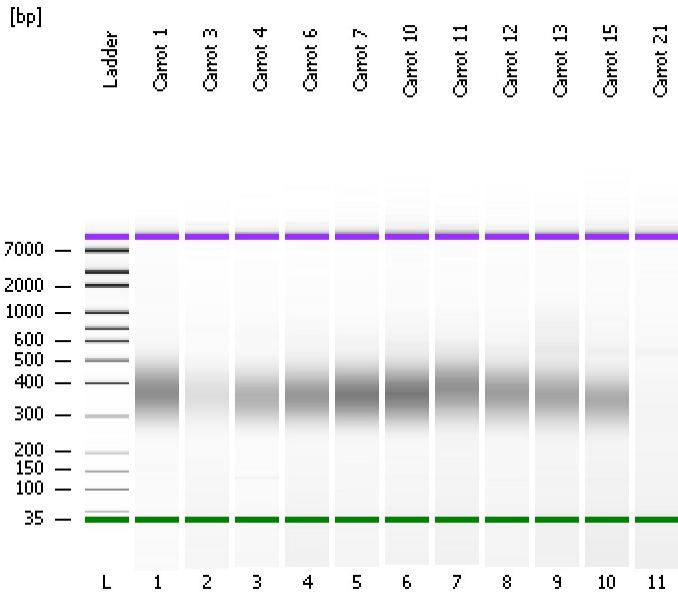


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
Modified: 5/28/2013 11:50:31 AM

Electrophoresis File Run Summary



Instrument Information:

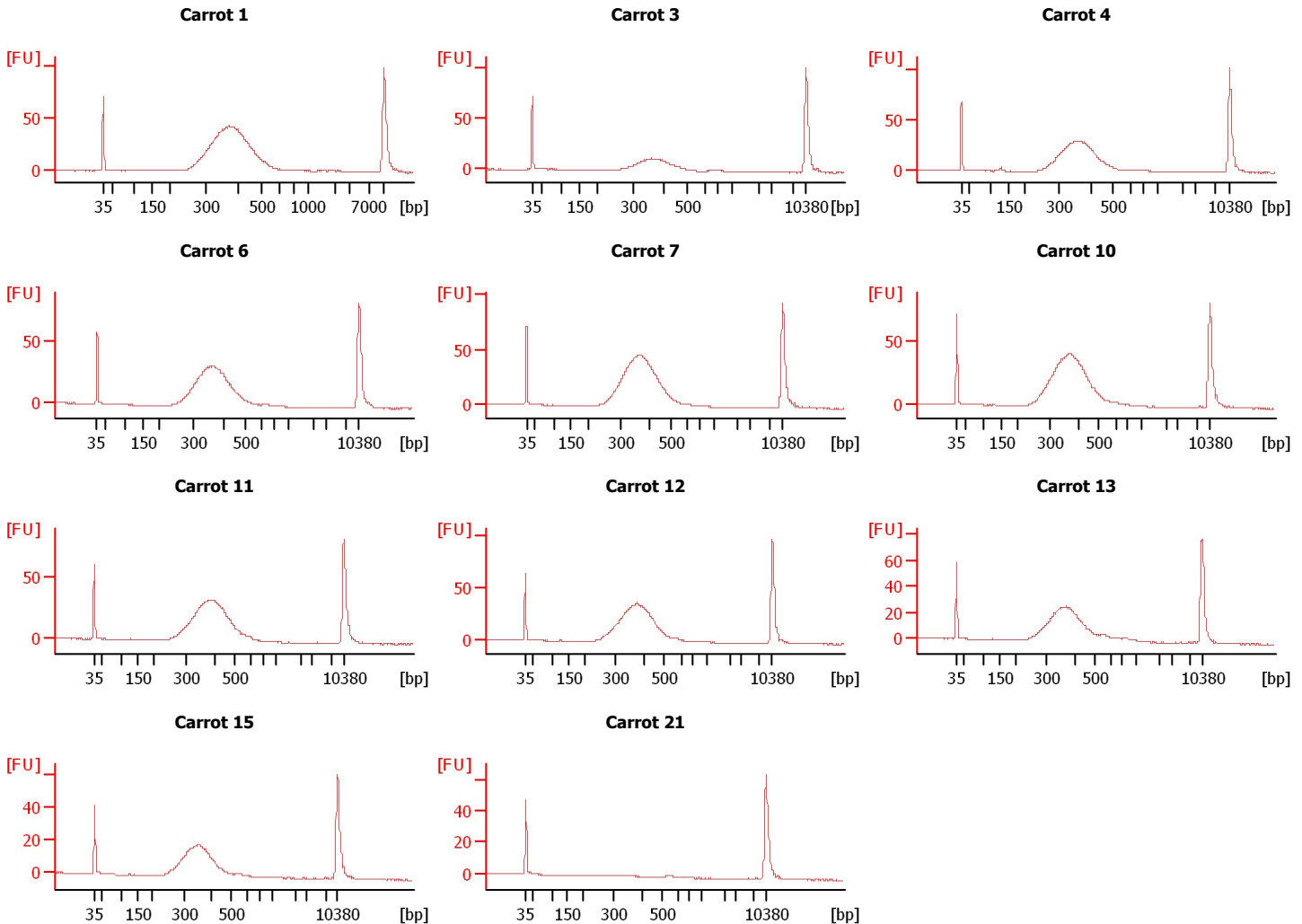
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Carrot 1		<input type="checkbox"/>	✓			
Carrot 3		<input type="checkbox"/>	✓			
Carrot 4		<input type="checkbox"/>	✓			
Carrot 6		<input type="checkbox"/>	✓			
Carrot 7		<input type="checkbox"/>	✓			
Carrot 10		<input type="checkbox"/>	✓			
Carrot 11		<input type="checkbox"/>	✓			
Carrot 12		<input type="checkbox"/>	✓			
Carrot 13		<input type="checkbox"/>	✓			
Carrot 15		<input type="checkbox"/>	✓			
Carrot 21		<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\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
Modified: 5/28/2013 11:50:31 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/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

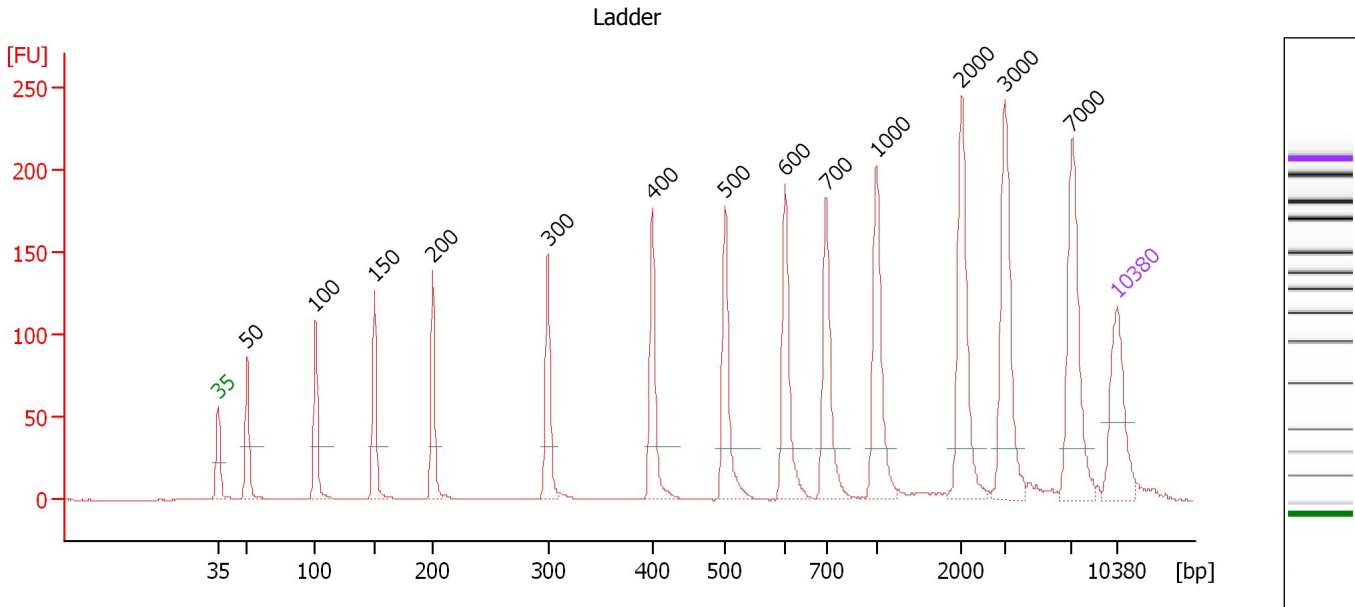
Ladder

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\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

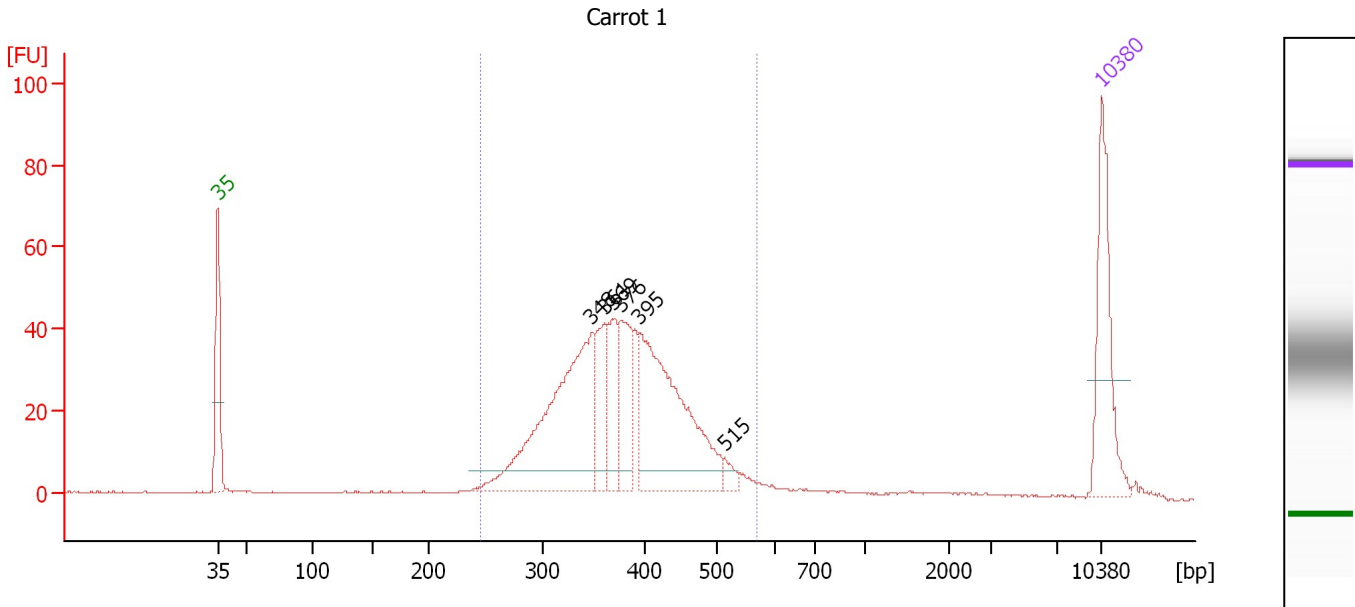
Peak table for Ladder

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

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Carrot 1

Number of peaks found: 6 Corr. Area 1: 695.3
 Noise: 0.2

Peak table for sample 1 : Carrot 1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	348	250.41	1,089.0	
3	361	62.97	264.0	
4	369	56.21	231.1	
5	376	67.45	271.9	
6	395	216.99	832.2	
7	515	9.92	29.2	
8	10,380	75.00	10.9	Upper Marker

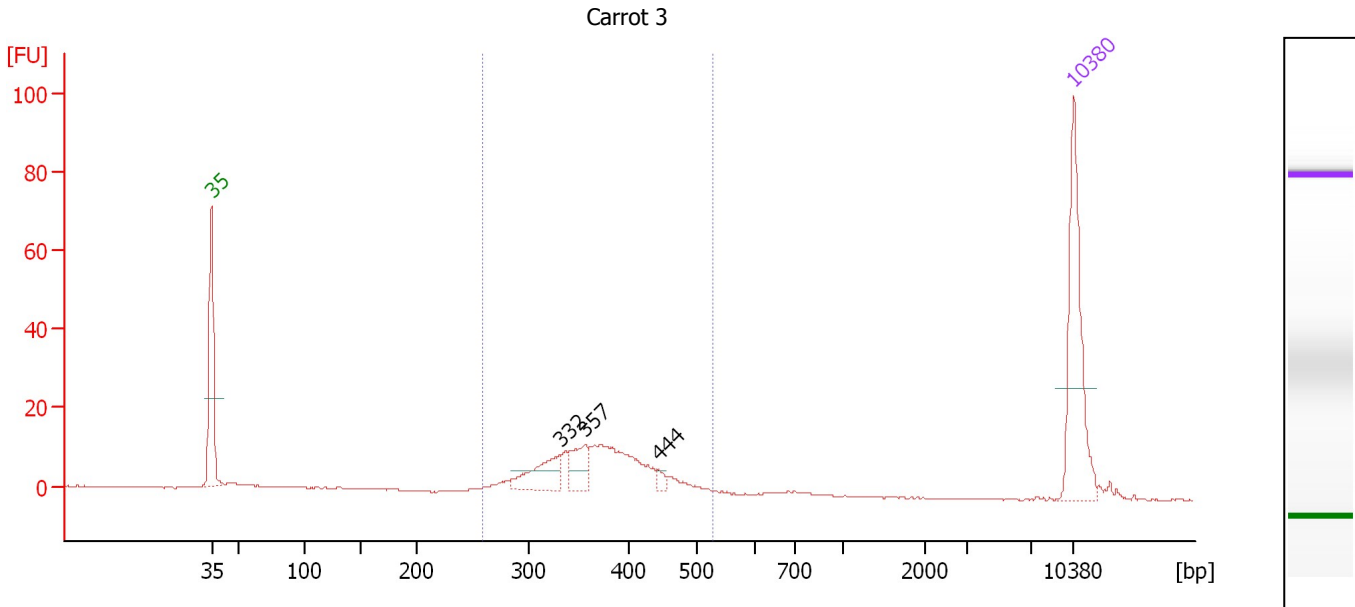
Region table for sample 1 : Carrot 1

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
246	568	380	3,109.7	753.73	695.3	92	16.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Carrot 3

Number of peaks found: 3 Corr. Area 1: 175.5
 Noise: 0.2

Peak table for sample 2 : Carrot 3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	332	38.49	175.4	
3	357	25.57	108.6	
4	444	5.08	17.3	
5	10,380	75.00	10.9	Upper Marker

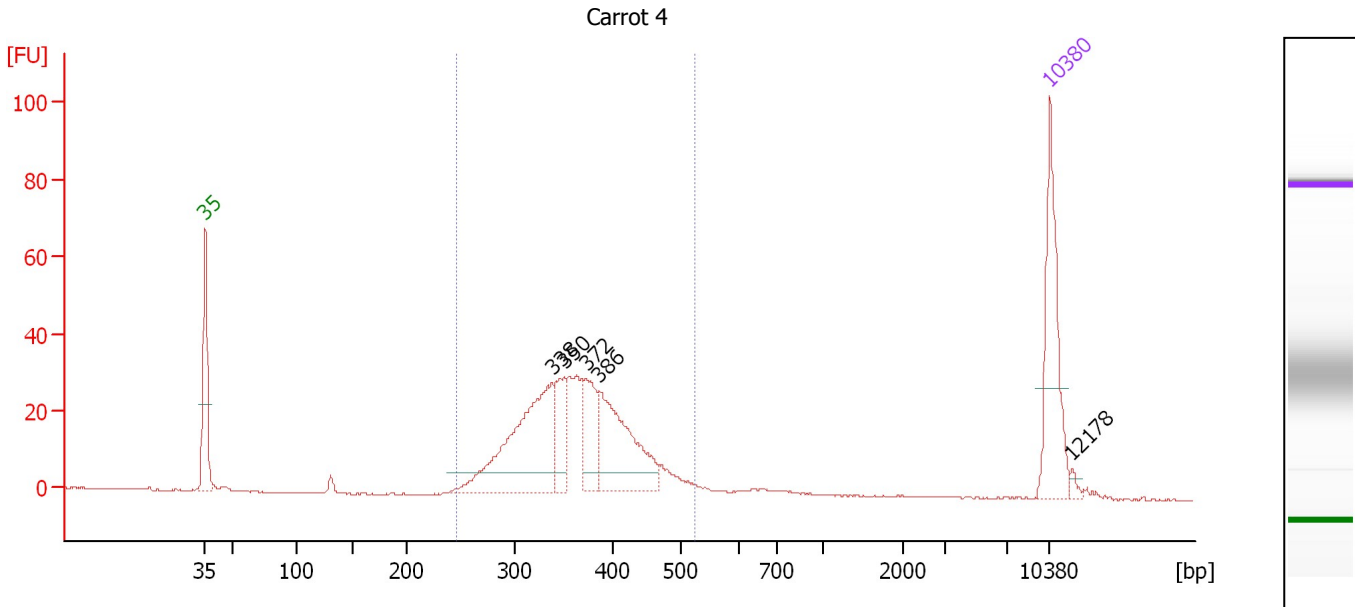
Region table for sample 2 : Carrot 3

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
259	526	371	800.8	191.22	175.5	81	14.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Carrot 4

Number of peaks found: 5 Corr. Area 1: 447.4
 Noise: 0.1

Peak table for sample 3 : Carrot 4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	338	182.43	817.8	
3	350	47.45	205.1	
4	372	50.79	206.8	
5	386	115.92	454.7	
6	10,380	75.00	10.9	Upper Marker
7	12,178	0.00	0.0	

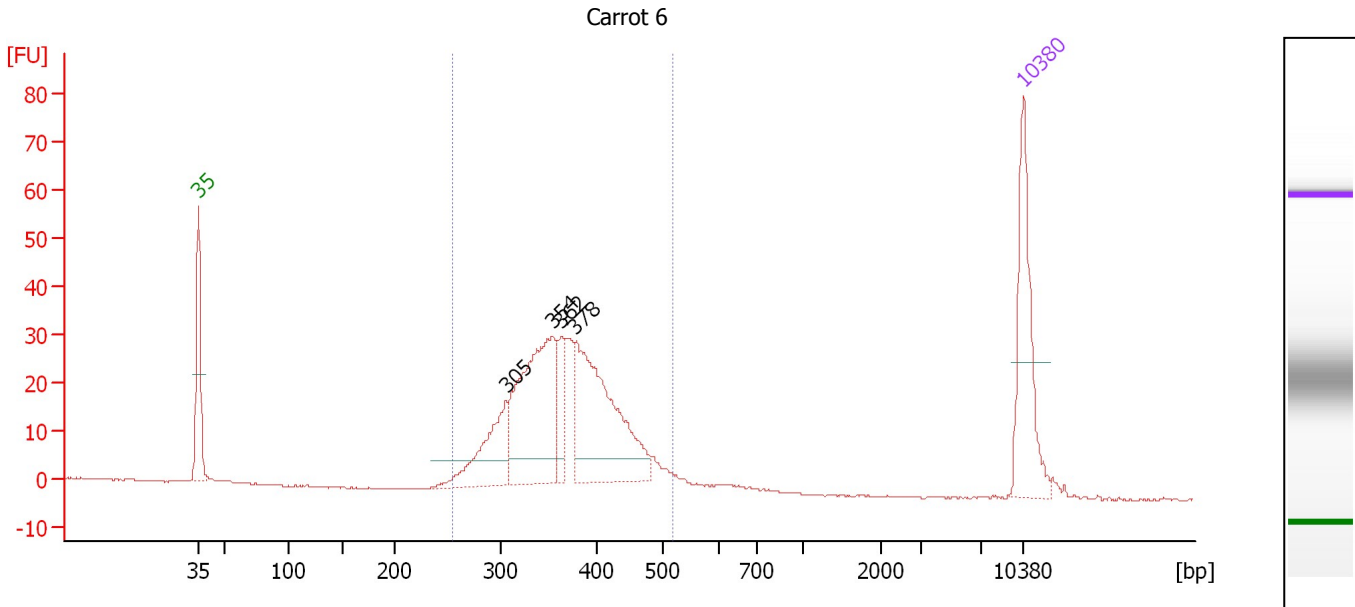
Region table for sample 3 : Carrot 4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
247	524	363	2,145.1	500.91	447.4	94	14.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Carrot 6

Number of peaks found: 4 Corr. Area 1: 455.2
 Noise: 0.1

Peak table for sample 4 : Carrot 6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	305	81.00	402.4	
3	354	185.29	793.2	
4	362	30.28	126.7	
5	378	178.21	714.6	
6	10,380	75.00	10.9	Upper Marker

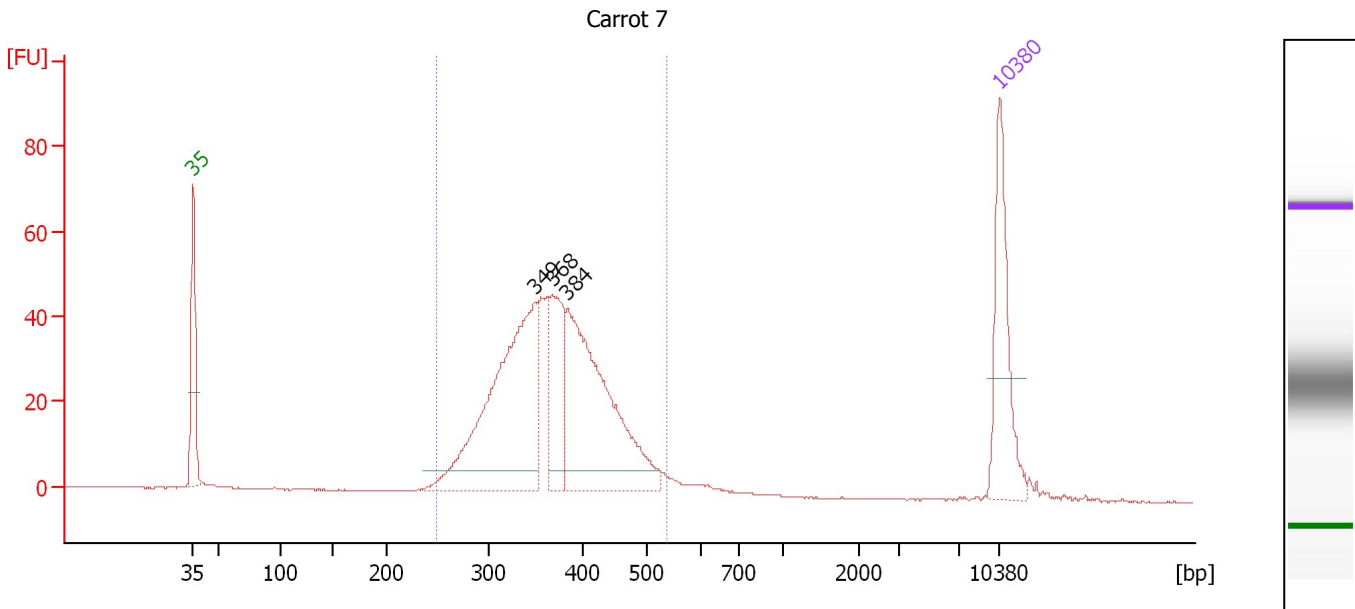
Region table for sample 4 : Carrot 6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
255	518	367	2,347.6	555.13	455.2	96	14.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Carrot 7

Number of peaks found: 3 Corr. Area 1: 695.1
 Noise: 0.1

Peak table for sample 5 : Carrot 7

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	349	285.74	1,239.1	
3	368	86.19	354.7	
4	384	242.91	958.2	
5	10,380	75.00	10.9	Upper Marker

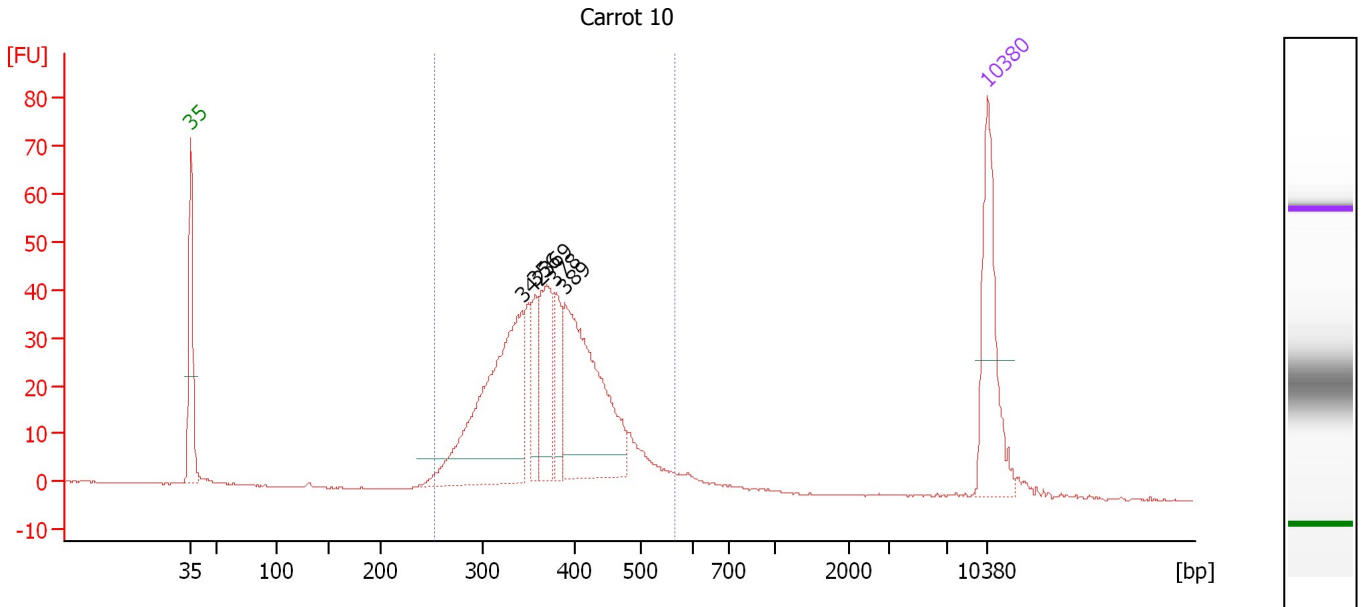
Region table for sample 5 : Carrot 7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
248	537	370	2,962.6	703.02	695.1	95	15.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Carrot 10

Number of peaks found: 5 Corr. Area 1: 640.4
 Noise: 0.1

Peak table for sample 6 : Carrot 10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	342	231.64	1,026.1	
3	356	38.65	164.3	
4	369	78.22	321.1	
5	378	41.81	167.7	
6	389	187.50	731.0	
7	10,380	75.00	10.9	Upper Marker

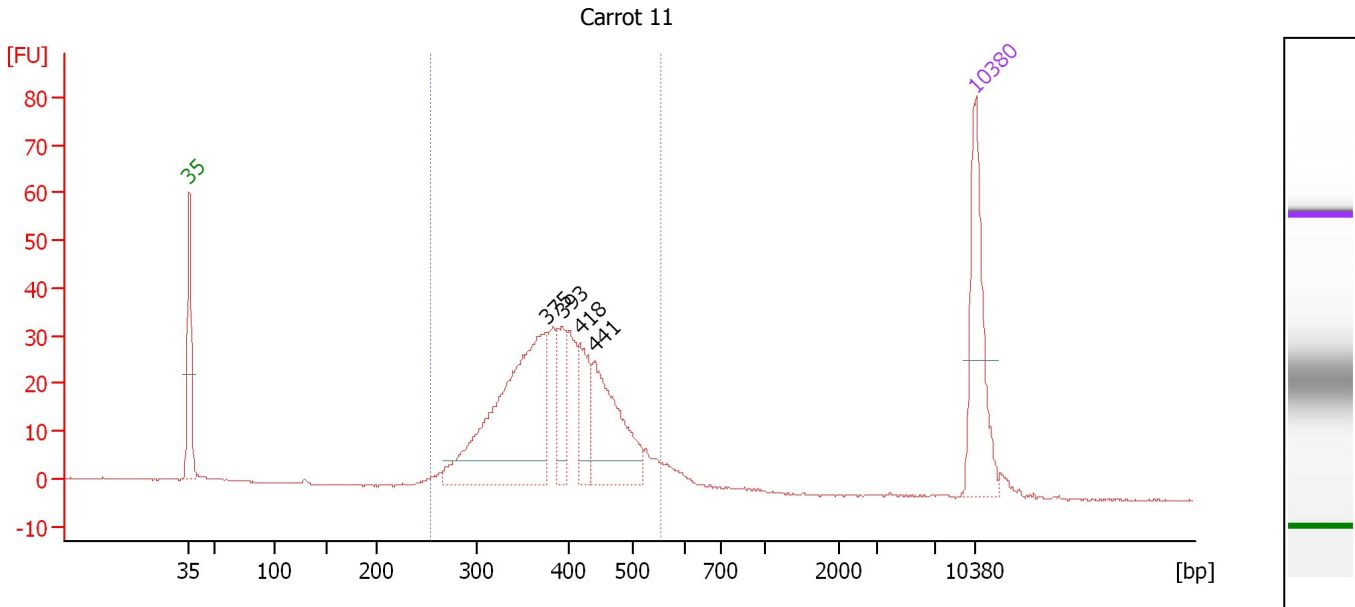
Region table for sample 6 : Carrot 10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
252	566	375	2,948.3	706.49	640.4	95	16.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Carrot 11

Number of peaks found: 4 Corr. Area 1: 515.8
 Noise: 0.1

Peak table for sample 7 : Carrot 11

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	375	241.28	974.5	
3	393	45.39	175.1	
4	418	48.42	175.5	
5	441	103.91	357.2	
6	10,380	75.00	10.9	Upper Marker

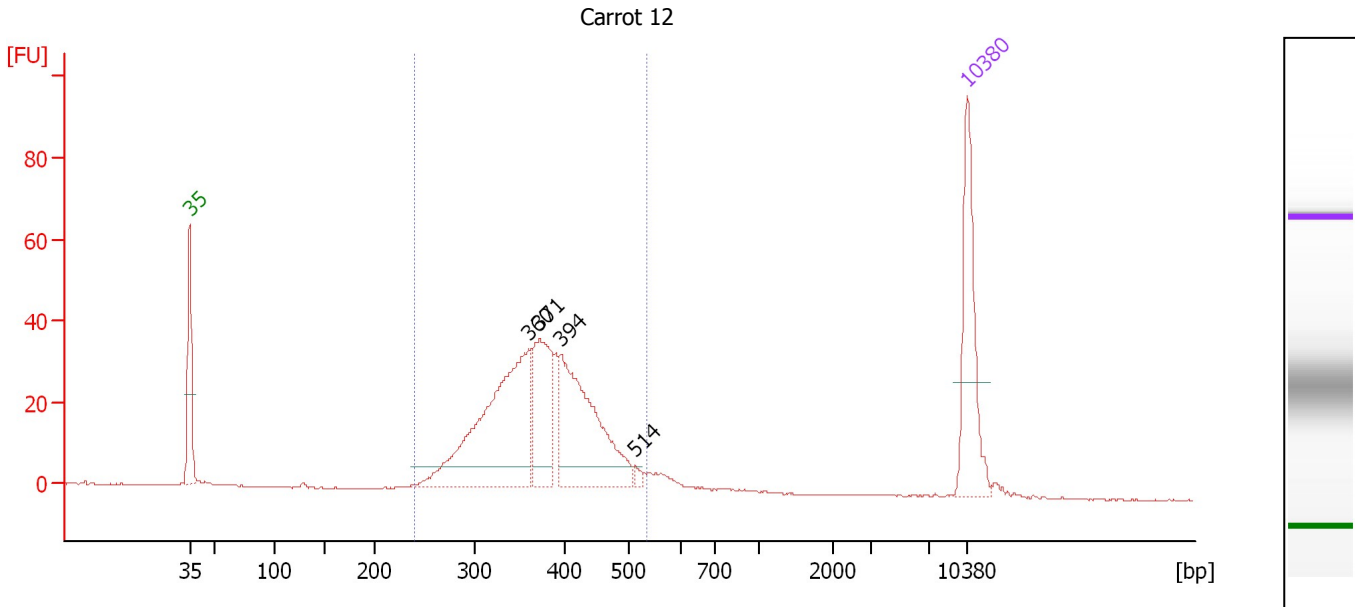
Region table for sample 7 : Carrot 11

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
253	556	391	2,330.4	582.24	515.8	94	15.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Carrot 12

Number of peaks found: 4 Corr. Area 1: 535.0
 Noise: 0.1

Peak table for sample 8 : Carrot 12

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	360	243.02	1,023.7	
3	371	96.51	394.2	
4	394	165.09	634.1	
5	514	4.38	12.9	
6	10,380	75.00	10.9	Upper Marker

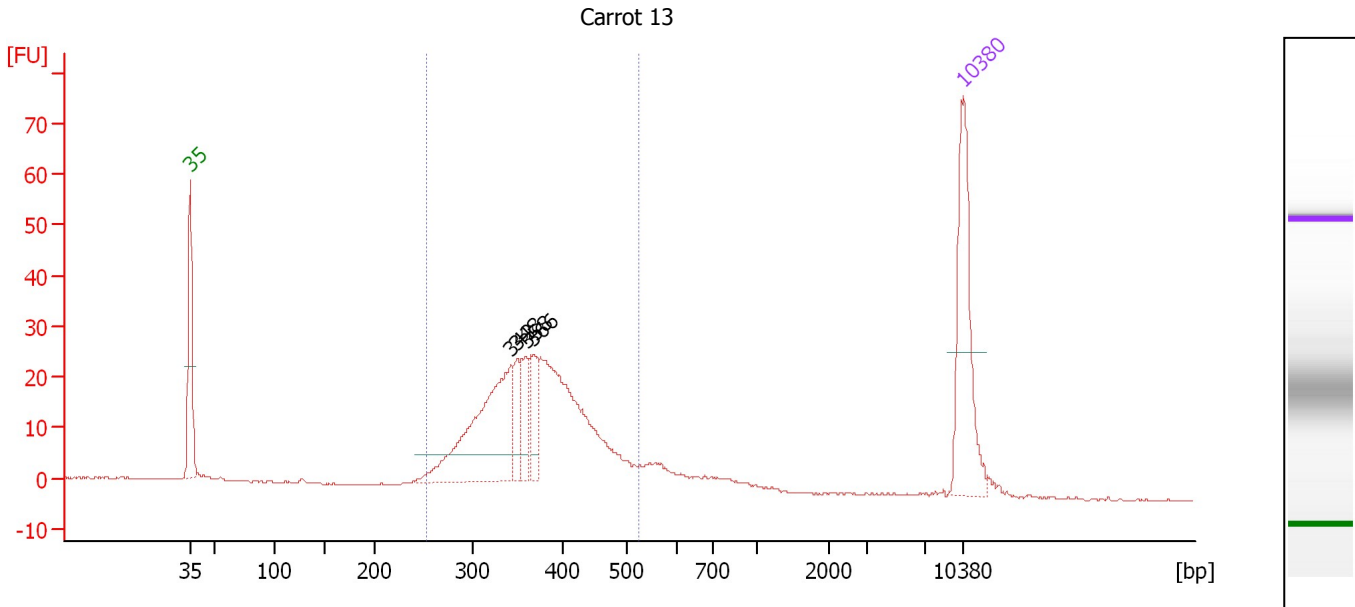
Region table for sample 8 : Carrot 12

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
239	538	375	2,393.8	573.92	535.0	94	15.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Carrot 13

Number of peaks found: 4 Corr. Area 1: 384.4
 Noise: 0.1

Peak table for sample 9 : Carrot 13

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	342	150.45	666.8	
3	348	26.50	115.2	
4	358	26.48	111.9	
5	366	30.26	125.2	
6	10,380	75.00	10.9	Upper Marker

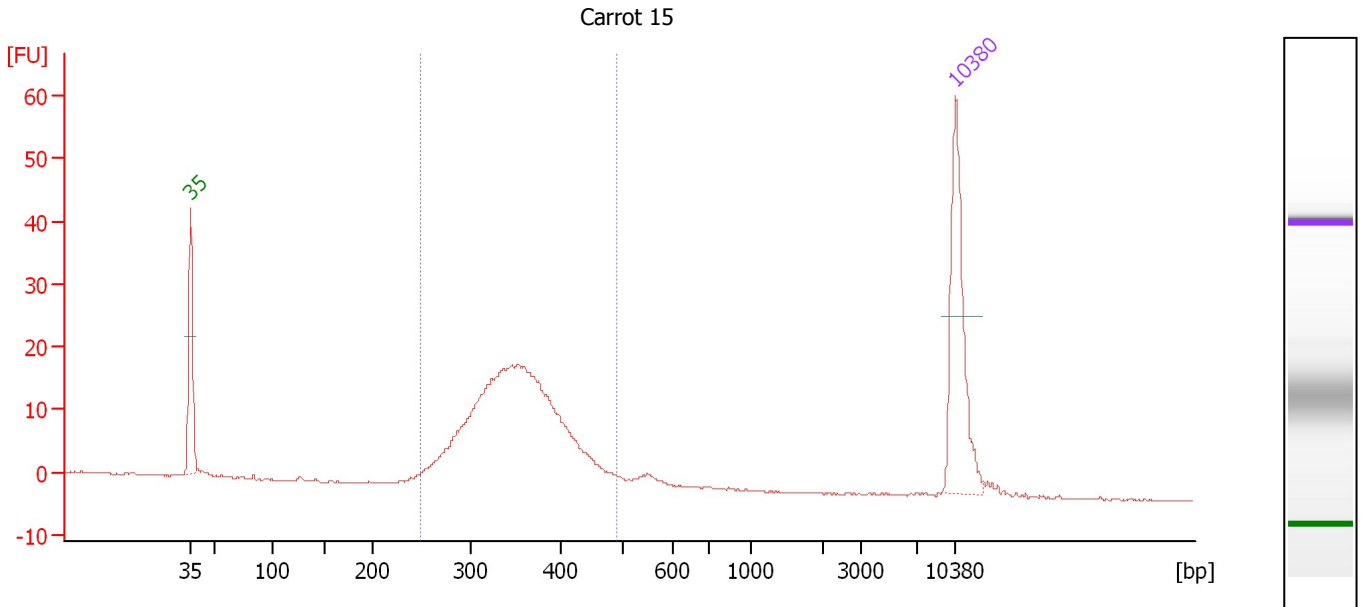
Region table for sample 9 : Carrot 13

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
253	525	370	1,928.6	457.33	384.4	88	15.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Carrot 15

Number of peaks found: 0 Corr. Area 1: 248.8
 Noise: 0.1

Peak table for sample 10 : Carrot 15

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

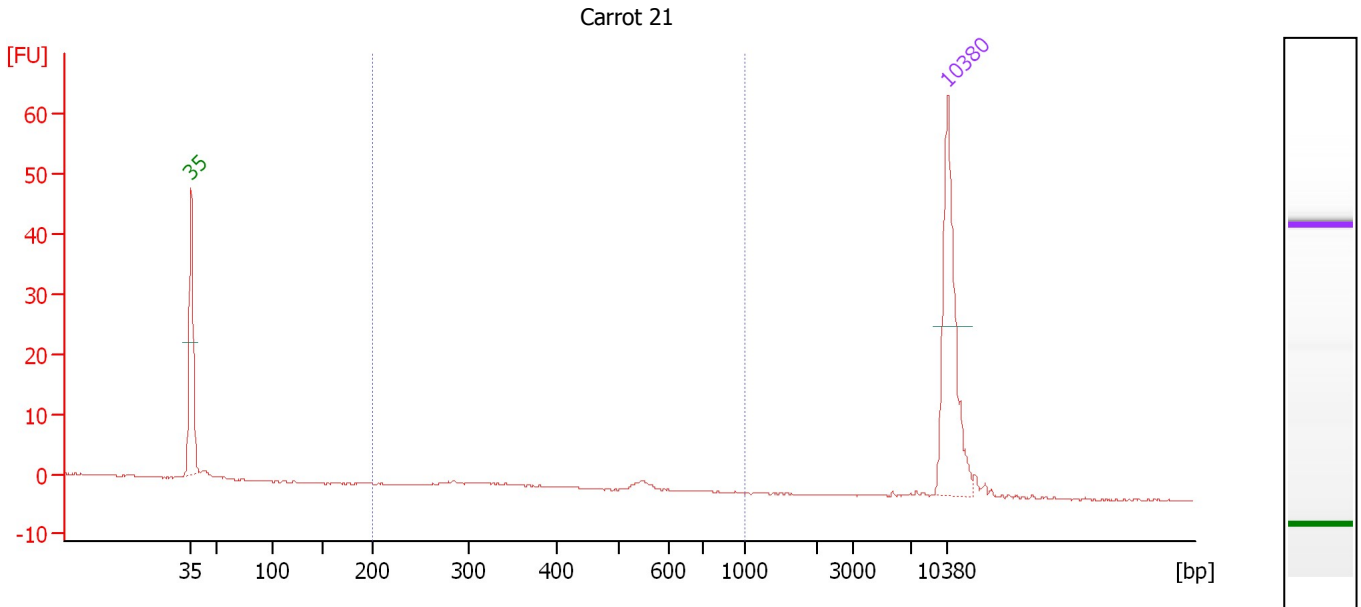
Region table for sample 10 : Carrot 15

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
248	492	352	1,668.3	379.05	248.8	95	13.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Carrot 21

Number of peaks found: 0 Corr. Area 1: 2.7
 Noise: 0.1

Peak table for sample 11 : Carrot 21

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

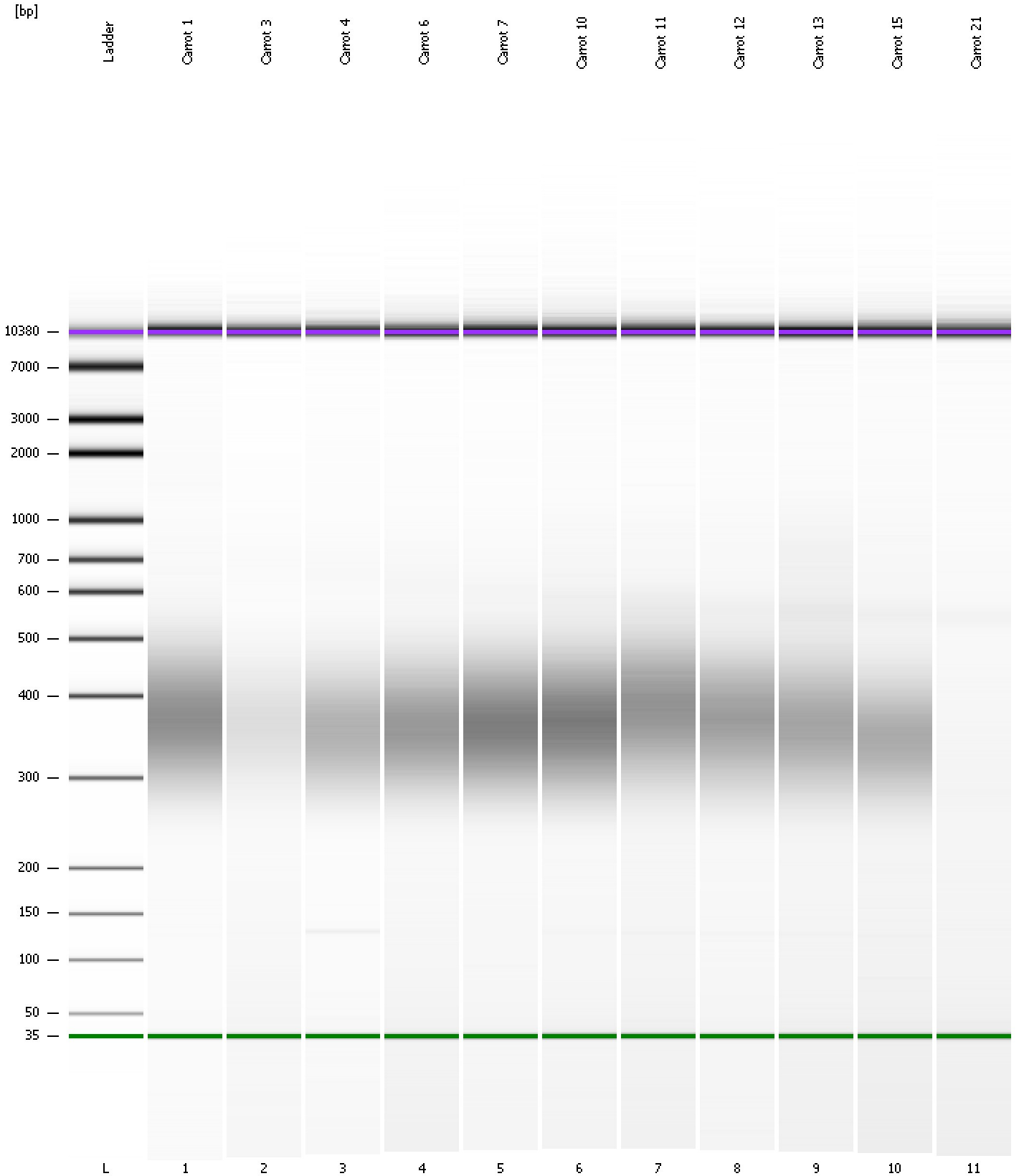
Region table for sample 11 : Carrot 21

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	483	13.2	3.75	2.7	31	22.3	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
Modified: 5/28/2013 11:50:31 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad

Created: 5/28/2013 11:09:13 AM
 Modified: 5/28/2013 11:50:31 AM

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		5/28/2013 11:50:26 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-28\2013-05-28_002.xad)		Instrument	Run		5/28/2013 11:09:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/28/2013 11:09:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/28/2013 11:09:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/28/2013 11:09:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/28/2013 11:09:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/28/2013 11:09:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/28/2013 11:09:13 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1