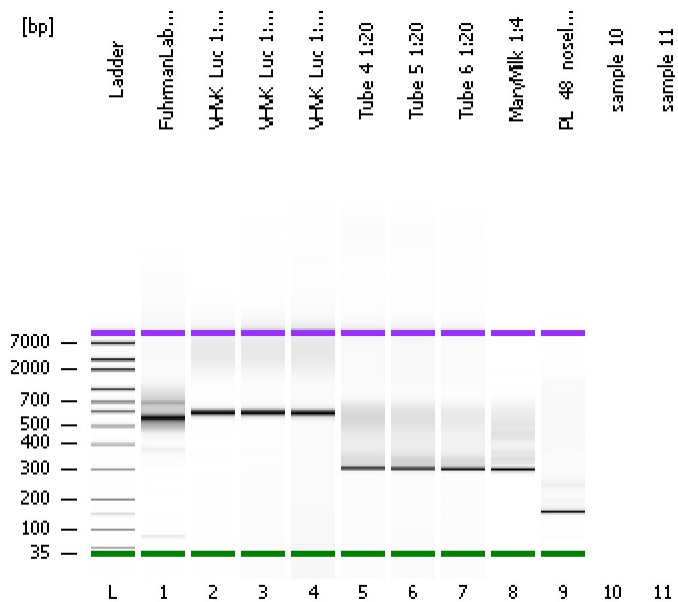


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
Modified: 7/10/2014 1:02:42 PM

Electrophoresis File Run Summary



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

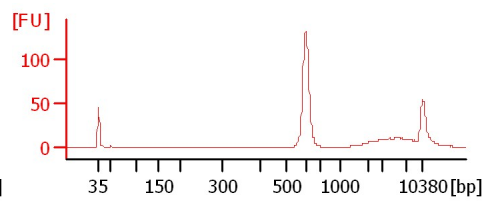
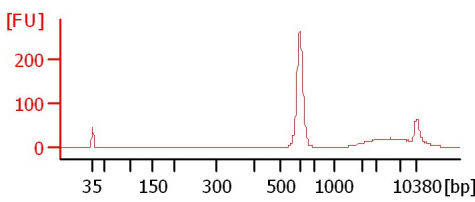
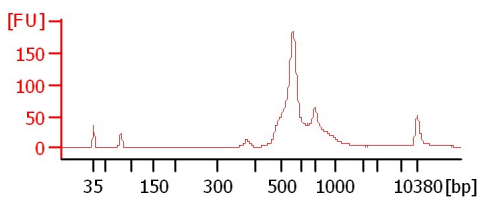
Assay Information:
 Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy
 Assay Class: High Sensitivity DNA Assay
 Version: 1.03
 Assay Comments: Copyright © 2003-2010 Agilent Technologies

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

FuhrmanLab7_2X

VHK_Luc 1:10

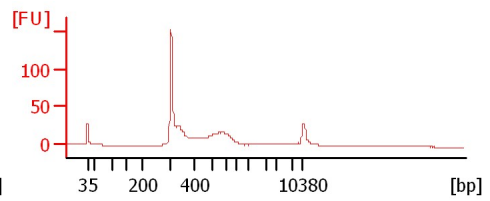
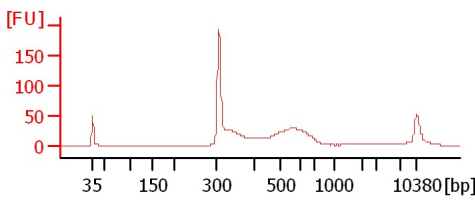
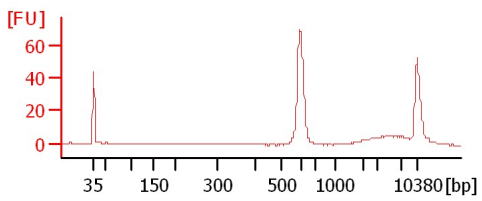
VHK_Luc 1:20



VHK_Luc 1:30

Tube 4 1:20

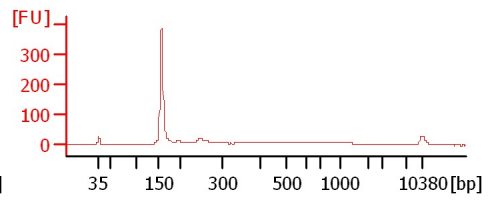
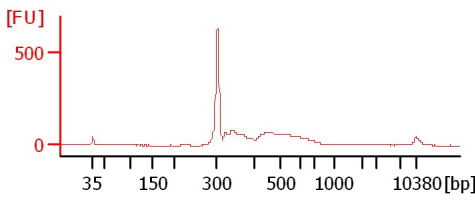
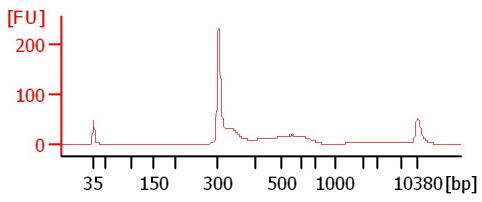
Tube 5 1:20



Tube 6 1:20

MaryMilk 1:4

PL_48_nosel 1:6



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
FuhrmanLab7_2X		<input type="checkbox"/>	✓			
VHVK_Luc 1:10		<input type="checkbox"/>	✓			
VHVK_Luc 1:20		<input type="checkbox"/>	✓			
VHVK_Luc 1:30		<input type="checkbox"/>	✓			
Tube 4 1:20		<input type="checkbox"/>	✓			
Tube 5 1:20		<input type="checkbox"/>	✓			
Tube 6 1:20		<input type="checkbox"/>	✓			
MaryMilk 1:4		<input type="checkbox"/>	✓			
PL_48_nosel 1:6		<input type="checkbox"/>	✓			
sample 10		<input type="checkbox"/>				
sample 11		<input type="checkbox"/>				
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
Modified: 7/10/2014 1:02:42 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/ μ l] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/ μ l] : 125
Upper Marker Concentration [pg/ μ l] : 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

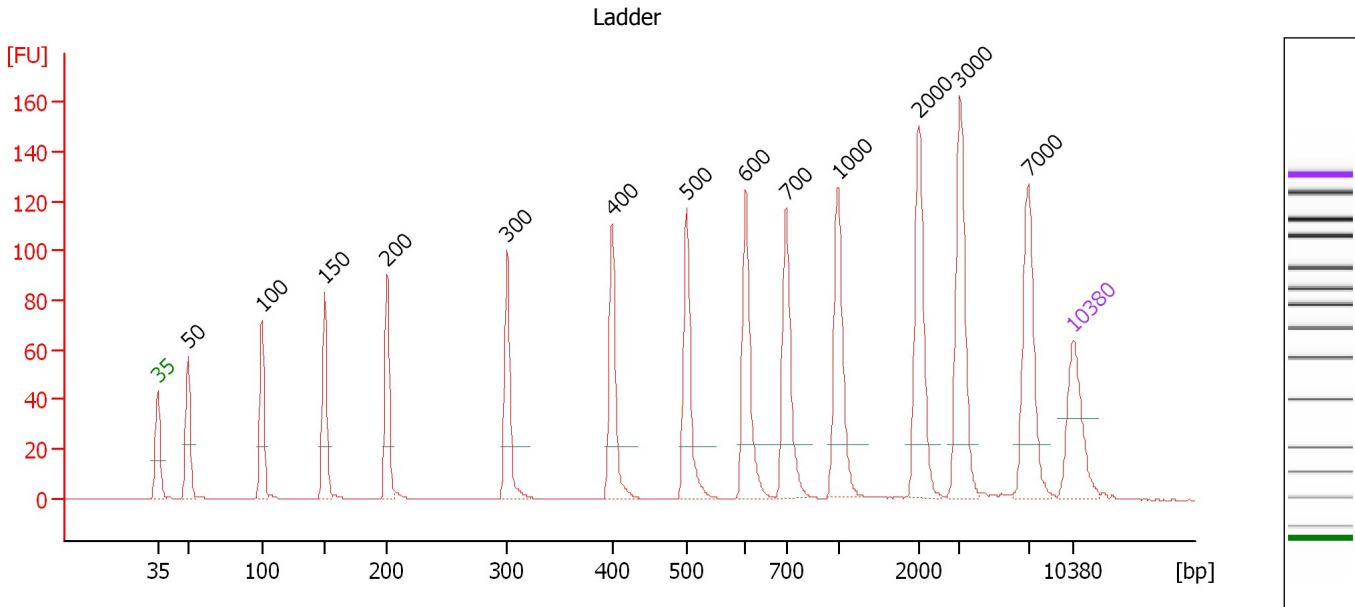
Ladder

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:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

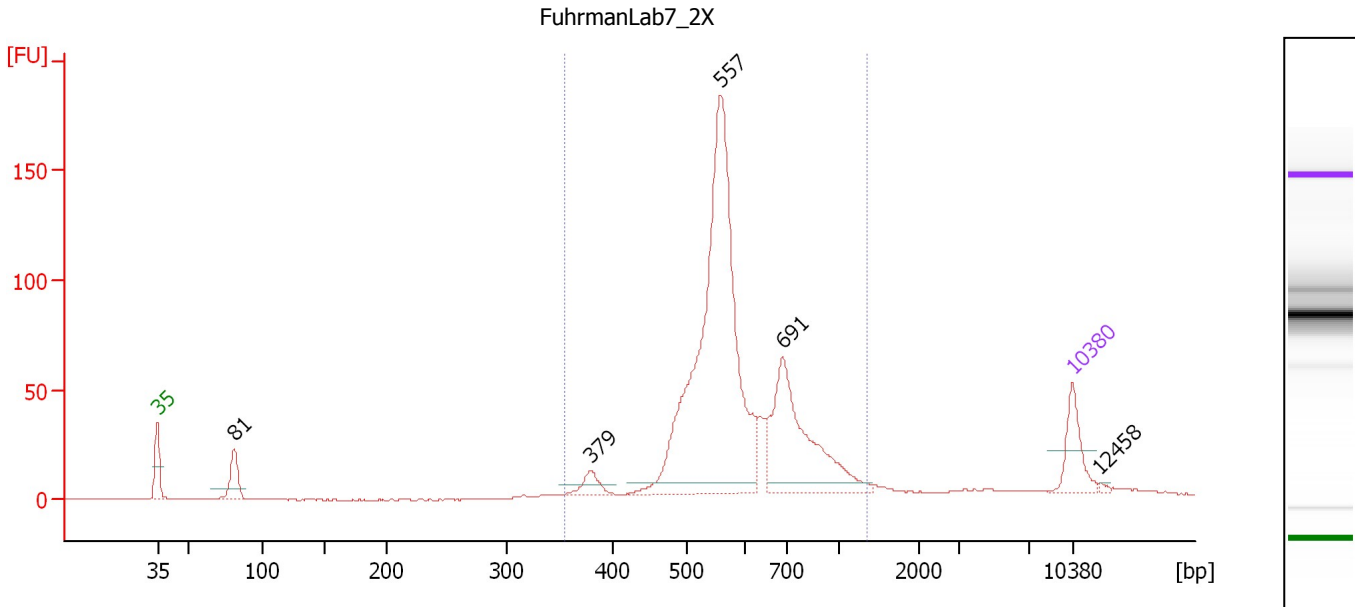
Peak table for Ladder

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

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : FuhrmanLab7_2X

Number of peaks found: 5 Corr. Area 1: 952.3
 Noise: 0.1

Peak table for sample 1 : FuhrmanLab7_2X

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	81	90.75	1,697.6	
3	379	42.42	169.7	
4	557	1,123.87	3,056.6	
5	691	386.83	848.2	
6	10,380	75.00	10.9	Upper Marker
7	12,458	0.00	0.0	

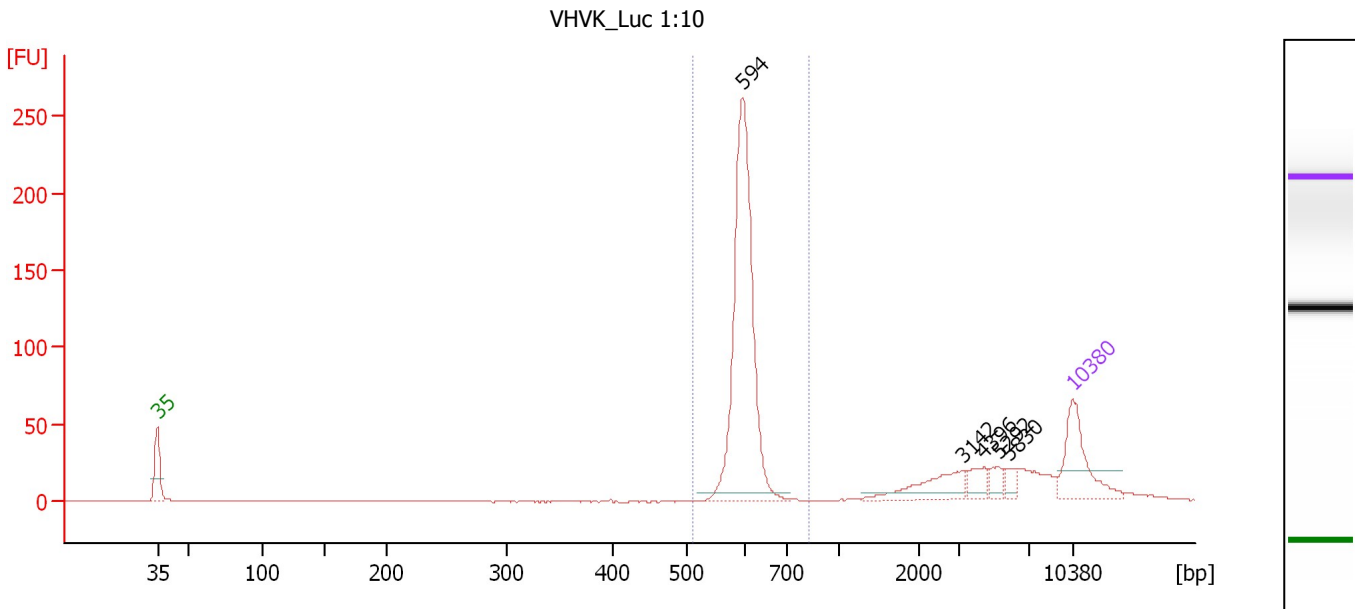
Region table for sample 1 : FuhrmanLab7_2X

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
354	1,357	611	4,535.7	1,726.27	952.3	85	24.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : VHVK_Luc 1:10

Number of peaks found: 5 Corr. Area 1: 487.5
 Noise: 0.2

Peak table for sample 2 : VHVK_Luc 1:10

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	594	432.78	1,103.0	
3	3,142	51.75	25.0	
4	4,396	21.65	7.5	
5	5,292	15.70	4.5	
6	5,830	12.96	3.4	
7	10,380	75.00	10.9	Upper Marker

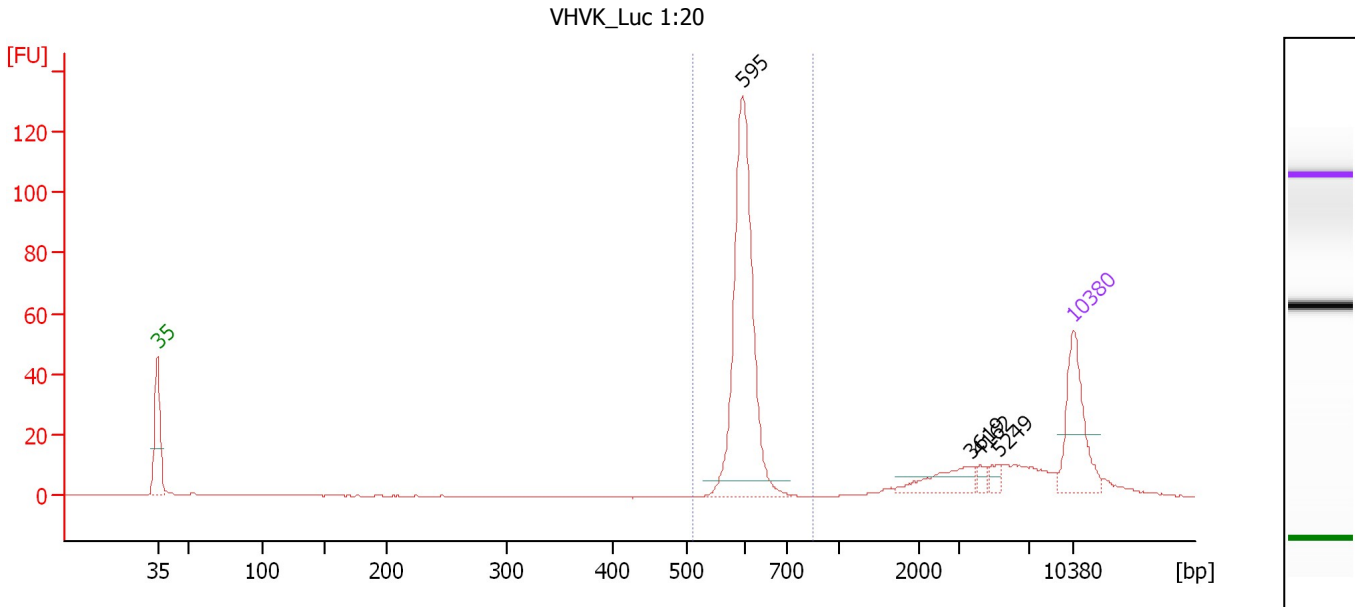
Region table for sample 2 : VHVK_Luc 1:10

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
511	836	600	1,111.1	439.16	487.5	66	3.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : VHVK_Luc 1:20

Number of peaks found: 4 Corr. Area 1: 247.5
 Noise: 0.1

Peak table for sample 3 : VHVK_Luc 1:20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	595	332.27	845.6	
3	3,619	34.71	14.5	
4	4,162	6.94	2.5	
5	5,249	8.21	2.4	
6	10,380	75.00	10.9	Upper Marker

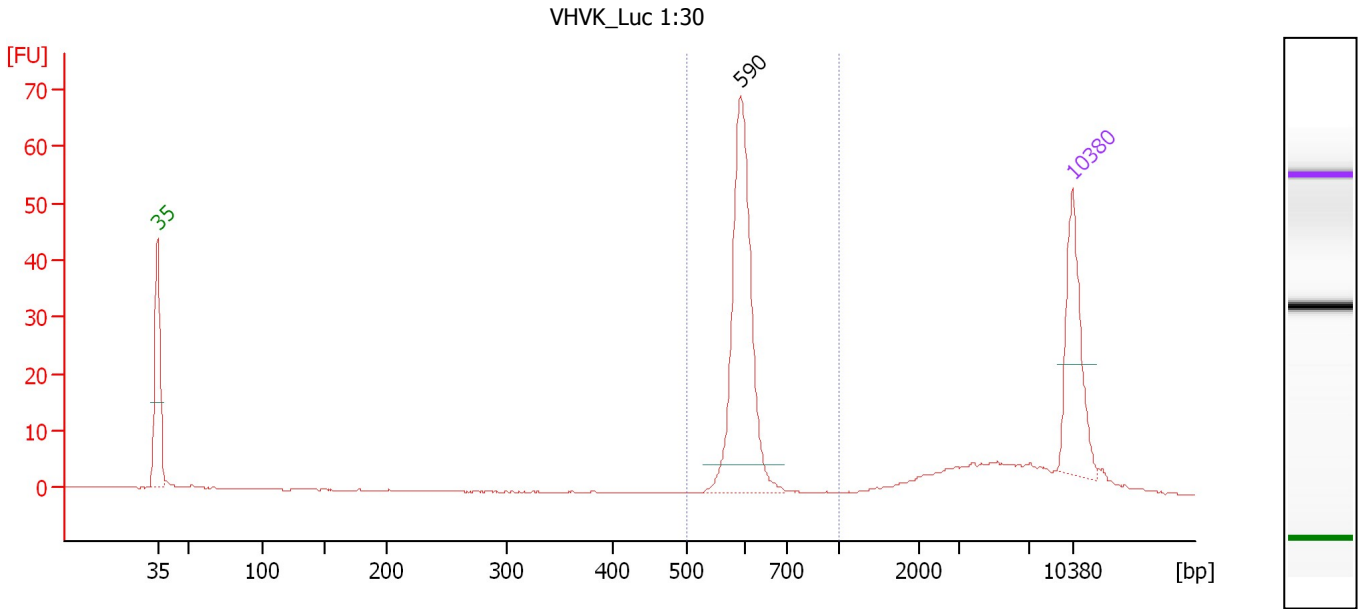
Region table for sample 3 : VHVK_Luc 1:20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
509	853	600	852.1	337.06	247.5	65	4.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : VHVK_Luc 1:30

Number of peaks found: 1 Corr. Area 1: 130.7
 Noise: 0.1

Peak table for sample 4 : VHVK_Luc 1:30

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	590	225.56	578.8	
3	10,380	75.00	10.9	Upper Marker

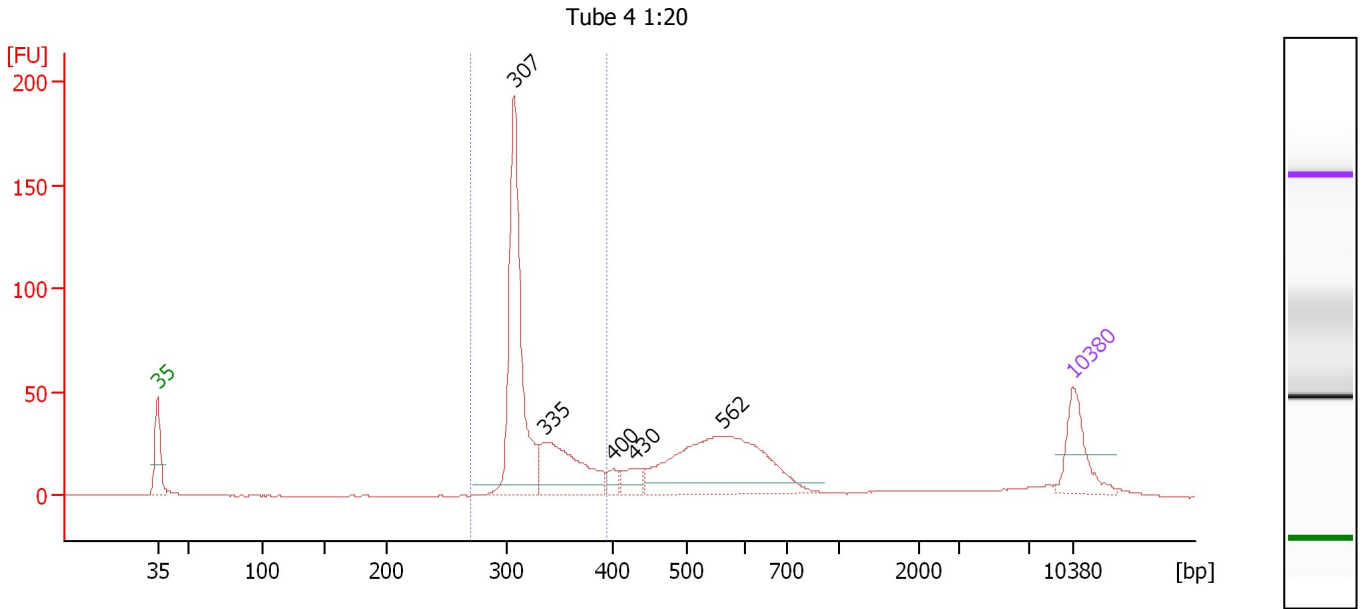
Region table for sample 4 : VHVK_Luc 1:30

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
499	1,000	598	578.0	227.69	130.7	66	4.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Tube 4 1:20

Number of peaks found: 5 Corr. Area 1: 411.3
 Noise: 0.1

Peak table for sample 5 : Tube 4 1:20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	307	443.59	2,191.7	
3	335	188.93	853.6	
4	400	18.69	70.7	
5	430	37.98	133.7	
6	562	351.38	947.7	
7	10,380	75.00	10.9	Upper Marker

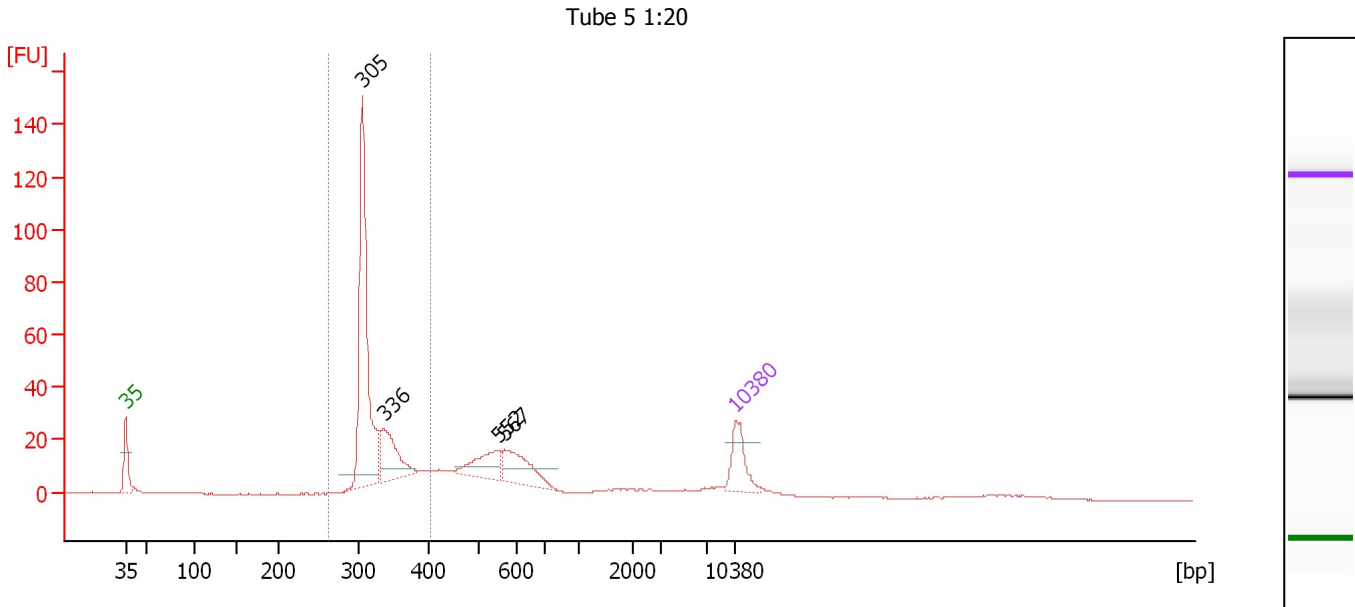
Region table for sample 5 : Tube 4 1:20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
269	394	324	2,977.1	636.98	411.3	48	7.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Tube 5 1:20

Number of peaks found: 4 Corr. Area 1: 339.4
 Noise: 0.1

Peak table for sample 6 : Tube 5 1:20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	305	596.50	2,960.9	
3	336	150.34	678.7	
4	552	91.38	250.7	
5	567	120.82	322.8	
6	10,380	75.00	10.9	Upper Marker

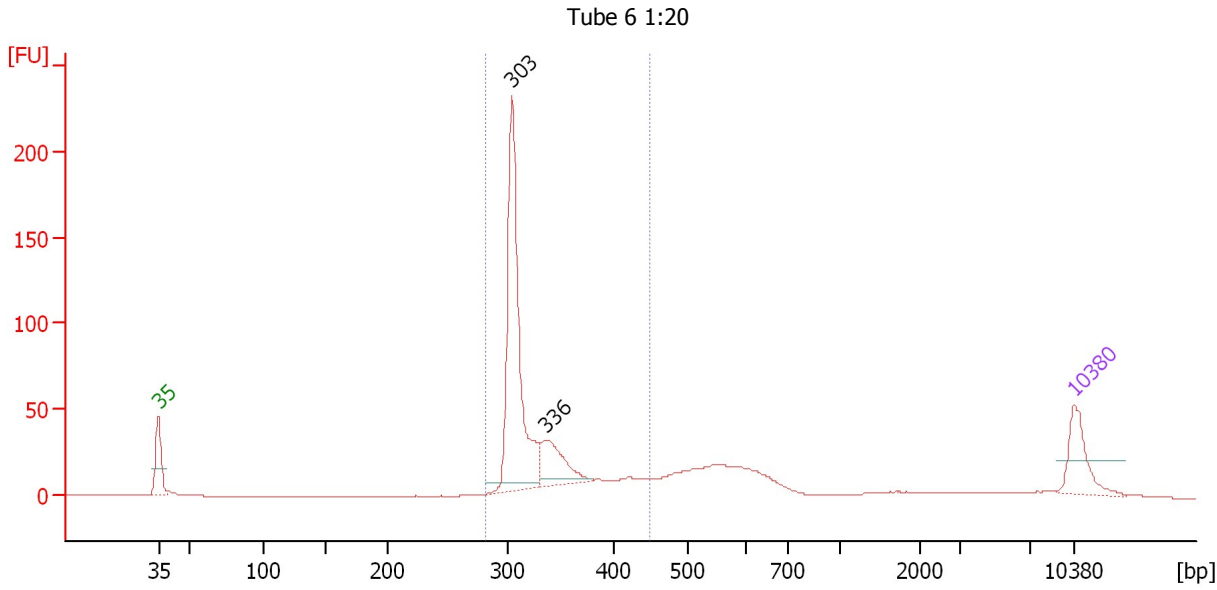
Region table for sample 6 : Tube 5 1:20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
262	402	325	4,351.8	932.02	339.4	56	8.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Tube 6 1:20

Number of peaks found: 2 Corr. Area 1: 507.1
 Noise: 0.1

Peak table for sample 7 : Tube 6 1:20

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	303	548.02	2,738.5	
3	336	120.65	544.6	
4	10,380	75.00	10.9	Upper Marker

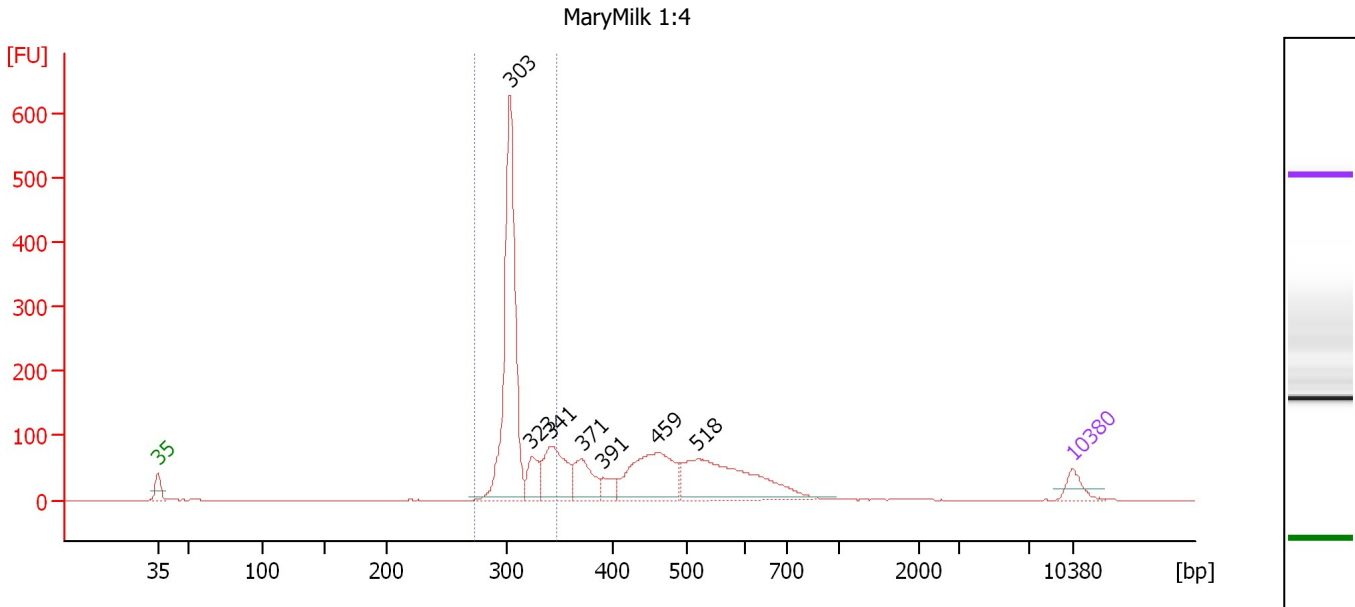
Region table for sample 7 : Tube 6 1:20

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
281	448	329	3,910.9	840.83	507.1	66	11.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : MaryMilk 1:4

Number of peaks found: 7 Corr. Area 1: 1,014.4
 Noise: 0.1

Peak table for sample 8 : MaryMilk 1:4

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	303	1,643.46	8,220.3	
3	323	170.46	799.0	
4	341	423.93	1,882.6	
5	371	250.77	1,024.5	
6	391	84.26	326.4	
7	459	602.67	1,988.0	
8	518	798.88	2,334.7	
9	10,380	75.00	10.9	Upper Marker

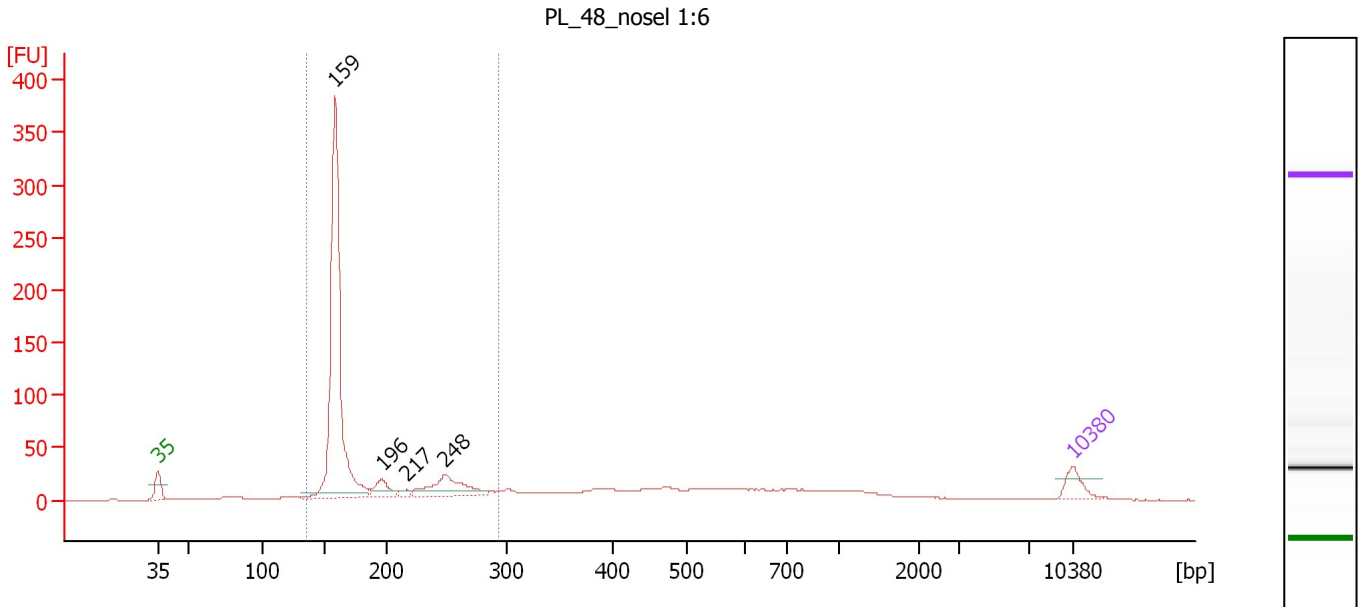
Region table for sample 8 : MaryMilk 1:4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
272	347	309	10,081.0	2,051.88	1,014.4	48	4.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : PL 48 nosel 1:6

Number of peaks found: 4 Corr. Area 1: 717.8
 Noise: 0.1

Peak table for sample 9 : PL 48 nosel 1:6

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	159	1,915.43	18,275.6	
3	196	111.81	865.4	
4	217	24.60	171.9	
5	248	253.91	1,549.3	
6	10,380	75.00	10.9	Upper Marker

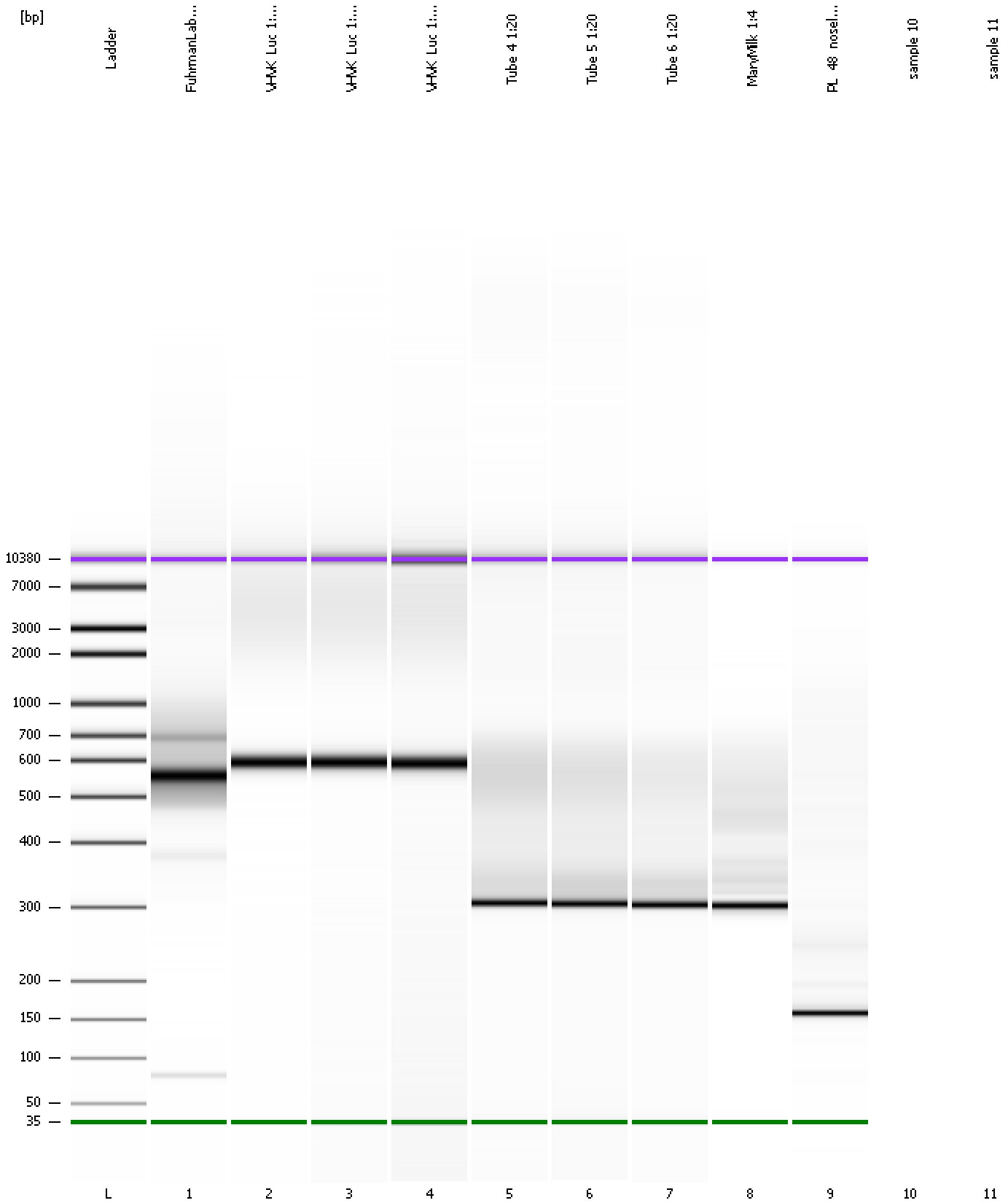
Region table for sample 9 : PL 48 nosel 1:6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
135	292	182	22,557.1	2,581.39	717.8	65	21.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
Modified: 7/10/2014 1:02:42 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
Modified: 7/10/2014 1:02:42 PM

Invalid Samples

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad

Created: 7/10/2014 12:21:12 PM
 Modified: 7/10/2014 1:02:42 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		7/10/2014 12:56:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-07-10\2014-07-10_002.xad)		Instrument	Run		7/10/2014 12:21:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/10/2014 12:21:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/10/2014 12:21:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/10/2014 12:21:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/10/2014 12:21:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/10/2014 12:21:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/10/2014 12:21:12 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1