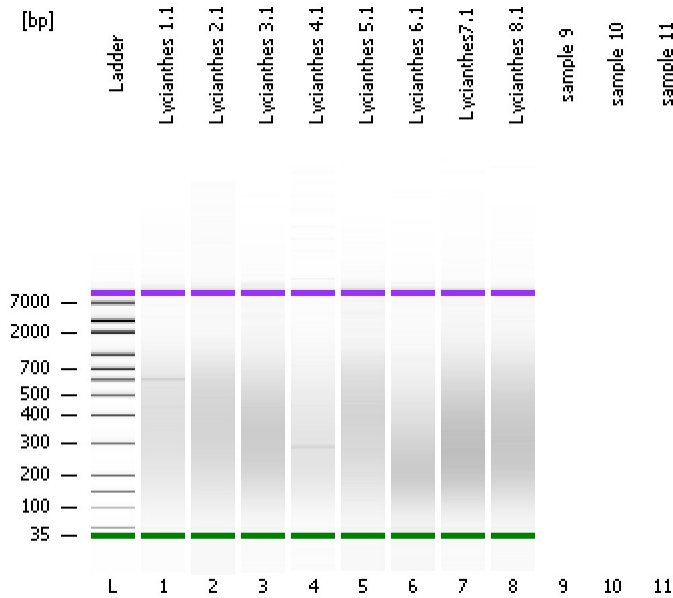


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
Modified: 10/28/2016 11:01:15 AM

Electrophoresis File Run Summary



Instrument Information:

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

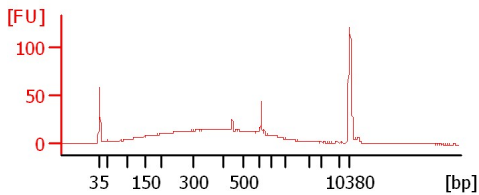
Assay Information:

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

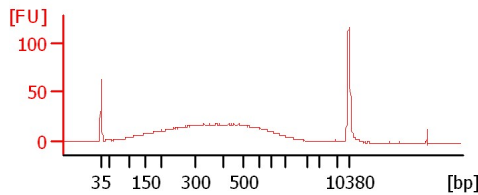
Chip Information:

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

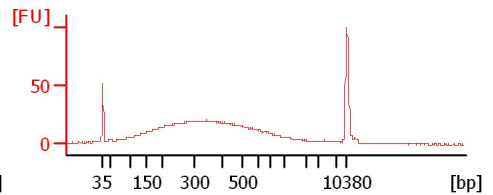
Lycianthes 1.1



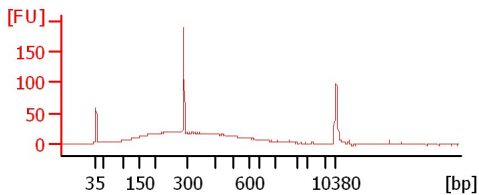
Lycianthes 2.1



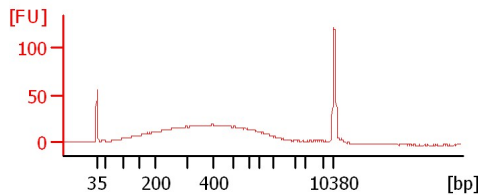
Lycianthes 3.1



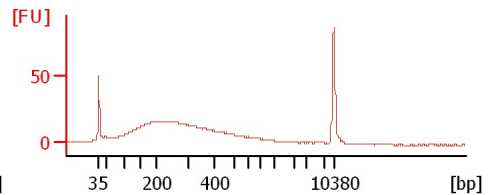
Lycianthes 4.1



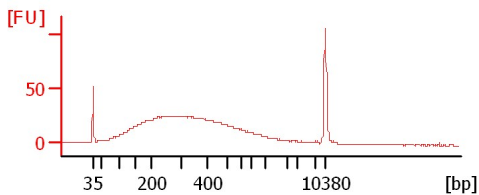
Lycianthes 5.1



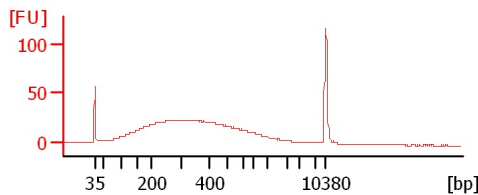
Lycianthes 6.1



Lycianthes7.1



Lycianthes 8.1



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
 Modified: 10/28/2016 11:01:15 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Lycianthes 1.1		<input type="checkbox"/>	✓			
Lycianthes 2.1		<input type="checkbox"/>	✓			
Lycianthes 3.1		<input type="checkbox"/>	✓			
Lycianthes 4.1		<input type="checkbox"/>	✓			
Lycianthes 5.1		<input type="checkbox"/>	✓			
Lycianthes 6.1		<input type="checkbox"/>	✓			
Lycianthes7.1		<input type="checkbox"/>	✓			
Lycianthes 8.1		<input type="checkbox"/>	✓			
sample 9		<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\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
Modified: 10/28/2016 11:01:15 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

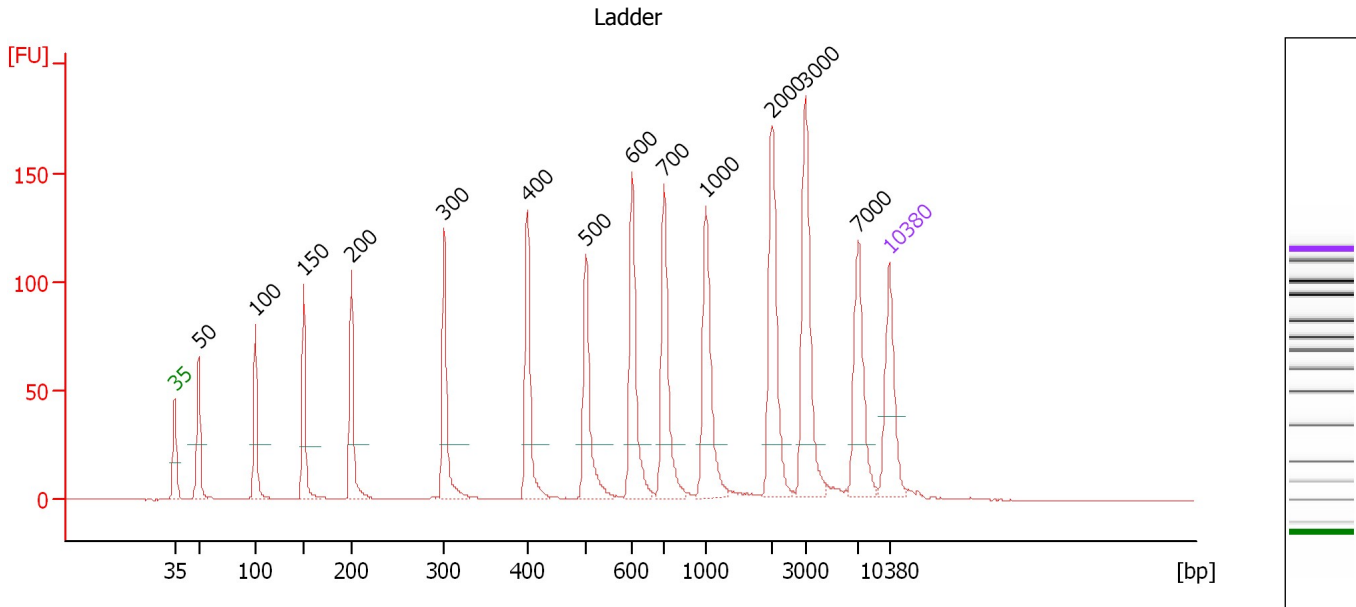
Ladder

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:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
 Modified: 10/28/2016 11:01:15 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

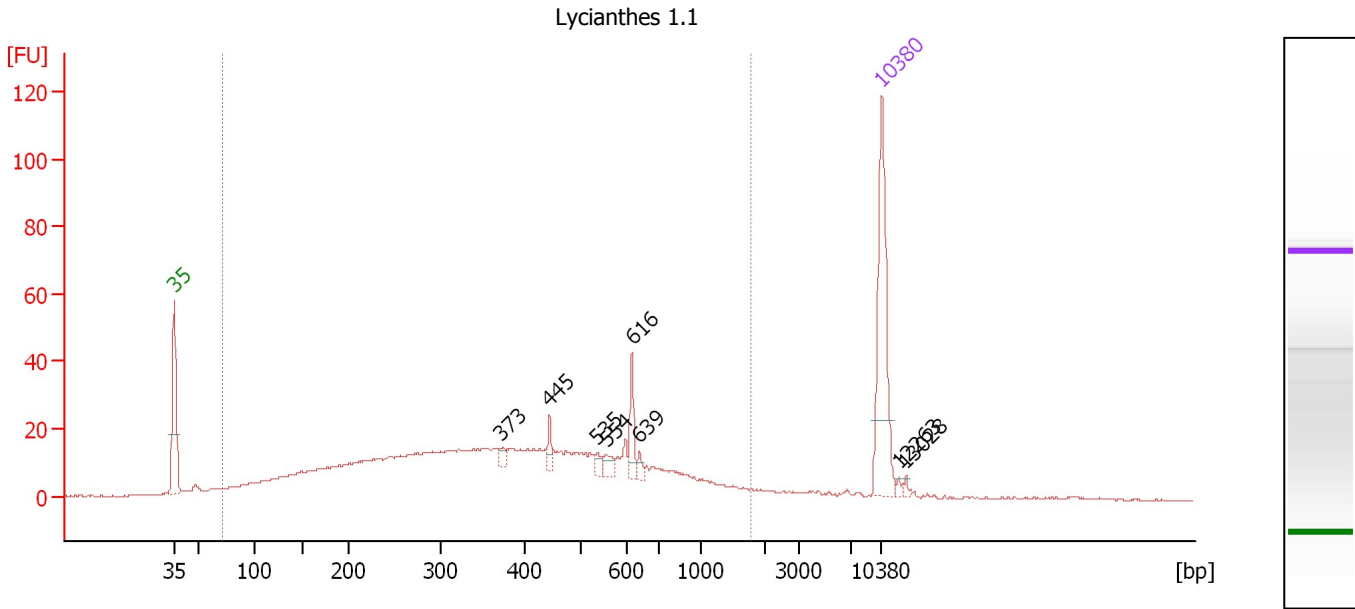
Peak table for Ladder

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	45.35
3	100	150.00	2,272.7	Ladder Peak	50.89
4	150	150.00	1,515.2	Ladder Peak	55.64
5	200	150.00	1,136.4	Ladder Peak	60.29
6	300	150.00	757.6	Ladder Peak	69.43
7	400	150.00	568.2	Ladder Peak	77.58
8	500	150.00	454.5	Ladder Peak	83.28
9	600	150.00	378.8	Ladder Peak	87.82
10	700	150.00	324.7	Ladder Peak	90.96
11	1,000	150.00	227.3	Ladder Peak	95.08
12	2,000	150.00	113.6	Ladder Peak	101.51
13	3,000	150.00	75.8	Ladder Peak	104.80
14	7,000	150.00	32.5	Ladder Peak	109.97
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
 Modified: 10/28/2016 11:01:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Lycianthes 1.1

Number of peaks found: 8 Corr. Area 1: 719.6
 Noise: 0.2

Peak table for sample 1 : Lycianthes 1.1

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	373	6.29	25.5		75.39
3	445	8.73	29.7		80.14
4	535	5.04	14.3		84.88
5	554	8.11	22.2		85.73
6	616	17.52	43.1		88.31
7	639	4.66	11.0		89.05
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,263	0.00	0.0		114.69
10	13,028	0.00	0.0		115.37

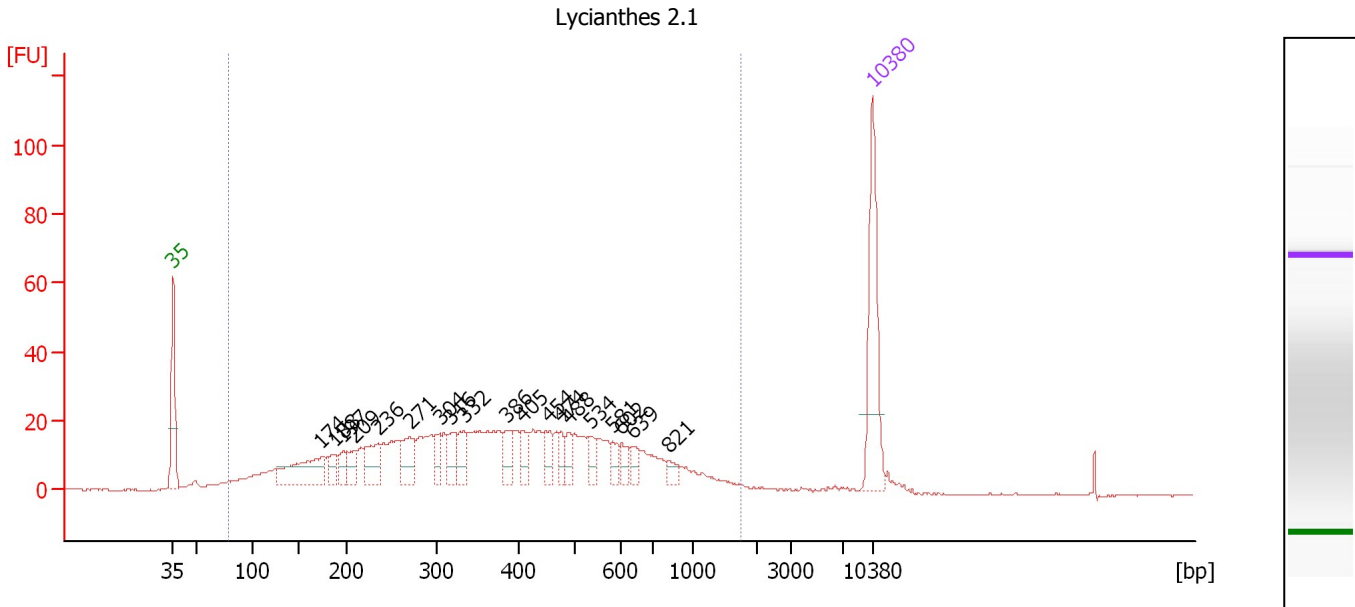
Region table for sample 1 : Lycianthes 1.1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
72	1,787	426	719.6	4,973.1	854.32	92	61.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
 Modified: 10/28/2016 11:01:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Lycianthes 2.1

Number of peaks found: 19 Corr. Area 1: 810.8
 Noise: 0.1

Peak table for sample 2 : Lycianthes 2.1

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	174	74.04	646.4		57.83
3	188	19.15	154.0		59.22
4	197	14.88	114.7		59.97
5	209	22.72	164.5		61.14
6	236	37.27	239.7		63.54
7	271	36.08	202.0		66.74
8	304	17.57	87.7		69.73
9	316	25.56	122.5		70.74
10	332	23.74	108.2		72.08
11	386	20.44	80.2		76.45
12	405	15.99	59.8		77.89
13	454	18.57	61.9		80.67
14	474	13.59	43.5		81.79
15	488	13.30	41.3		82.59
16	534	14.42	40.9		84.83
17	581	12.46	32.5		86.96
18	602	10.79	27.2		87.87
19	639	10.85	25.7		89.04
20	821	8.34	15.4		92.62
21	10,380	75.00	10.9	Upper Marker	113.00

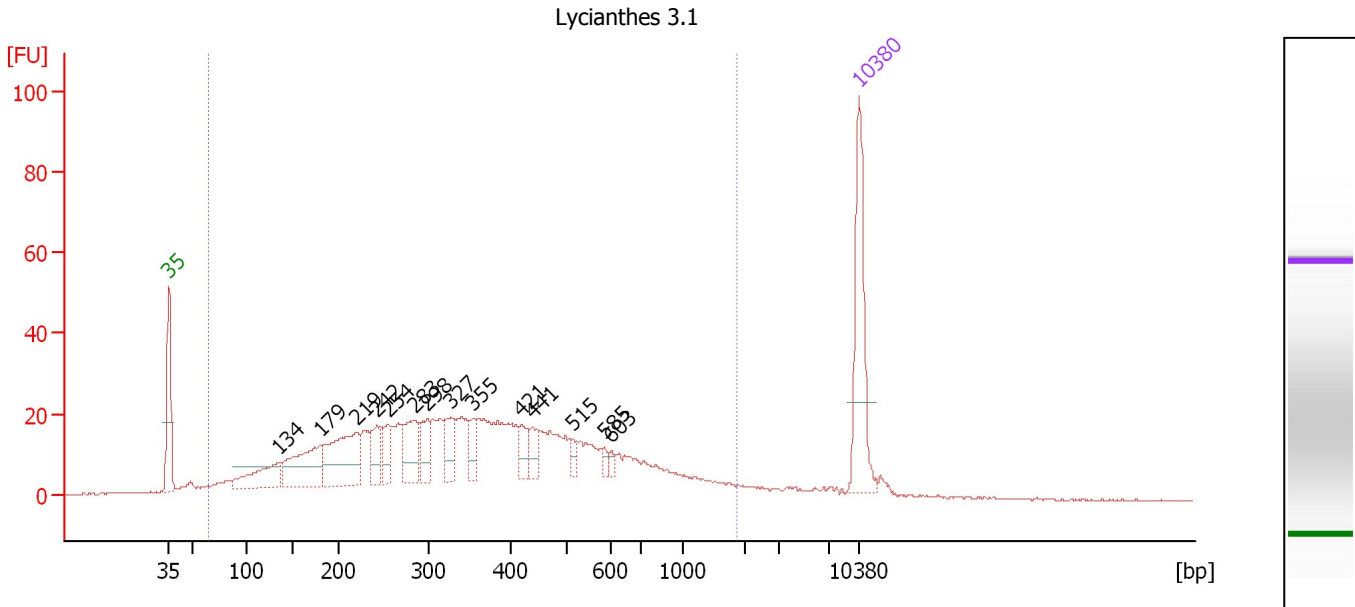
Region table for sample 2 : Lycianthes 2.1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
79	1,744	418	810.8	5,626.2	1,000.30	96	57.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
 Modified: 10/28/2016 11:01:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Lycianthes 3.1

Number of peaks found: 14 Corr. Area 1: 889.2
 Noise: 0.2

Peak table for sample 3 : Lycianthes 3.1

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	134	59.55	675.0		54.09
3	179	85.68	726.5		58.31
4	219	99.79	689.9		62.04
5	242	29.02	181.5		64.15
6	254	29.16	173.9		65.23
7	283	50.85	272.2		67.88
8	298	24.73	125.8		69.24
9	327	28.13	130.4		71.62
10	355	17.66	75.4		73.89
11	421	17.30	62.3		78.76
12	441	18.26	62.8		79.89
13	515	9.45	27.8		83.95
14	585	5.56	14.4		87.14
15	603	4.77	12.0		87.90
16	10,380	75.00	10.9	Upper Marker	113.00

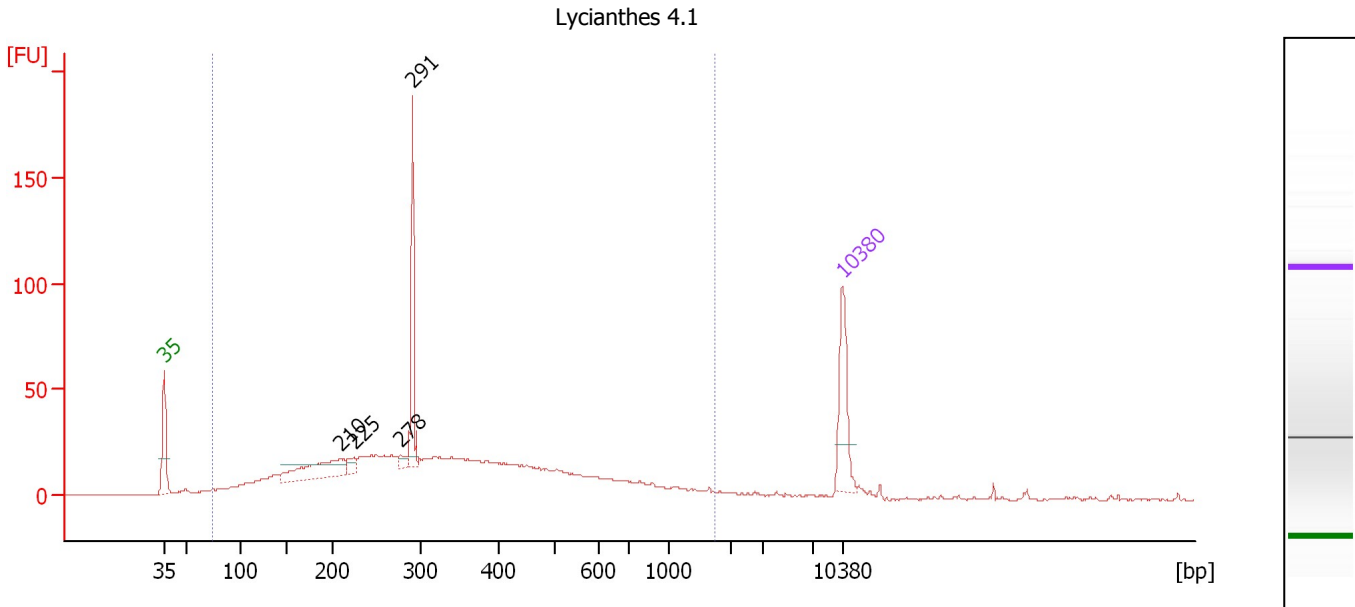
Region table for sample 3 : Lycianthes 3.1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
65	1,870	402	889.2	7,241.1	1,184.78	93	65.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
 Modified: 10/28/2016 11:01:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Lycianthes 4.1

Number of peaks found: 4 Corr. Area 1: 929.8
 Noise: 0.2

Peak table for sample 4 : Lycianthes 4.1

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	210	109.61	792.7		61.16
3	225	18.45	124.2		62.59
4	278	14.66	79.9		67.43
5	291	105.74	549.9		68.64
6	10,380	75.00	10.9	Upper Marker	113.00

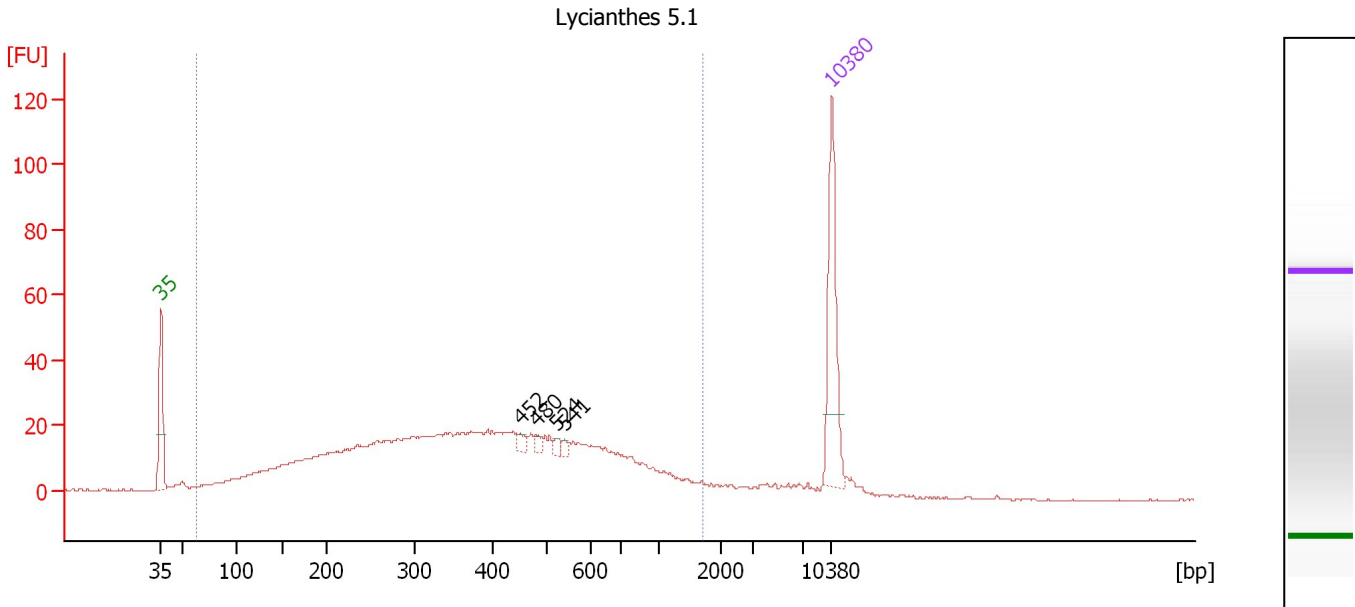
Region table for sample 4 : Lycianthes 4.1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
74	1,737	372	929.8	8,757.0	1,418.27	94	63.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
 Modified: 10/28/2016 11:01:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Lycianthes 5.1

Number of peaks found: 4 Corr. Area 1: 848.2
 Noise: 0.2

Peak table for sample 5 : Lycianthes 5.1

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	6.42	21.5		80.53
3	480	4.70	14.8		82.15
4	524	5.00	14.5		84.38
5	541	4.30	12.0		85.16
6	10,380	75.00	10.9	Upper Marker	113.00

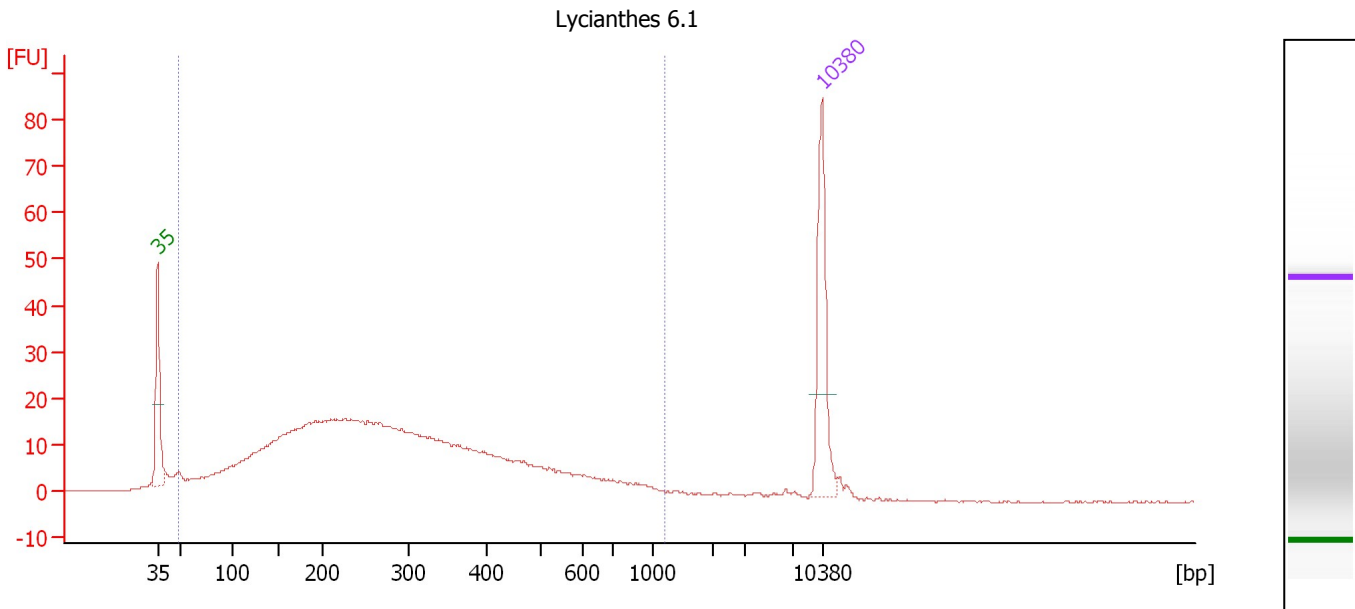
Region table for sample 5 : Lycianthes 5.1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
62	1,693	427	848.2	5,633.5	999.22	94	58.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
 Modified: 10/28/2016 11:01:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Lycianthes 6.1

Number of peaks found: 0 Corr. Area 1: 648.3
 Noise: 0.2

Peak table for sample 6 : Lycianthes 6.1

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	10,380	75.00	10.9	Upper Marker	113.00

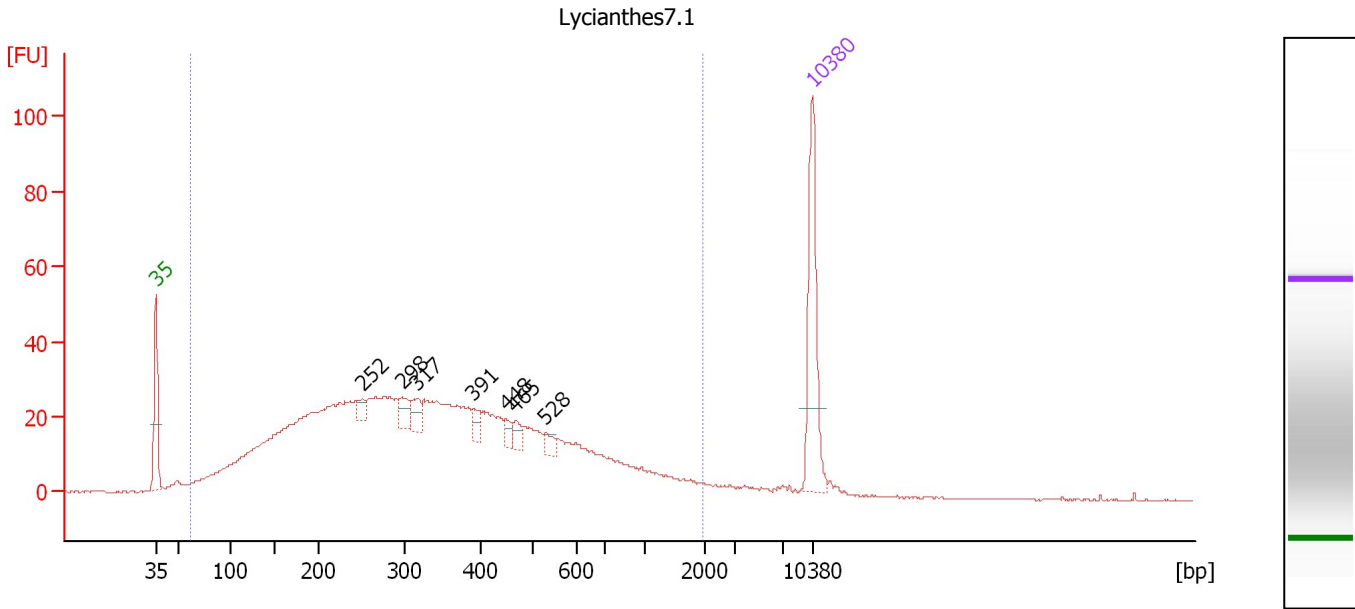
Region table for sample 6 : Lycianthes 6.1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
49	1,212	303	648.3	8,237.2	1,077.55	95	55.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
 Modified: 10/28/2016 11:01:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Lycianthes7.1

Number of peaks found: 7 Corr. Area 1: 1,191.2
 Noise: 0.2

Peak table for sample 7 : Lycianthes7.1

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	252	11.29	67.9		65.02
3	298	16.41	83.5		69.24
4	317	15.36	73.4		70.83
5	391	9.78	37.9		76.86
6	448	7.41	25.1		80.33
7	465	9.27	30.2		81.30
8	528	8.72	25.0		84.54
9	10,380	75.00	10.9	Upper Marker	113.00

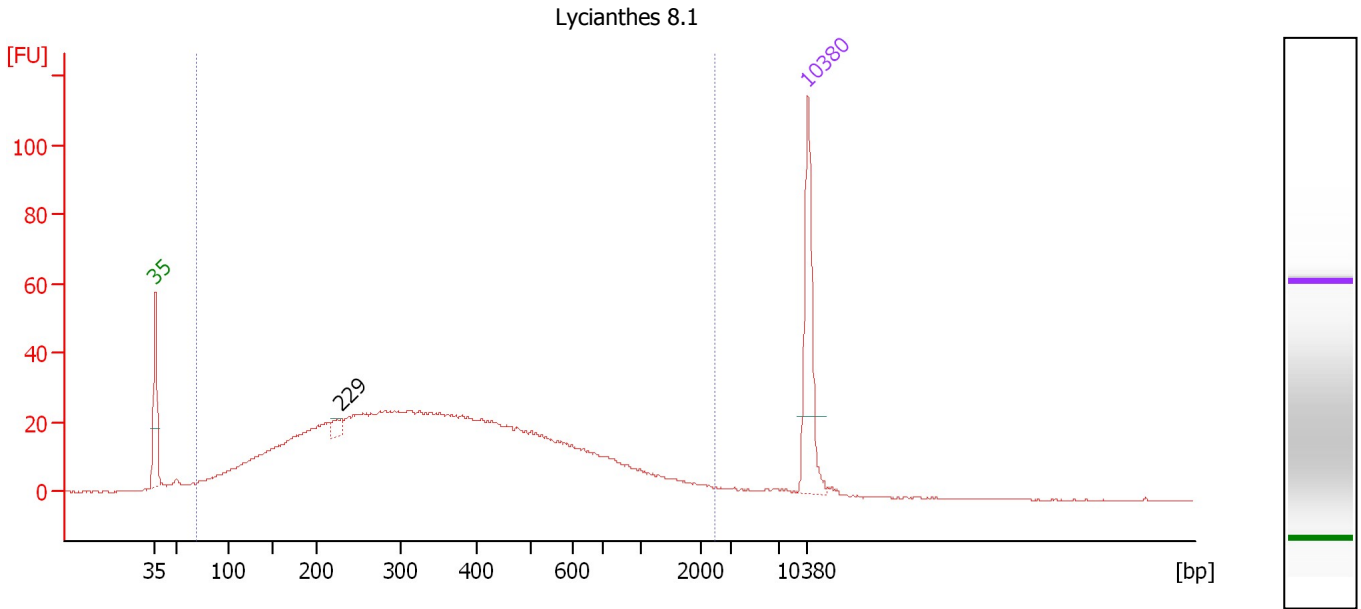
Region table for sample 7 : Lycianthes7.1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
61	1,965	387	1,191.2	10,054.5	1,572.92	96	69.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
 Modified: 10/28/2016 11:01:15 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Lycianthes 8.1

Number of peaks found: 1 Corr. Area 1: 1,120.7
 Noise: 0.2

Peak table for sample 8 : Lycianthes 8.1

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	229	13.28	87.8		62.96
3	10,380	75.00	10.9	Upper Marker	113.00

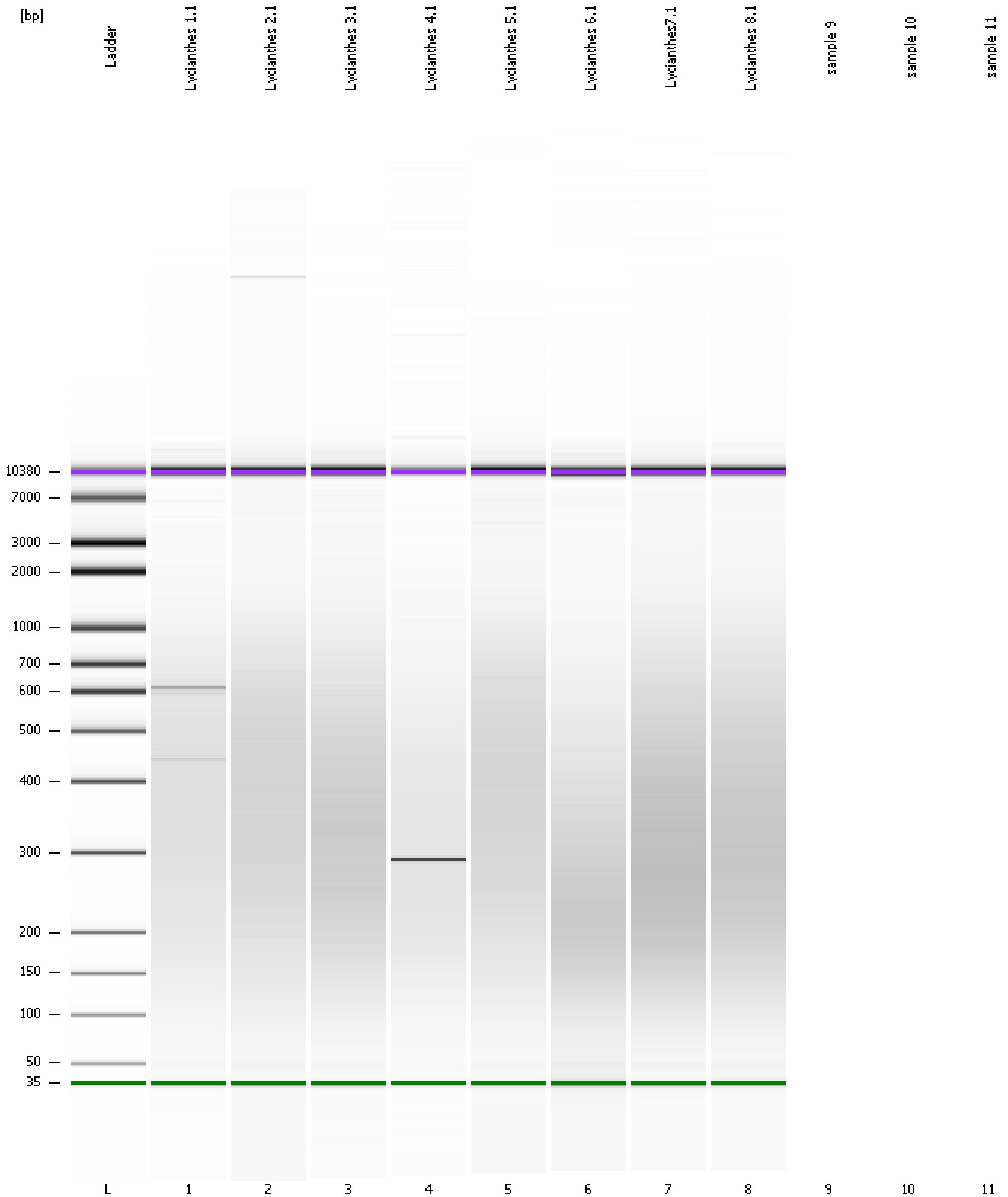
Region table for sample 8 : Lycianthes 8.1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
69	2,479	417	1,120.7	8,491.4	1,400.44	96	75.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
Modified: 10/28/2016 11:01:15 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
Modified: 10/28/2016 11:01:15 AM

Invalid Samples

Sample 9 has not been run, no results available.

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\2016-10-28\2016-10-28_001.xad

Created: 10/28/2016 10:25:50 AM
 Modified: 10/28/2016 11:01:15 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		10/28/2016 10:58:32 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-10-28\2016-10-28_001.xad)		Instrument	Run		10/28/2016 10:25:56 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		10/28/2016 10:25:56 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		10/28/2016 10:25:56 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		10/28/2016 10:25:56 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		10/28/2016 10:25:56 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		10/28/2016 10:25:56 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		10/28/2016 10:25:56 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1