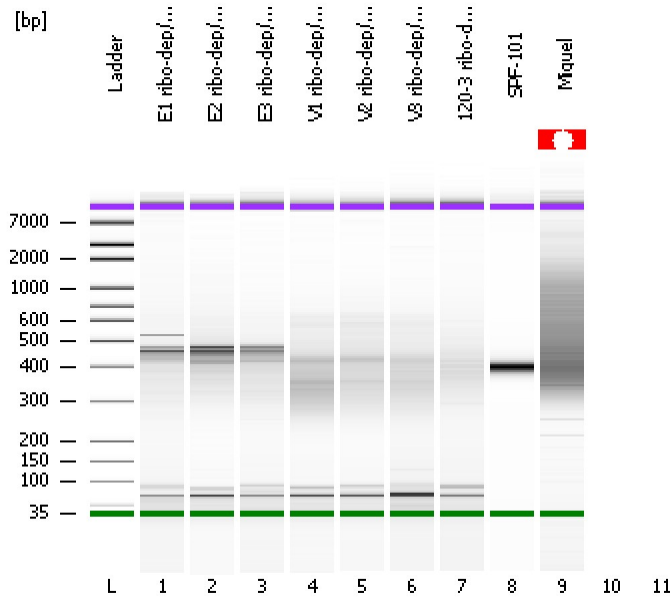


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
Modified: 7/17/2014 3:01:58 PM

Electrophoresis File Run Summary



Instrument Information:

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

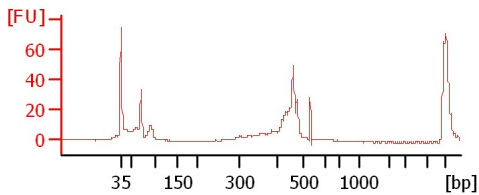
Assay Information:

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

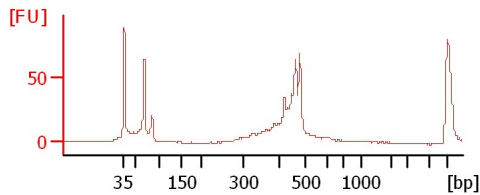
Chip Information:

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

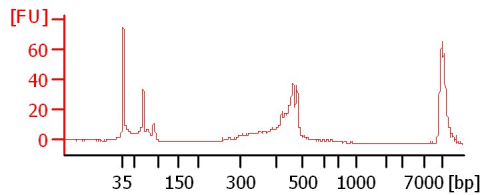
E1 ribo-dep/ss RNA lib



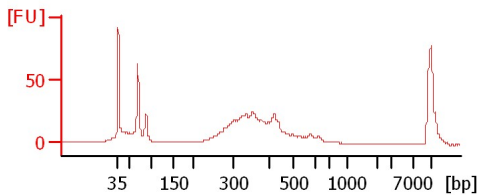
E2 ribo-dep/ss RNA lib



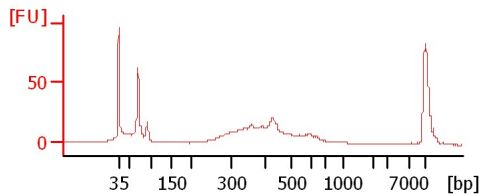
E3 ribo-dep/ss RNA lib



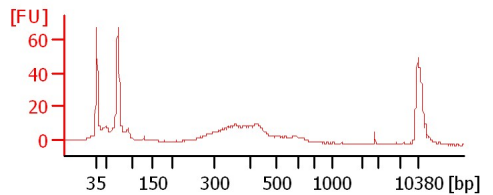
V1 ribo-dep/ss RNA lib



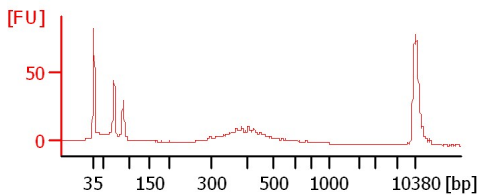
V2 ribo-dep/ss RNA lib



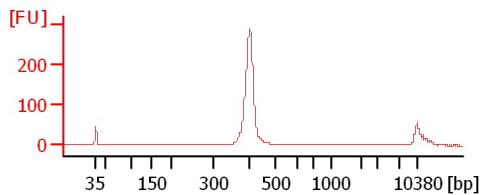
V3 ribo-dep/ss RNA lib



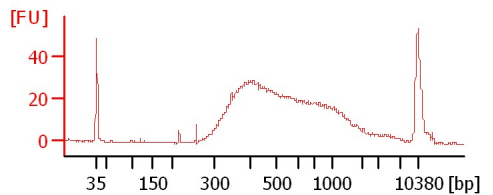
120-3 ribo-dep/ss RNA lib



SPF-101



Miguel



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
E1 ribo-dep/ss RNA lib		<input type="checkbox"/>	✓			
E2 ribo-dep/ss RNA lib		<input type="checkbox"/>	✓			
E3 ribo-dep/ss RNA lib		<input type="checkbox"/>	✓			
V1 ribo-dep/ss RNA lib		<input type="checkbox"/>	✓			
V2 ribo-dep/ss RNA lib		<input type="checkbox"/>	✓			
V3 ribo-dep/ss RNA lib		<input type="checkbox"/>	✓			
120-3 ribo-dep/ss RNA lib		<input type="checkbox"/>	✓			
SPF-101		<input type="checkbox"/>	✓			
Miguel		<input type="checkbox"/>	⚠			
		<input type="checkbox"/>				
		<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\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
Modified: 7/17/2014 3:01:58 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

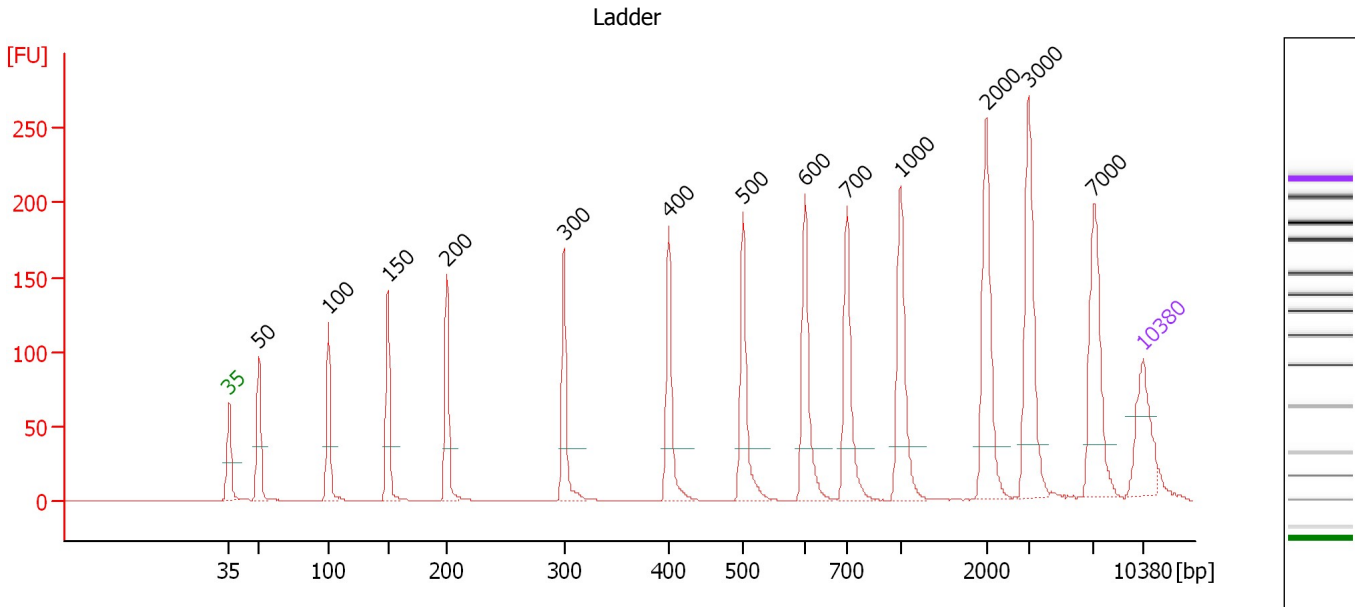
Ladder

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:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

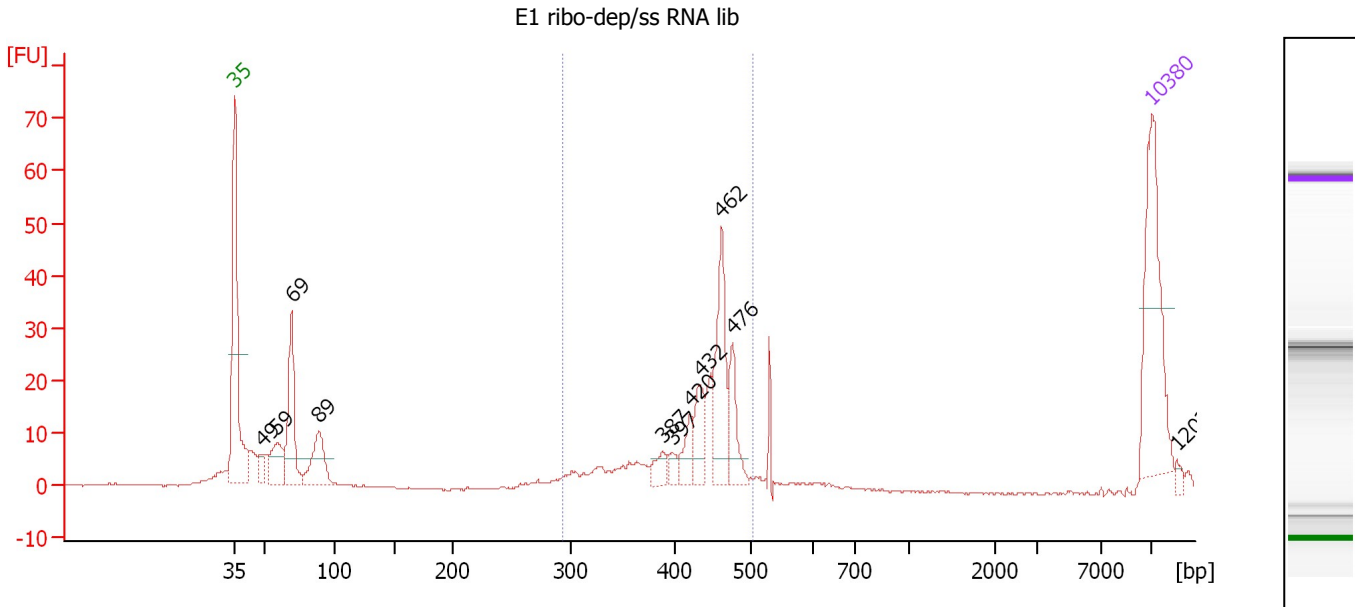
Peak table for Ladder

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\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : E1 ribo-dep/ss RNA lib

Number of peaks found: 11 Corr. Area 1: 145.9
 Noise: 0.2

Peak table for sample 1 : E1 ribo-dep/ss RNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	49	13.17	410.3	
3	59	37.18	958.8	
4	69	73.87	1,619.5	
5	89	44.53	761.0	
6	387	11.61	45.5	
7	397	7.55	28.8	
8	420	18.28	66.0	
9	432	24.92	87.3	
10	462	62.45	205.0	
11	476	30.06	95.7	
12	10,380	75.00	10.9	Upper Marker
13	12,029	0.00	0.0	

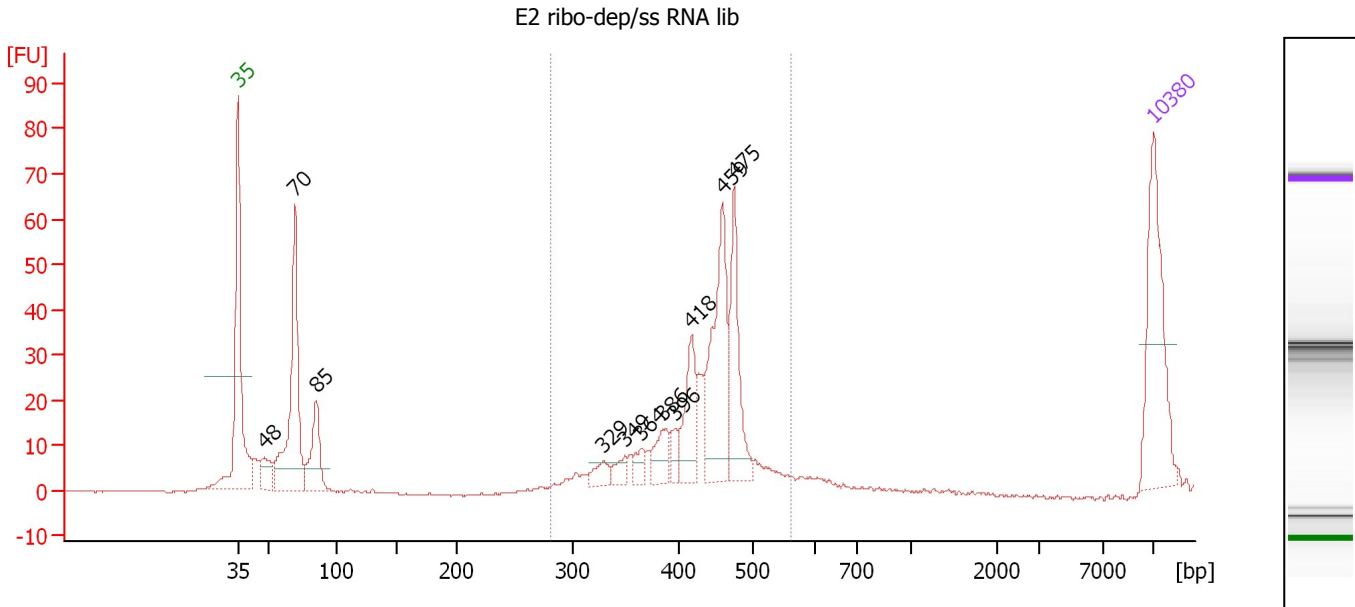
Region table for sample 1 : E1 ribo-dep/ss RNA lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
293	504	434	655.1	185.23	145.9	55	9.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : E2 ribo-dep/ss RNA lib

Number of peaks found: 11 Corr. Area 1: 314.0
 Noise: 0.2

Peak table for sample 2 : E2 ribo-dep/ss RNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	23.66	745.0	
3	70	164.27	3,577.7	
4	85	54.53	977.1	
5	329	13.04	60.1	
6	349	11.21	48.7	
7	364	11.35	47.2	
8	386	23.65	92.9	
9	396	11.09	42.4	
10	418	46.10	167.2	
11	459	107.81	355.7	
12	475	71.47	228.0	
13	10,380	75.00	10.9	Upper Marker

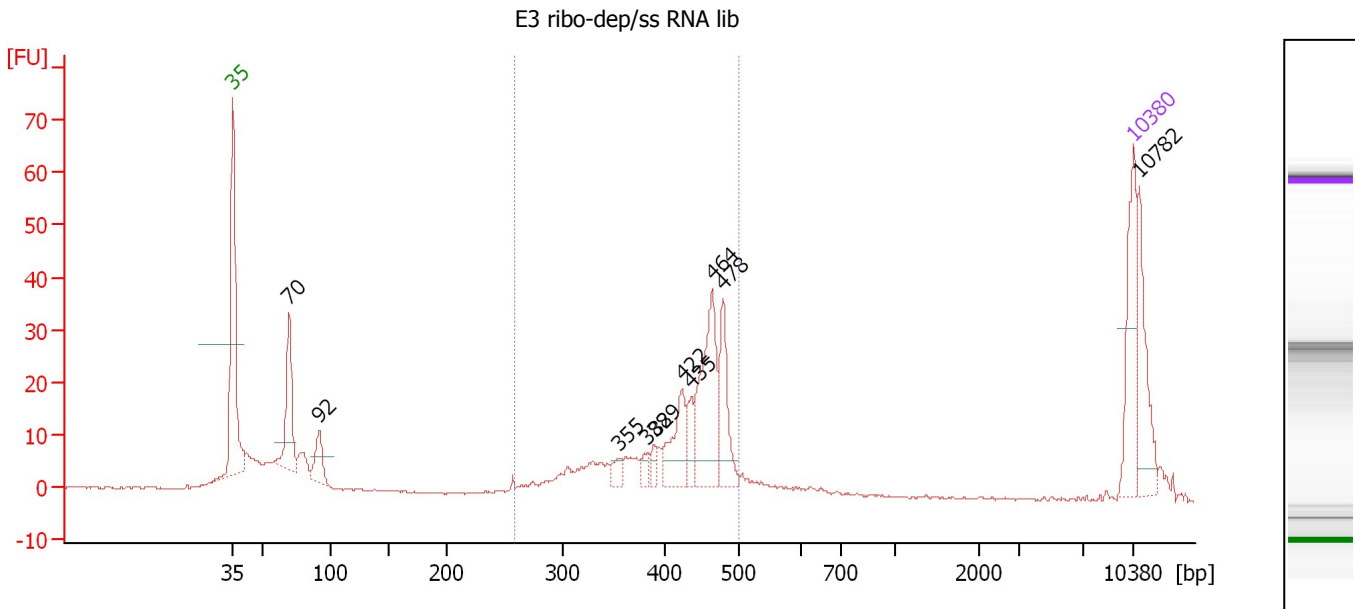
Region table for sample 2 : E2 ribo-dep/ss RNA lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
281	563	434	1,266.5	356.47	314.0	66	11.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : E3 ribo-dep/ss RNA lib

Number of peaks found: 10 Corr. Area 1: 235.1
 Noise: 0.2

Peak table for sample 3 : E3 ribo-dep/ss RNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	106.54	2,310.8	
3	92	43.61	720.3	
4	355	13.95	59.5	
5	382	12.82	50.8	
6	389	12.61	49.1	
7	422	63.88	229.3	
8	435	26.95	93.8	
9	464	134.10	437.7	
10	478	72.57	230.1	
11	10,380	75.00	10.9	Upper Marker
12	10,782	0.00	0.0	

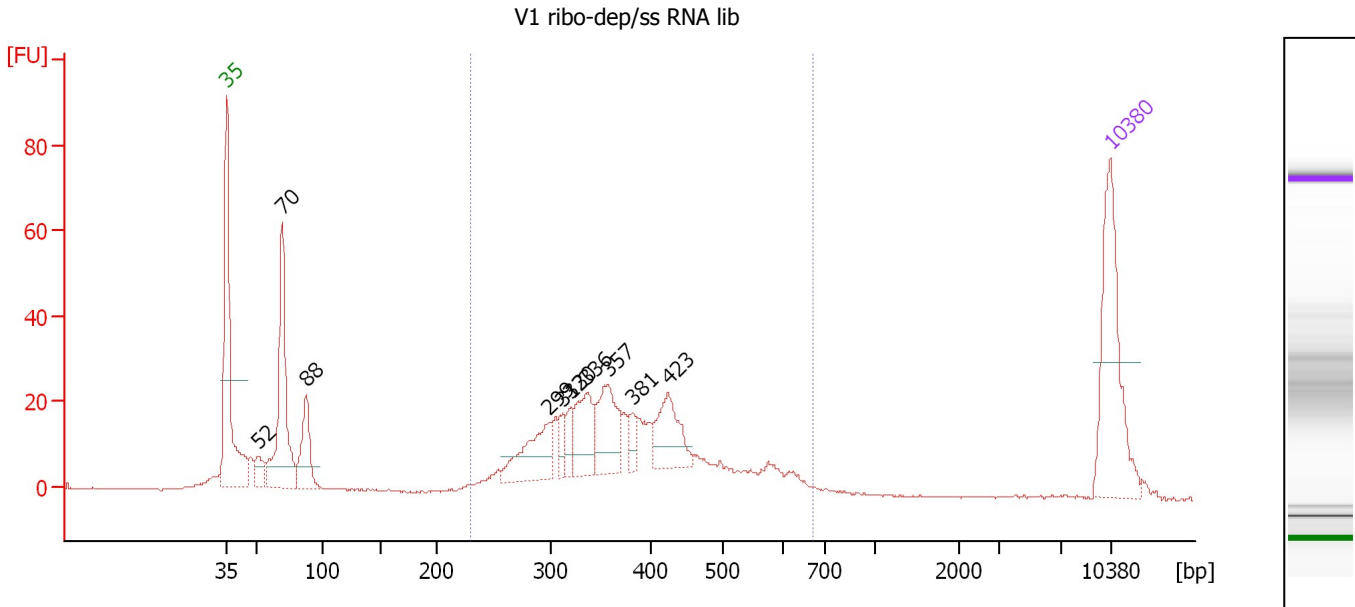
Region table for sample 3 : E3 ribo-dep/ss RNA lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
258	500	417	1,921.1	511.75	235.1	54	13.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : V1 ribo-dep/ss RNA lib

Number of peaks found: 10 Corr. Area 1: 450.9
 Noise: 0.1

Peak table for sample 4 : V1 ribo-dep/ss RNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	52	18.82	548.9	
3	70	133.65	2,898.5	
4	88	50.23	867.1	
5	299	53.90	273.4	
6	313	12.59	61.0	
7	320	14.35	67.9	
8	336	42.45	191.4	
9	357	54.16	229.7	
10	381	11.99	47.7	
11	423	43.98	157.6	
12	10,380	75.00	10.9	Upper Marker

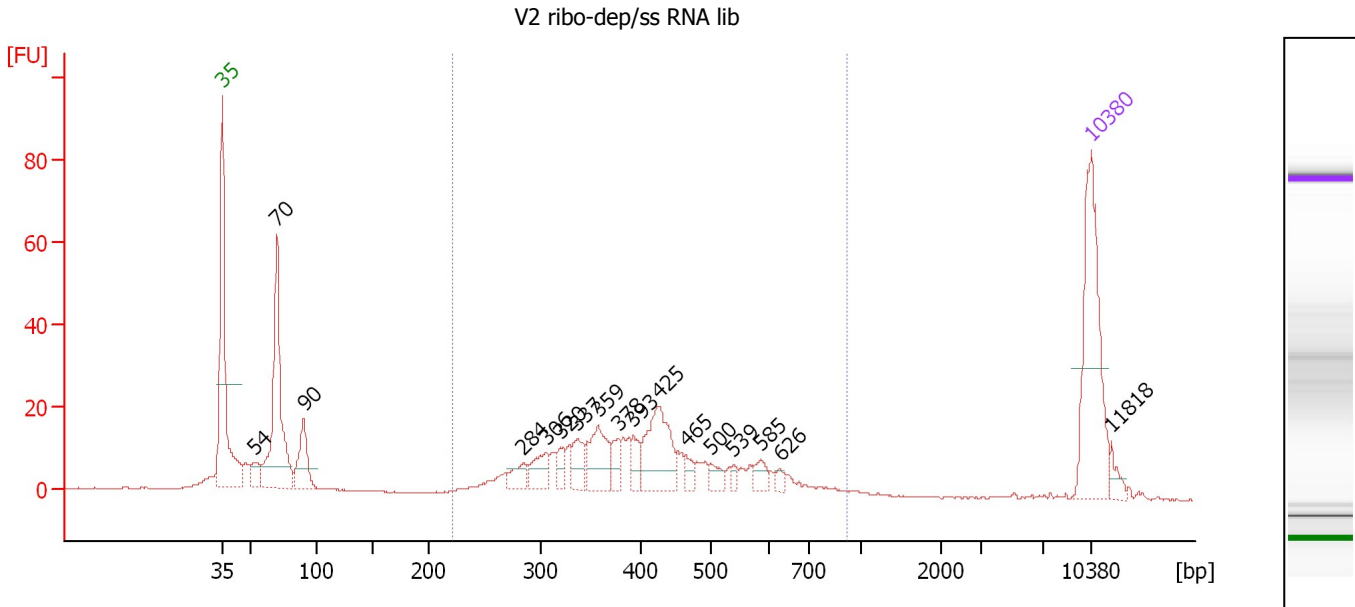
Region table for sample 4 : V1 ribo-dep/ss RNA lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
230	672	384	1,898.7	449.31	450.9	70	23.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : V2 ribo-dep/ss RNA lib

Number of peaks found: 17 Corr. Area 1: 349.4
 Noise: 0.1

Peak table for sample 5 : V2 ribo-dep/ss RNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	54	14.41	407.7	
3	70	140.16	3,045.1	
4	90	39.77	666.7	
5	284	13.31	70.9	
6	306	20.09	99.5	
7	320	11.34	53.7	
8	337	18.72	84.1	
9	359	36.72	155.2	
10	378	12.00	48.0	
11	393	11.96	46.1	
12	425	56.65	201.8	
13	465	6.92	22.5	
14	500	8.58	26.0	
15	539	3.77	10.6	
16	585	8.46	21.9	
17	626	4.07	9.8	
18	10,380	75.00	10.9	Upper Marker
19	11,818	0.00	0.0	

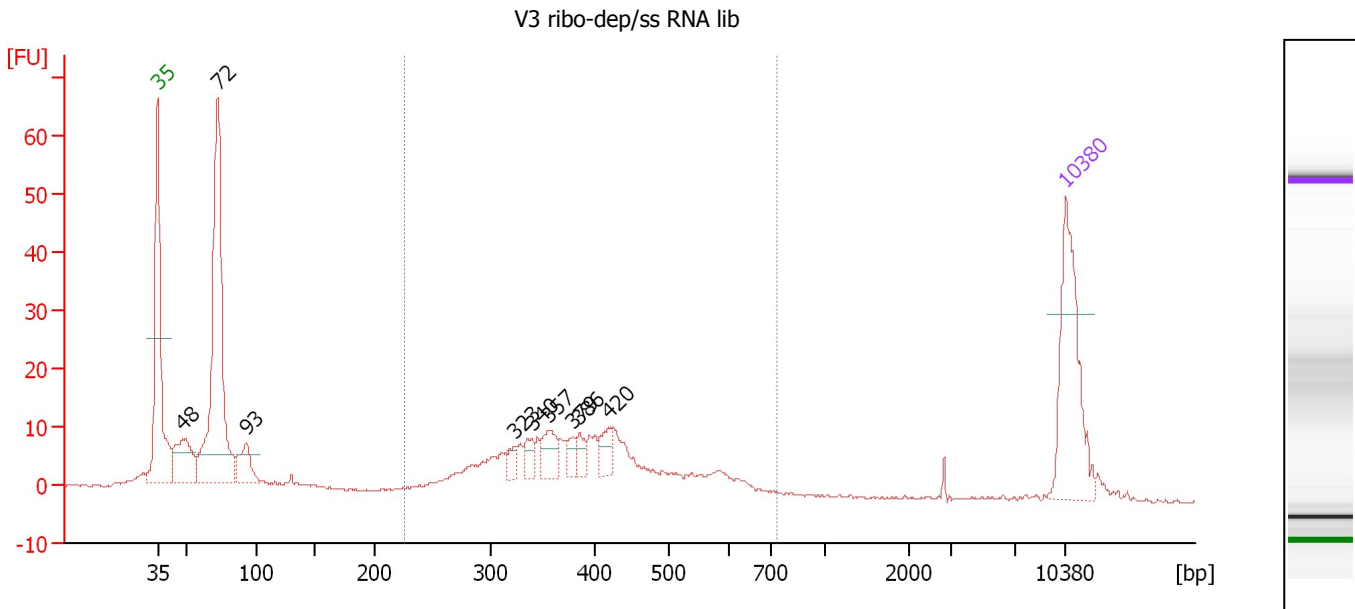
Region table for sample 5 : V2 ribo-dep/ss RNA lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
220	923	422	1,368.4	346.49	349.4	63	27.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : V3 ribo-dep/ss RNA lib

Number of peaks found: 9 Corr. Area 1: 206.8
 Noise: 0.2

Peak table for sample 6 : V3 ribo-dep/ss RNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	58.66	1,865.5	
3	72	277.27	5,819.6	
4	93	32.22	526.0	
5	323	9.12	42.8	
6	340	12.23	54.5	
7	357	22.14	94.1	
8	379	10.74	42.9	
9	386	10.18	39.9	
10	420	15.34	55.3	
11	10,380	75.00	10.9	Upper Marker

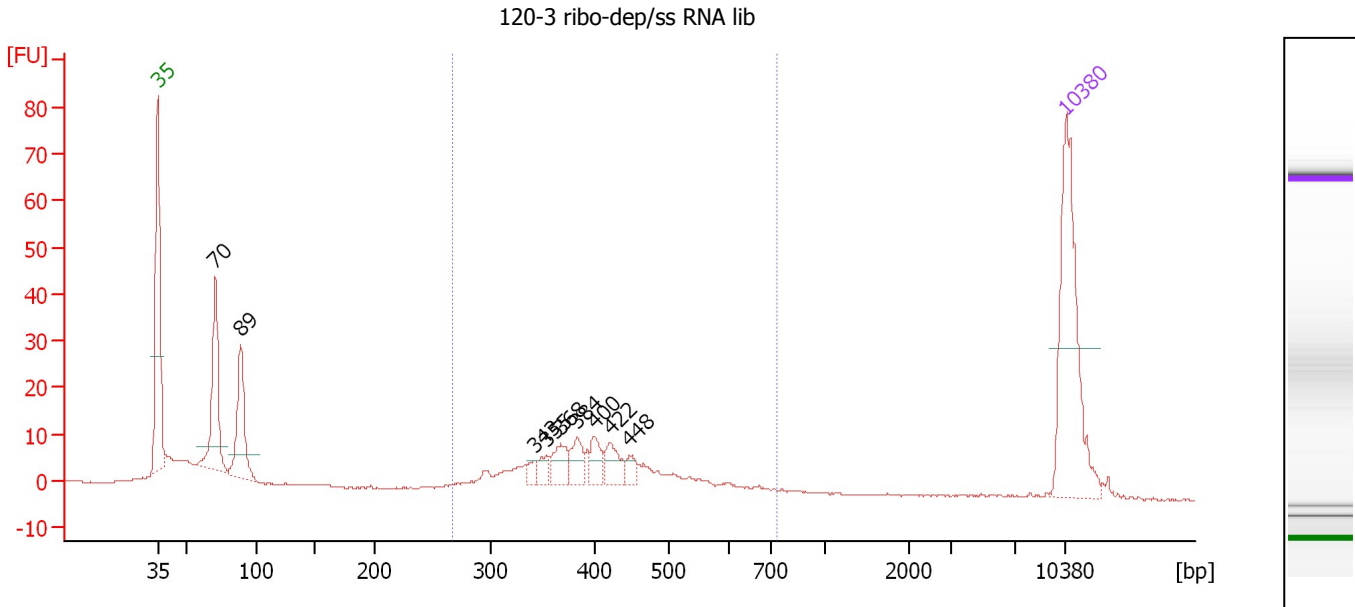
Region table for sample 6 : V3 ribo-dep/ss RNA lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
226	734	402	1,269.8	313.35	206.8	48	23.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 120-3 ribo-dep/ss RNA lib

Number of peaks found: 9 Corr. Area 1: 151.9
 Noise: 0.1

Peak table for sample 7 : 120-3 ribo-dep/ss RNA lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	70	72.18	1,554.6	
3	89	55.19	941.9	
4	343	5.24	23.1	
5	355	7.27	31.1	
6	368	14.94	61.4	
7	384	13.38	52.8	
8	400	11.65	44.1	
9	422	14.58	52.4	
10	448	6.36	21.5	
11	10,380	75.00	10.9	Upper Marker

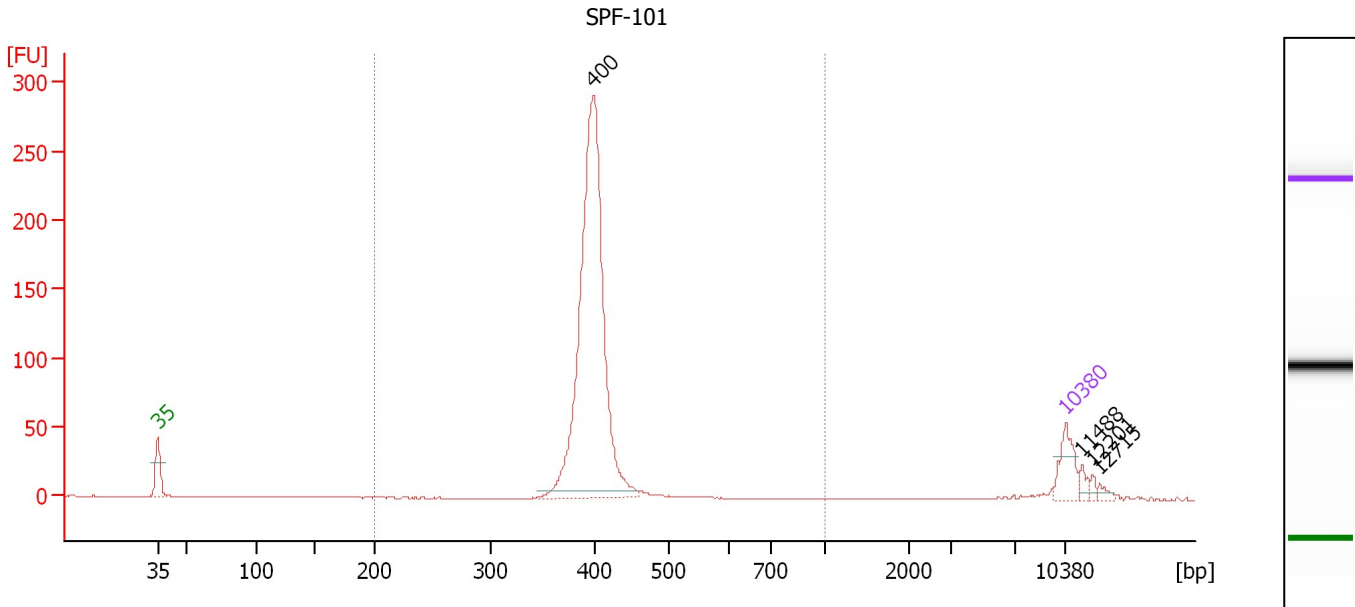
Region table for sample 7 : 120-3 ribo-dep/ss RNA lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
268	729	415	582.7	151.85	151.9	49	20.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : SPF-101

Number of peaks found: 4 Corr. Area 1: 818.1
 Noise: 0.2

Peak table for sample 8 : SPF-101

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	400	1,409.52	5,343.3	
3	10,380	75.00	10.9	Upper Marker
4	11,488	0.00	0.0	
5	12,201	0.00	0.0	
6	12,715	0.00	0.0	

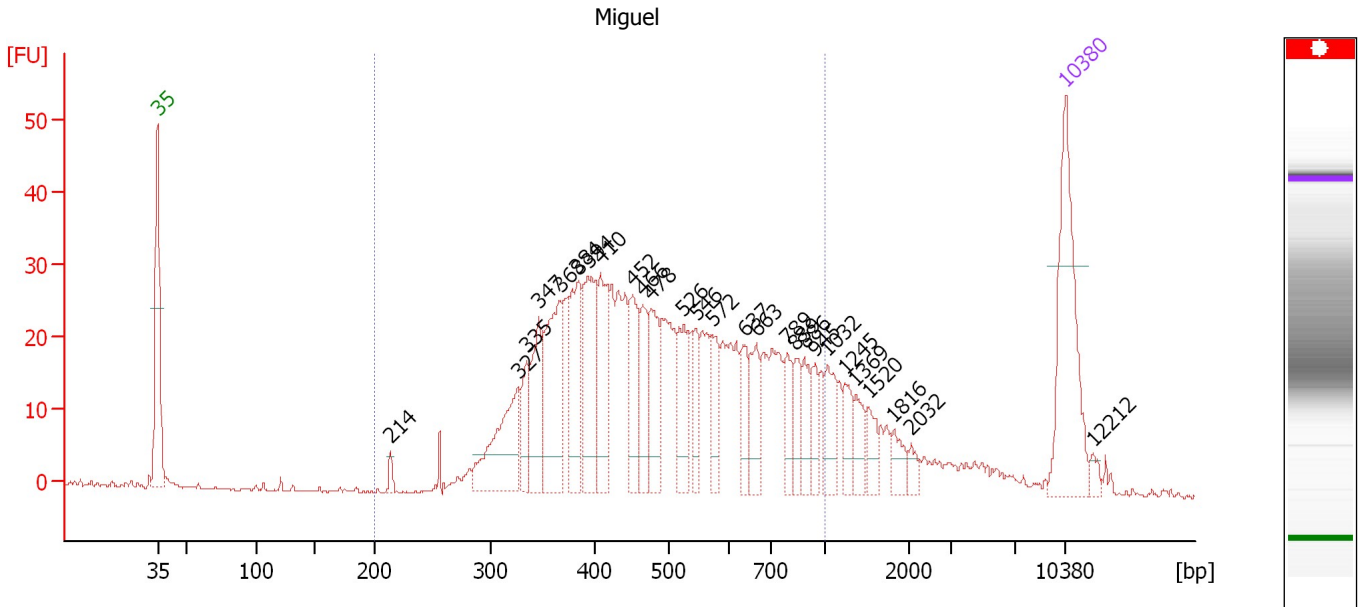
Region table for sample 8 : SPF-101

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	401	5,494.7	1,450.94	818.1	94	4.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Miguel

Number of peaks found: 27 Corr. Area 1: 690.9
 Noise: 0.2

Peak table for sample 9 : Miguel

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	214	5.00	35.4	
3	327	70.51	327.0	
4	335	27.15	122.7	
5	347	45.68	199.4	
6	368	77.33	318.4	
7	384	57.76	228.0	
8	394	64.04	246.0	
9	410	49.28	182.3	
10	452	38.79	129.9	
11	466	32.56	105.9	
12	478	39.64	125.7	
13	526	34.36	99.0	
14	546	22.54	62.6	
15	572	22.46	59.6	
16	637	20.17	48.0	
17	663	25.60	58.5	
18	789	18.06	34.7	
19	839	17.14	30.9	
20	886	19.63	33.6	
21	945	14.20	22.8	
22	1,032	22.36	32.8	
23	1,245	15.29	18.6	
24	1,369	15.21	16.8	
25	1,520	13.20	13.2	
26	1,816	10.85	9.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
Modified: 7/17/2014 3:01:58 PM

Electropherogram Summary Continued ...**... Peak table for sample 9 : Miguel**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	2,032	6.00	4.5	
28	10,380	75.00	10.9	Upper Marker
29	12,212	0.00	0.0	

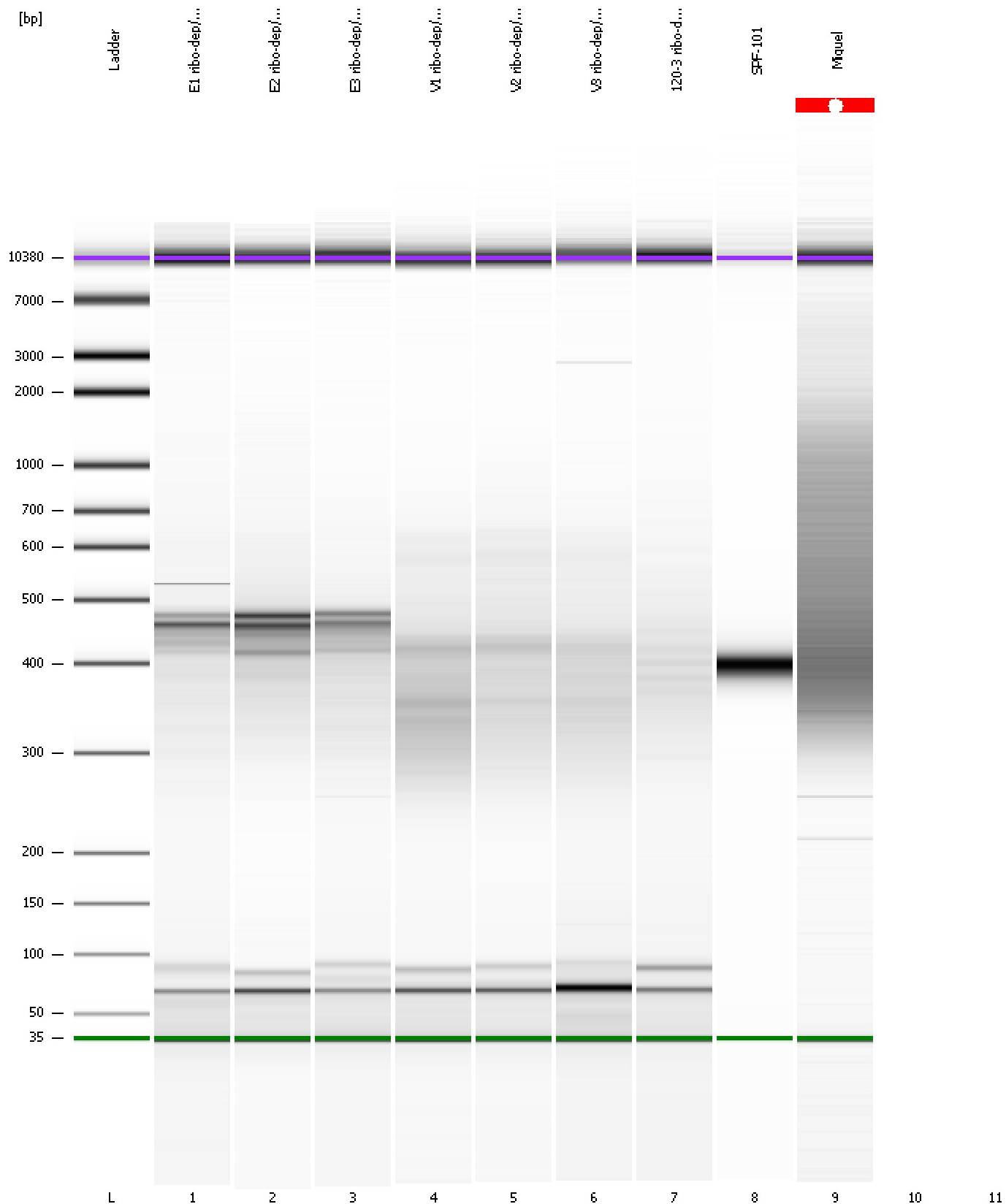
Region table for sample 9 : Miguel

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
200	1,000	513	3,418.0	1,024.33	690.9	85	32.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
Modified: 7/17/2014 3:01:58 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
Modified: 7/17/2014 3:01:58 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\2014-07-17\2014-07-17_004.xad

Created: 7/17/2014 2:26:27 PM
 Modified: 7/17/2014 3:01:58 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		7/17/2014 3:01:56 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\2014-07-17\2014-07-17_004.xad)		Instrument	Run		7/17/2014 2:26:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/17/2014 2:26:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/17/2014 2:26:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/17/2014 2:26:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/17/2014 2:26:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/17/2014 2:26:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/17/2014 2:26:27 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1