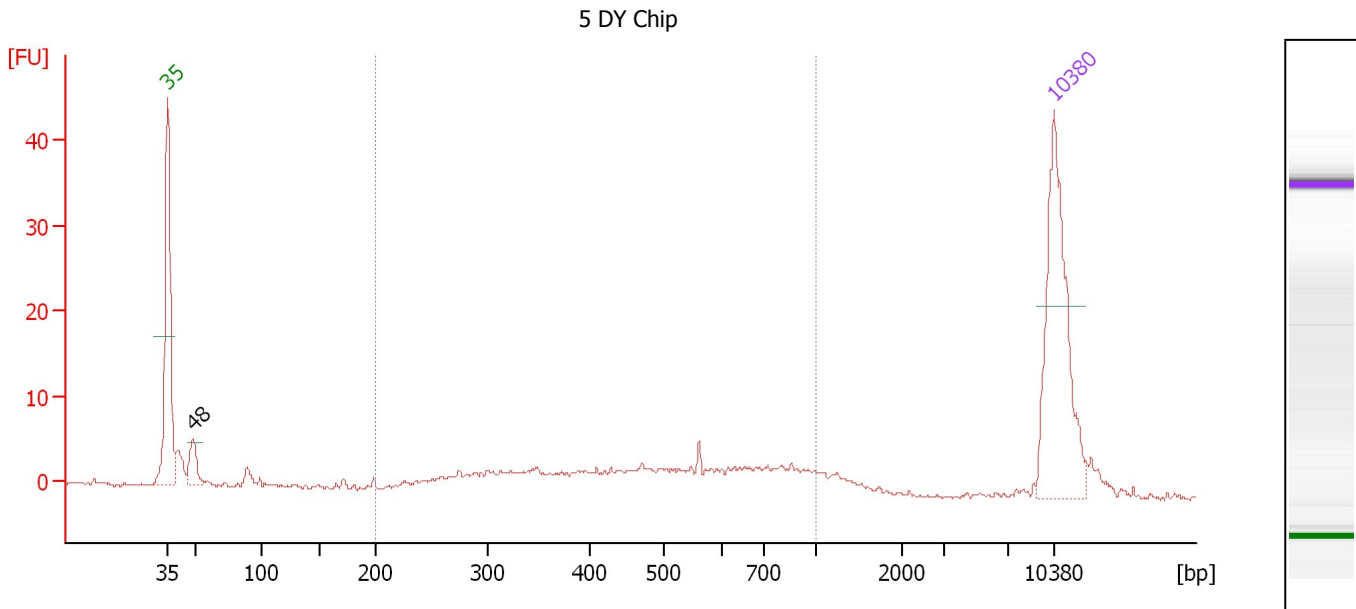
Region table for sample 9 : 3 DY Chip

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
244	2,934.0	858	1,030.99	2,908	828.5	95	63.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : 5 DY Chip

Number of peaks found: 1 Corr. Area 1: 53.7
 Noise: 0.2

Peak table for sample 10 : 5 DY Chip

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	15.92	498.7	
3	10,380	75.00	10.9	Upper Marker

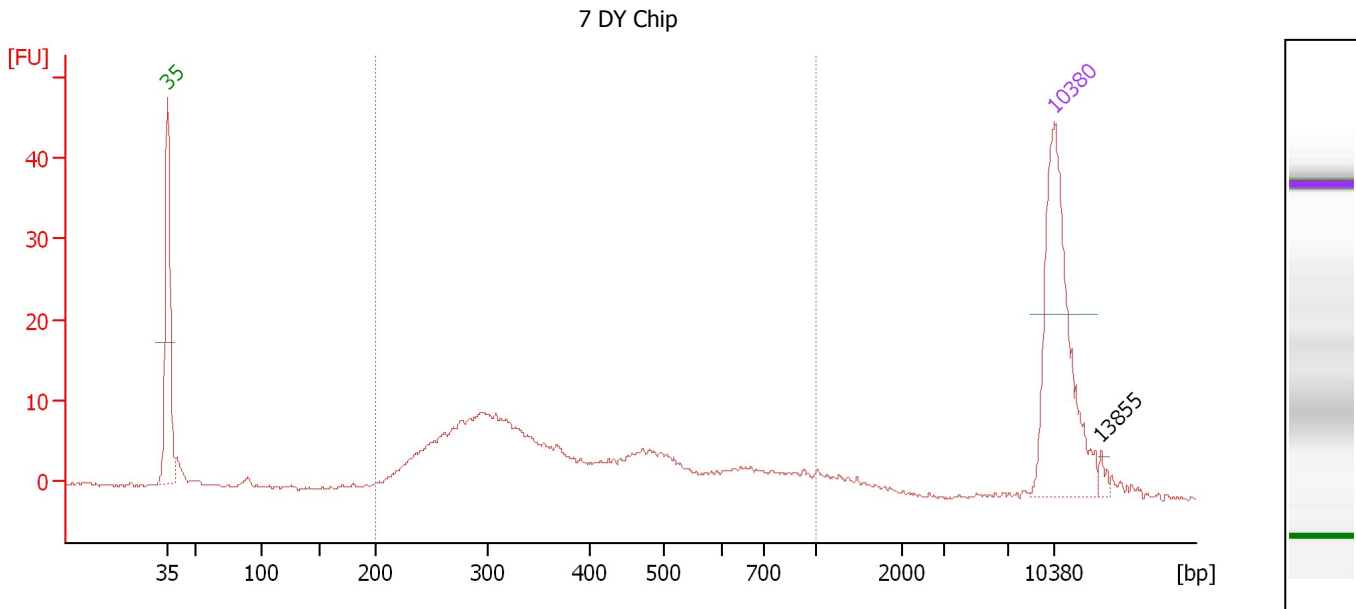
Region table for sample 10 : 5 DY Chip

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	274.1	520	78.53	1,000	53.7	72	35.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 7 DY Chip

Number of peaks found: 1 Corr. Area 1: 181.6
 Noise: 0.3

Peak table for sample 11 : 7 DY Chip

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
3	13,855	0.00	0.0	

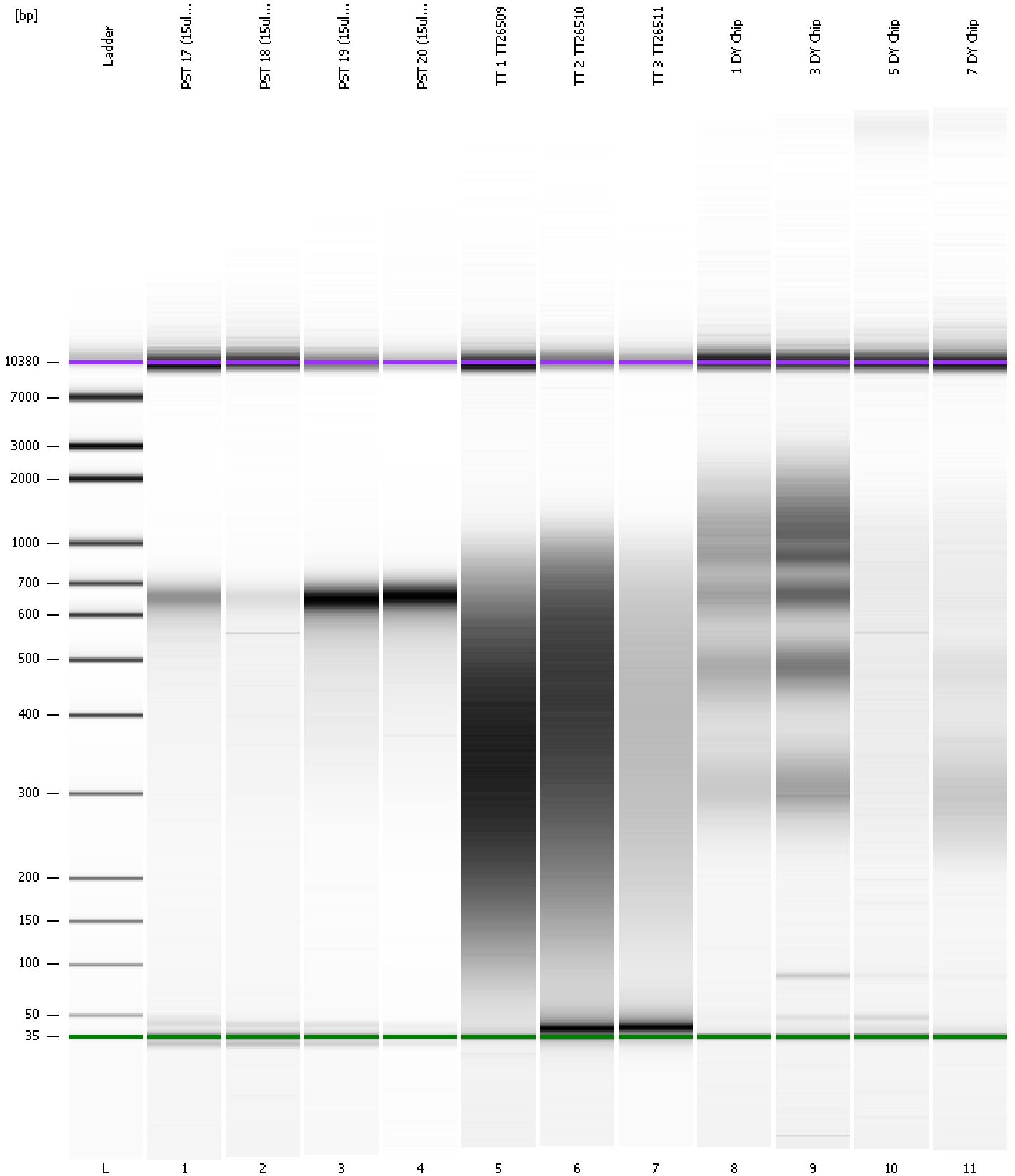
Region table for sample 11 : 7 DY Chip

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,058.0	394	234.64	1,000	181.6	93	39.5	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
Modified: 3/12/2012 5:02:50 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad

Created: 3/12/2012 3:05:48 PM
 Modified: 3/12/2012 5:02:50 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		3/12/2012 3:47:06 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-12\2012-03-12_004.xad)		Instrument	Run		3/12/2012 3:05:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/12/2012 3:05:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/12/2012 3:05:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/12/2012 3:05:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/12/2012 3:05:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/12/2012 3:05:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/12/2012 3:05:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1