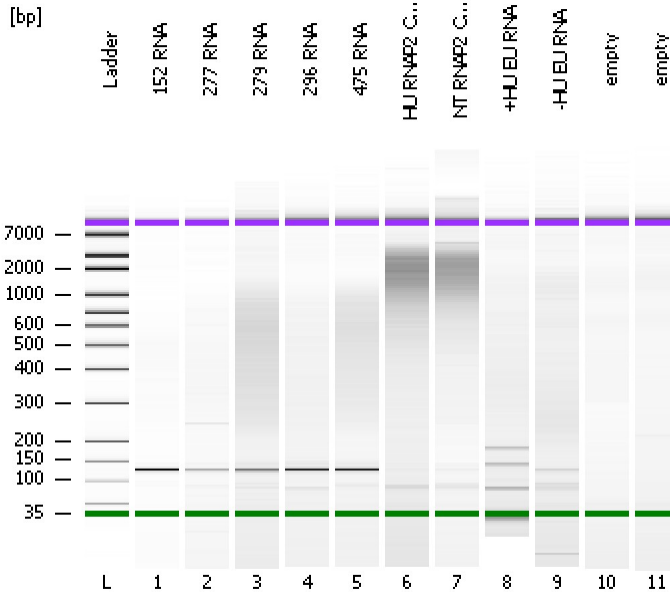


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
Modified: 12/12/2016 4:22:30 PM

Electrophoresis File Run Summary



Instrument Information:

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

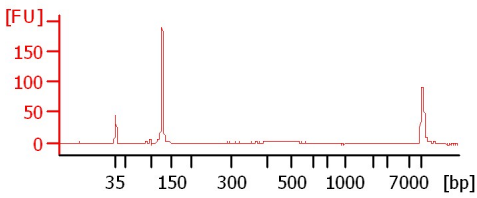
Assay Information:

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

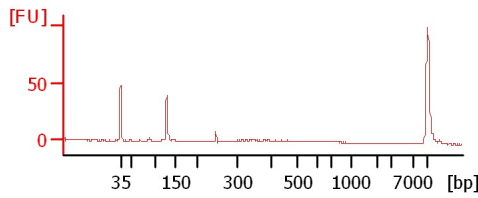
Chip Information:

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

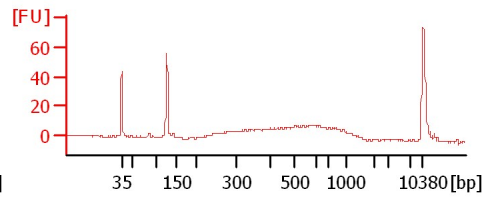
152 RNA



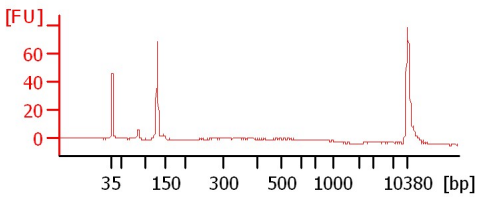
277 RNA



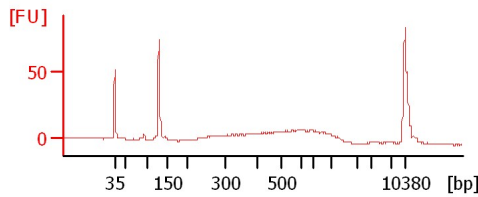
279 RNA



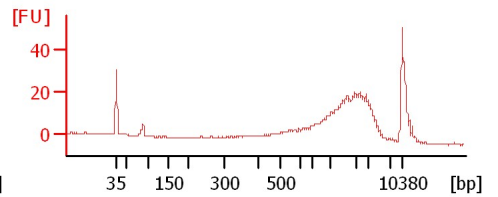
296 RNA



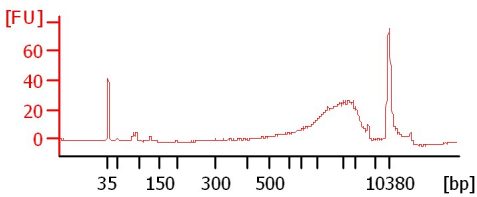
475 RNA



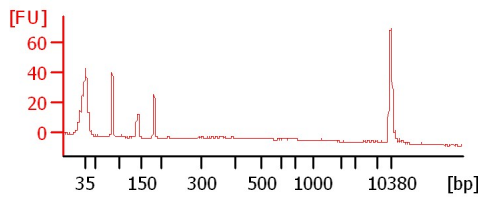
HU RNAP2 ChIP



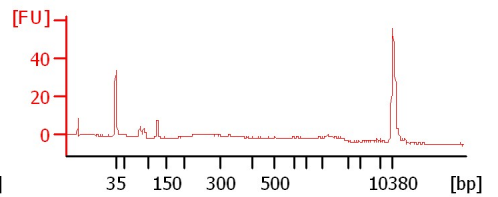
NT RNAP2 ChIP



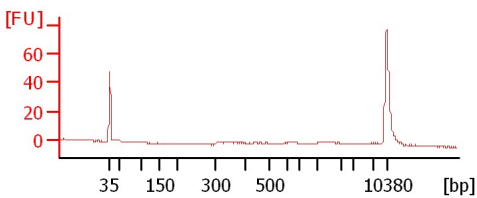
+HU EU RNA



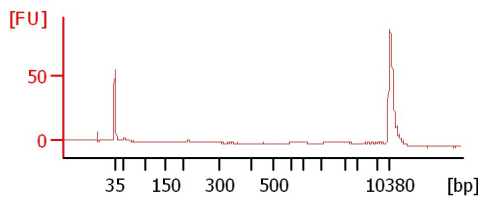
-HU EU RNA



empty



empty



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
Modified: 12/12/2016 4:22:30 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
152 RNA		<input type="checkbox"/>	✓			
277 RNA		<input type="checkbox"/>	✓			
279 RNA		<input type="checkbox"/>	✓			
296 RNA		<input type="checkbox"/>	✓			
475 RNA		<input type="checkbox"/>	✓			
HU RNAP2 ChIP		<input type="checkbox"/>	✓			
NT RNAP2 ChIP		<input type="checkbox"/>	✓			
+HU EU RNA		<input type="checkbox"/>	✓			
-HU EU RNA		<input type="checkbox"/>	✓			
empty		<input type="checkbox"/>	✓			
empty		<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\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
Modified: 12/12/2016 4:22:30 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

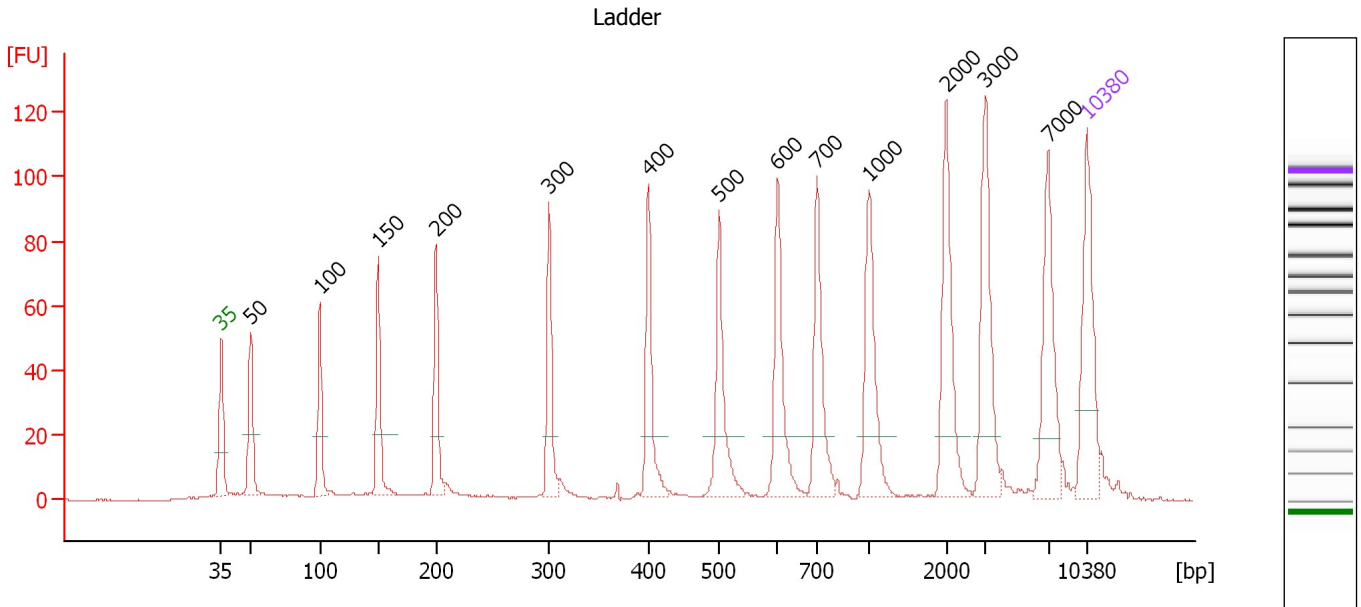
Ladder

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\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

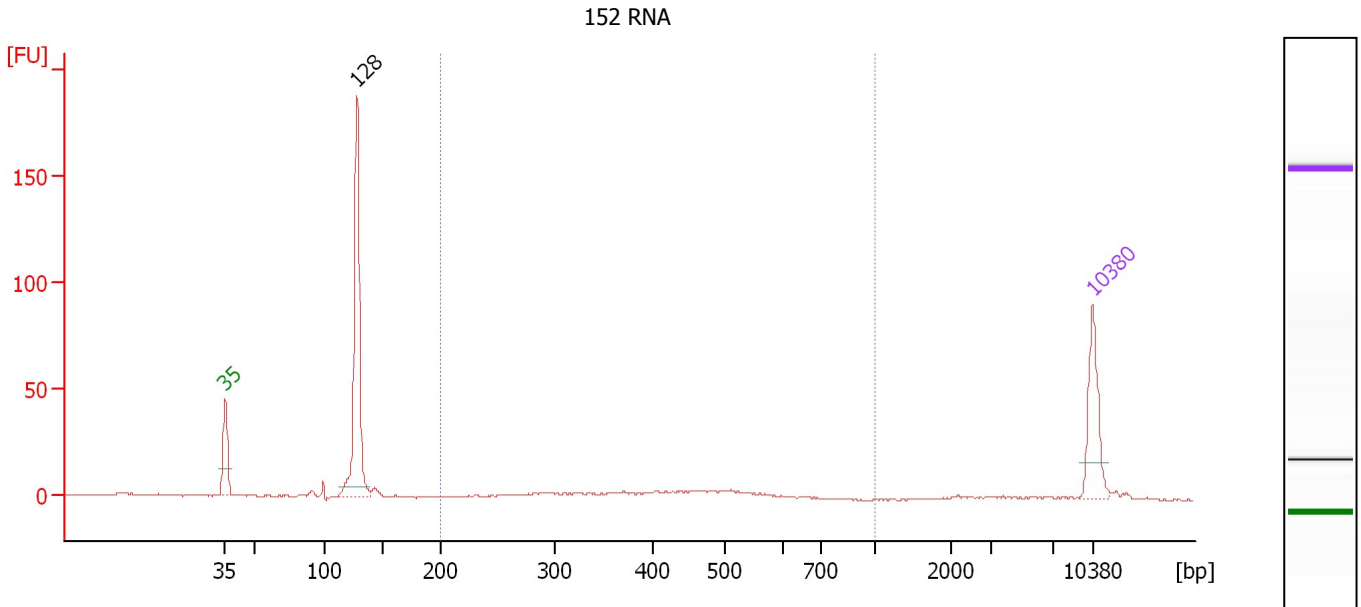
Peak table for Ladder

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	45.37
3	100	150.00	2,272.7	Ladder Peak	50.97
4	150	150.00	1,515.2	Ladder Peak	55.72
5	200	150.00	1,136.4	Ladder Peak	60.37
6	300	150.00	757.6	Ladder Peak	69.51
7	400	150.00	568.2	Ladder Peak	77.53
8	500	150.00	454.5	Ladder Peak	83.26
9	600	150.00	378.8	Ladder Peak	88.00
10	700	150.00	324.7	Ladder Peak	91.15
11	1,000	150.00	227.3	Ladder Peak	95.37
12	2,000	150.00	113.6	Ladder Peak	101.62
13	3,000	150.00	75.8	Ladder Peak	104.81
14	7,000	150.00	32.5	Ladder Peak	109.85
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 152 RNA

Number of peaks found: 1 Corr. Area 1: 63.9
 Noise: 0.3

Peak table for sample 1 : 152 RNA

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	128	372.95	4,413.2		53.63
3	10,380	75.00	10.9	Upper Marker	113.00

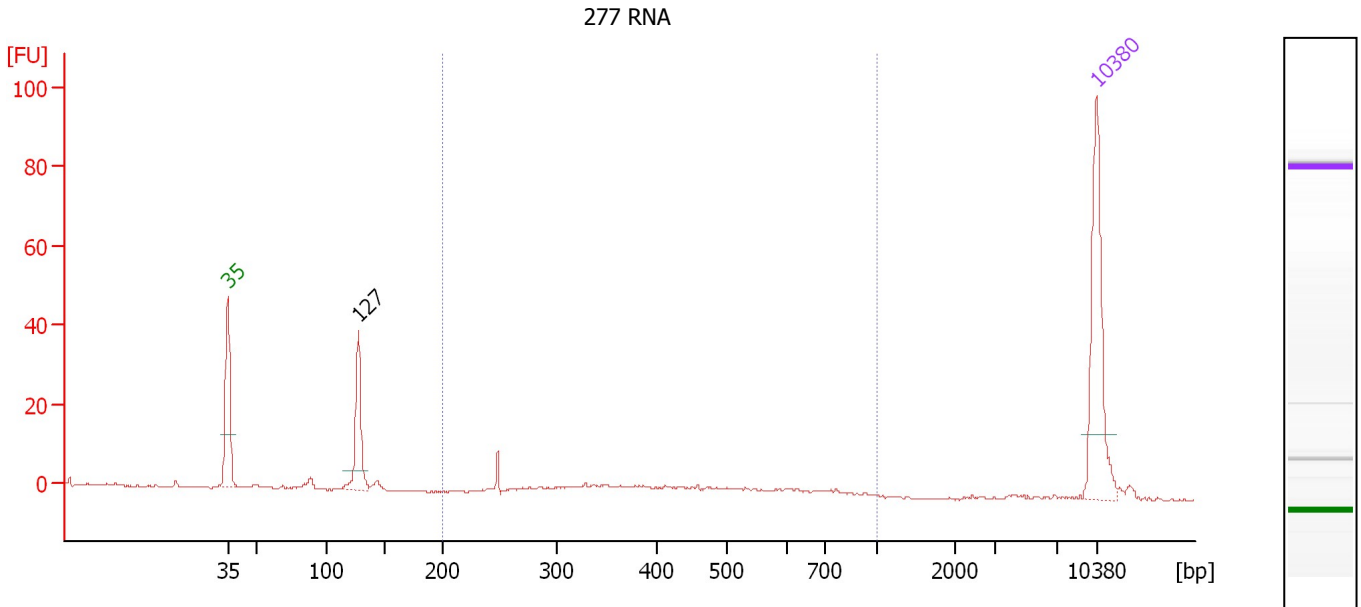
Region table for sample 1 : 152 RNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	419	63.9	370.8	93.96	23	23.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 277 RNA

Number of peaks found: 1 Corr. Area 1: 48.8
 Noise: 0.2

Peak table for sample 2 : 277 RNA

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	127	67.88	810.8		53.52
3	10,380	75.00	10.9	Upper Marker	113.00

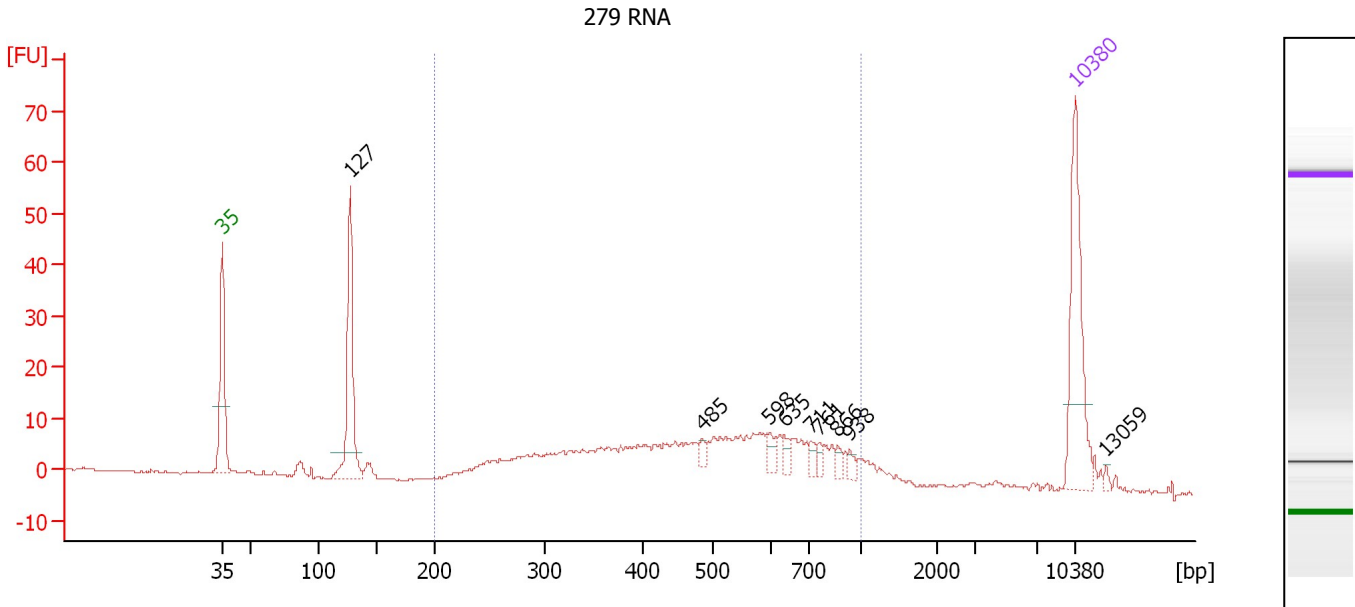
Region table for sample 2 : 277 RNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	458	48.8	234.8	60.68	48	34.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 279 RNA

Number of peaks found: 9 Corr. Area 1: 282.1
 Noise: 0.2

Peak table for sample 3 : 279 RNA

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	127	124.78	1,492.9		53.50
3	485	6.30	19.7		82.42
4	598	8.88	22.5		87.89
5	635	7.57	18.1		89.11
6	711	6.53	13.9		91.30
7	761	5.85	11.7		92.00
8	866	5.93	10.4		93.49
9	938	5.24	8.5		94.49
10	10,380	75.00	10.9	Upper Marker	113.00
11	13,059	0.00	0.0		115.49

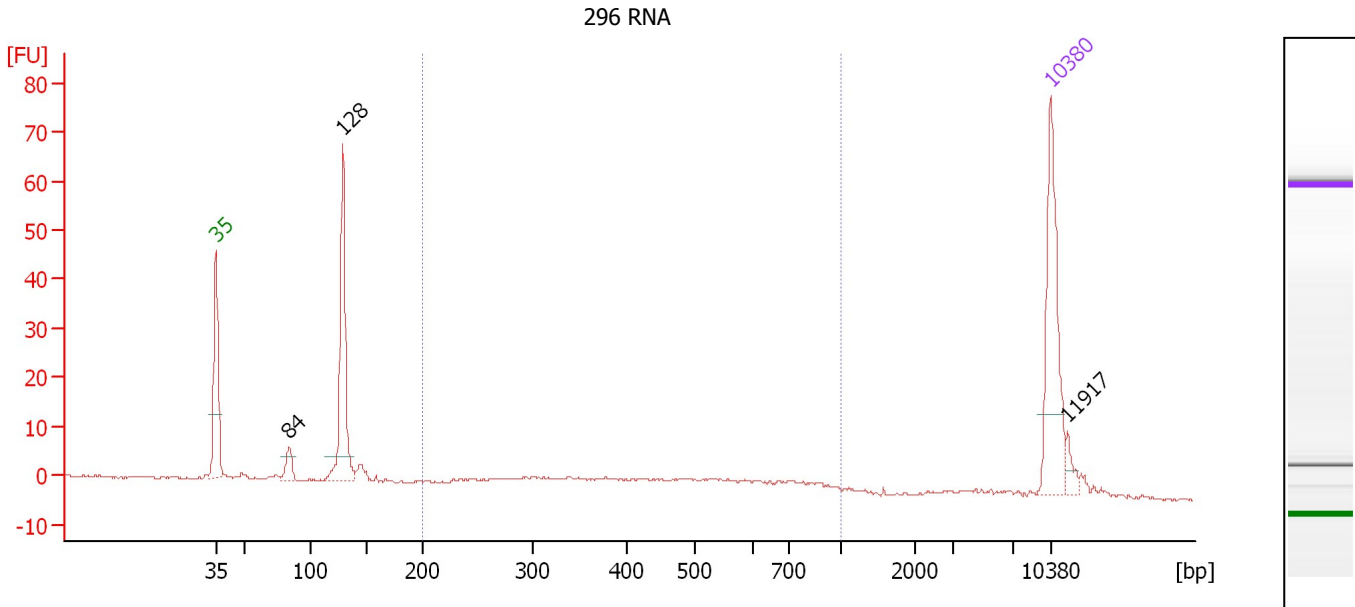
Region table for sample 3 : 279 RNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	508	282.1	1,562.0	434.70	74	35.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 296 RNA

Number of peaks found: 3 Corr. Area 1: 68.0
 Noise: 0.2

Peak table for sample 4 : 296 RNA

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	84	17.77	320.9		49.17
3	128	136.81	1,617.2		53.65
4	10,380	75.00	10.9	Upper Marker	113.00
5	11,917	0.00	0.0		114.43

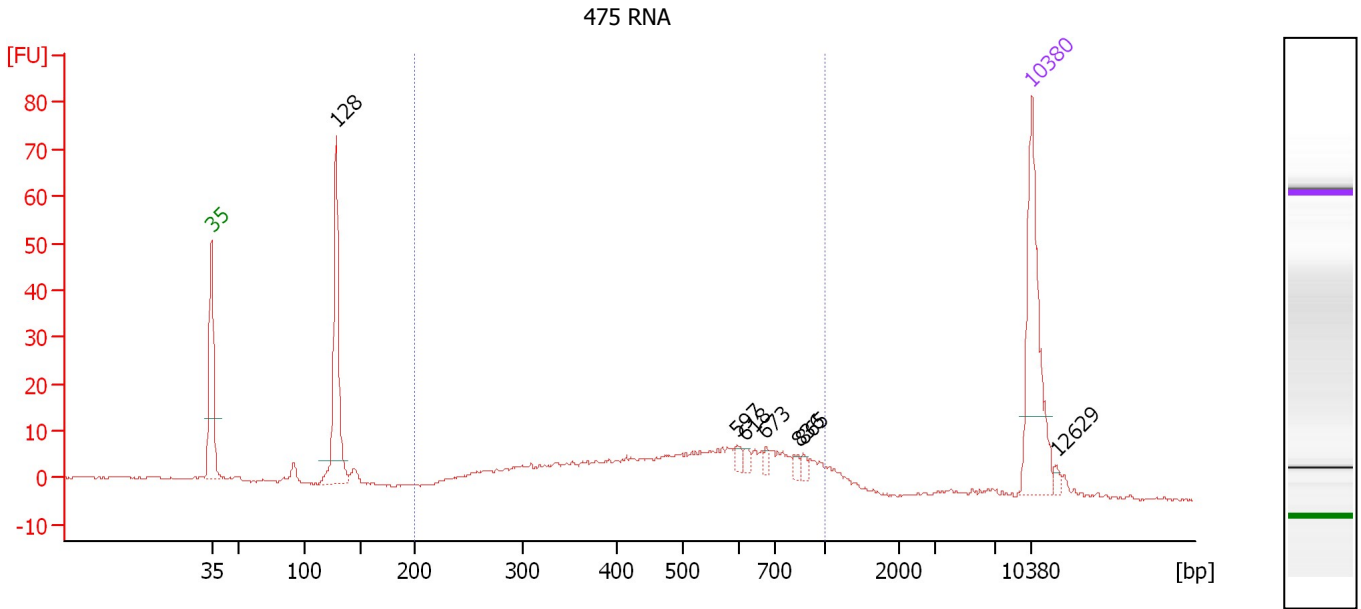
Region table for sample 4 : 296 RNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	480	68.0	379.4	98.55	37	37.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 475 RNA

Number of peaks found: 7 Corr. Area 1: 246.3
 Noise: 0.2

Peak table for sample 5 : 475 RNA

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	128	127.28	1,504.1		53.65
3	597	4.69	11.9		87.88
4	618	4.22	10.4		88.56
5	673	4.09	9.2		90.29
6	836	4.21	7.6		93.07
7	865	4.26	7.5		93.47
8	10,380	75.00	10.9	Upper Marker	113.00
9	12,629	0.00	0.0		115.09

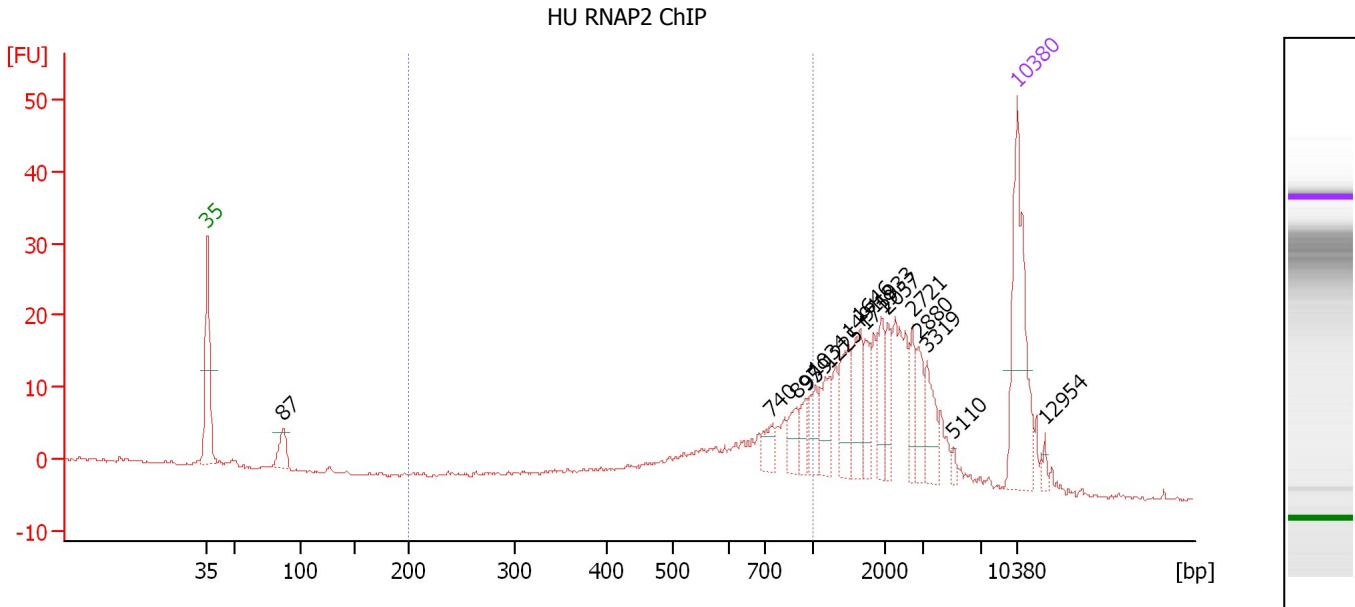
Region table for sample 5 : 475 RNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	523	246.3	1,045.1	299.83	67	35.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : HU RNAP2 ChIP

Number of peaks found: 16 Corr. Area 1: 113.6
 Noise: 0.2

Peak table for sample 6 : HU RNAP2 ChIP

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	87	22.85	396.8		49.54
3	740	14.77	30.2		91.71
4	897	14.63	24.7		93.92
5	959	13.25	20.9		94.80
6	1,034	16.54	24.2		95.58
7	1,225	23.91	29.6		96.78
8	1,491	30.05	30.5		98.44
9	1,646	28.87	26.6		99.41
10	1,719	16.68	14.7		99.87
11	1,933	19.36	15.2		101.20
12	2,057	17.61	13.0		101.80
13	2,721	15.98	8.9		103.92
14	2,880	17.67	9.3		104.43
15	3,319	21.40	9.8		105.21
16	5,110	3.27	1.0		107.47
17	10,380	75.00	10.9	Upper Marker	113.00
18	12,954	0.00	0.0		115.40

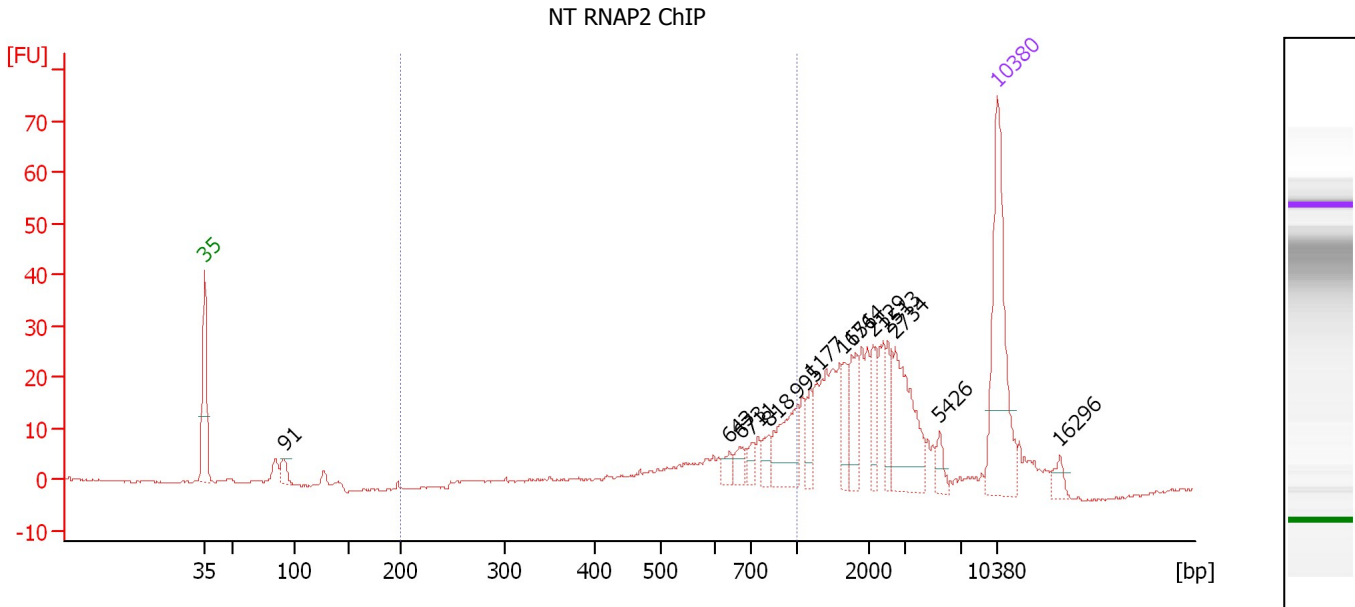
Region table for sample 6 : HU RNAP2 ChIP

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	672	113.6	513.0	200.97	31	27.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : NT RNAP2 ChIP

Number of peaks found: 14 Corr. Area 1: 119.8
 Noise: 0.2

Peak table for sample 7 : NT RNAP2 ChIP

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	91	11.25	187.2		49.97
3	643	6.96	16.4		89.37
4	673	9.55	21.5		90.31
5	711	7.54	16.1		91.30
6	818	9.22	17.1		92.80
7	995	34.40	52.4		95.30
8	1,177	12.55	16.2		96.48
9	1,651	14.31	13.1		99.44
10	1,764	21.55	18.5		100.15
11	2,129	15.05	10.7		102.03
12	2,513	15.12	9.1		103.26
13	2,734	50.63	28.1		103.96
14	5,426	7.44	2.1		107.87
15	10,380	75.00	10.9	Upper Marker	113.00
16	16,296	0.00	0.0		118.51

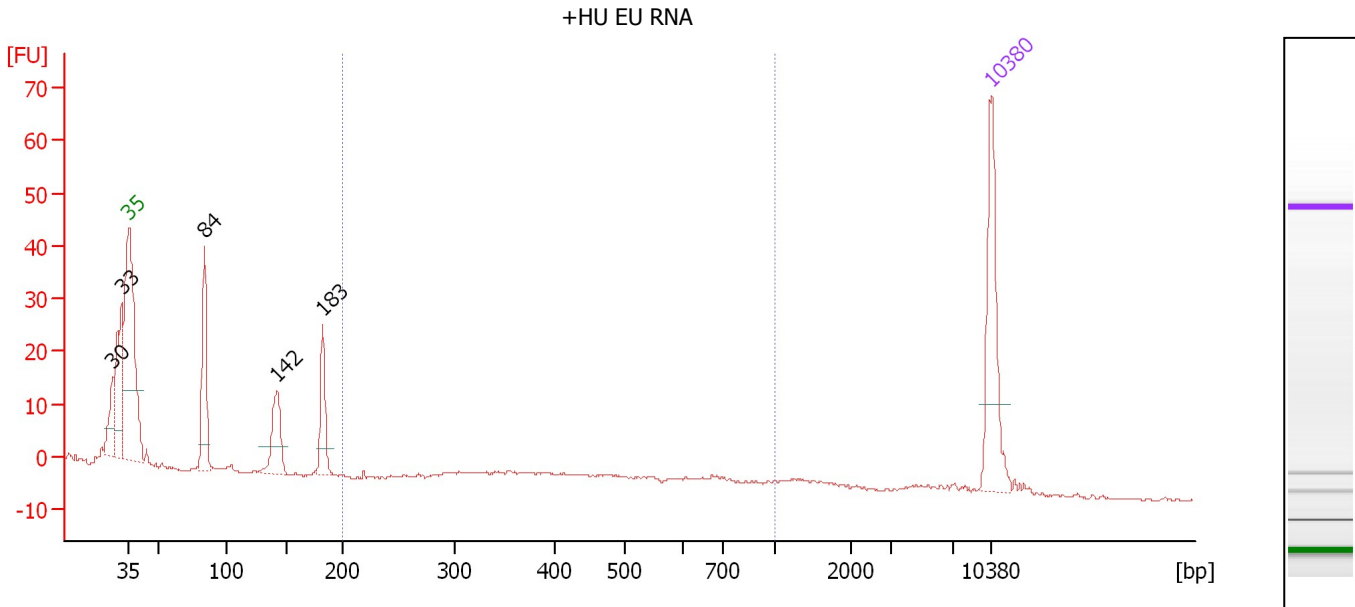
Region table for sample 7 : NT RNAP2 ChIP

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	686	119.8	348.1	136.86	29	28.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : +HU EU RNA

Number of peaks found: 5 Corr. Area 1: 20.9
 Noise: 0.2

Peak table for sample 8 : +HU EU RNA

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	30	0.00	0.0		41.66
2	33	0.00	0.0		42.39
3	35	125.00	5,411.3	Lower Marker	43.00
4	84	105.97	1,919.2		49.14
5	142	66.05	703.3		54.98
6	183	55.27	458.7		58.75
7	10,380	75.00	10.9	Upper Marker	113.00

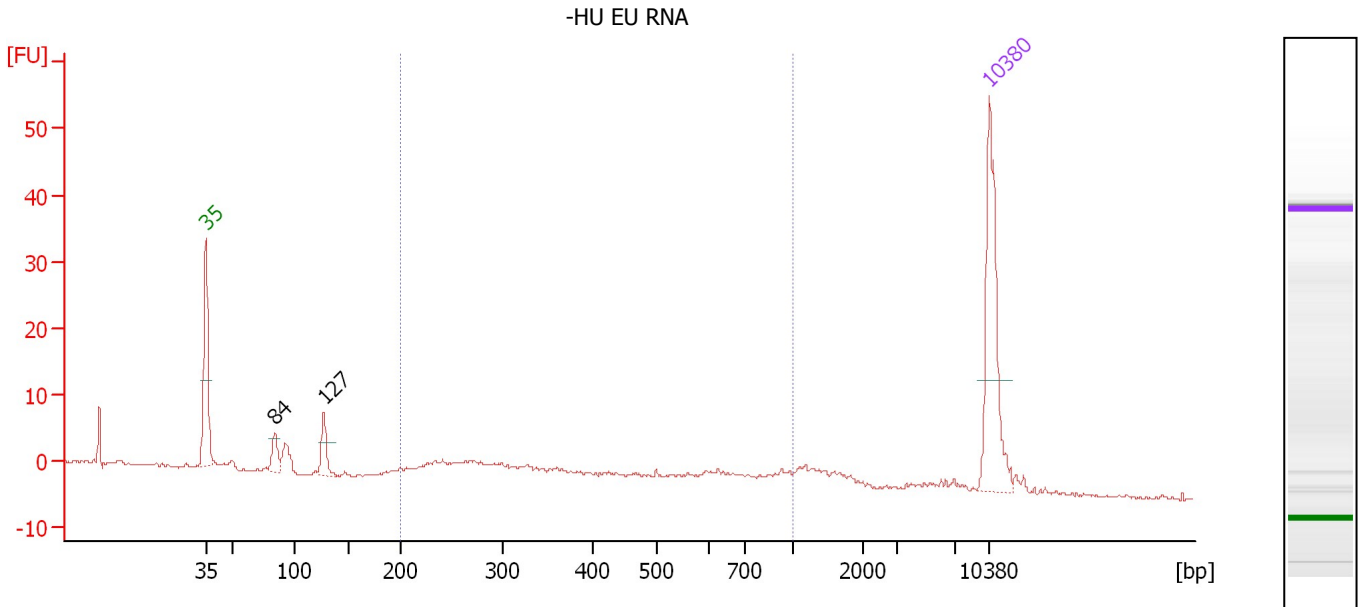
Region table for sample 8 : +HU EU RNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	540	20.9	107.7	33.63	10	31.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : -HU EU RNA

Number of peaks found: 2 Corr. Area 1: 52.5
 Noise: 0.2

Peak table for sample 9 : -HU EU RNA

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	84	18.63	337.3		49.15
3	127	23.94	285.7		53.53
4	10,380	75.00	10.9	Upper Marker	113.00

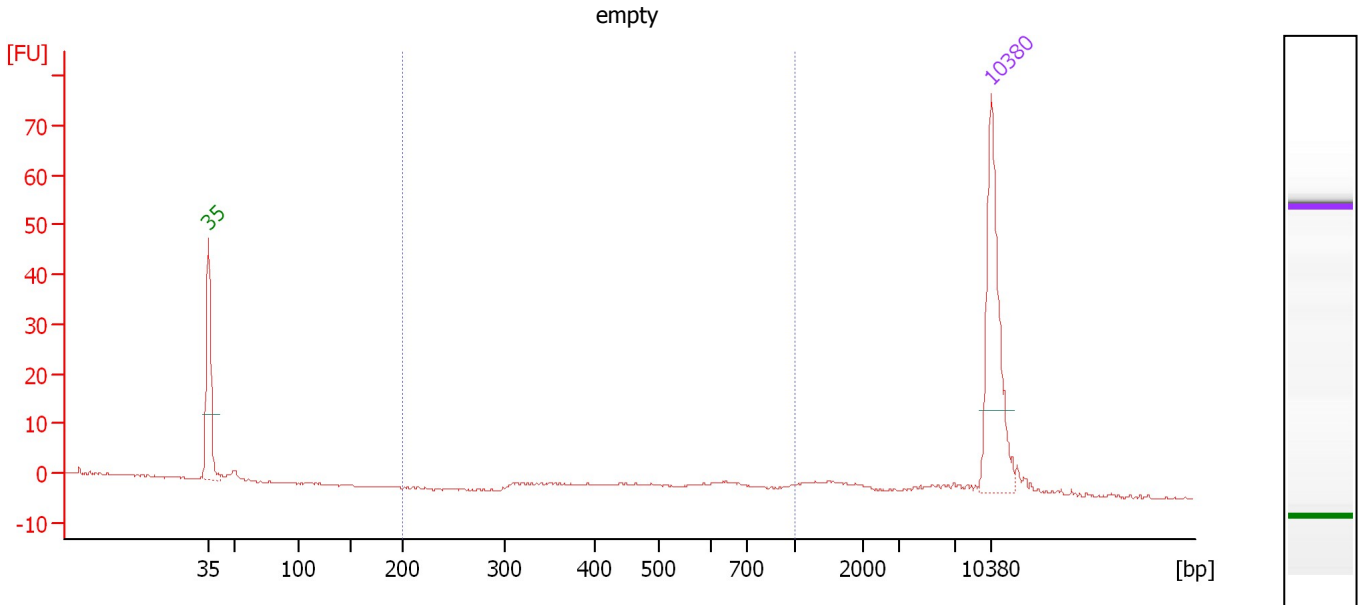
Region table for sample 9 : -HU EU RNA

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	464	52.5	443.9	103.02	53	46.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : empty

Number of peaks found: 0 Corr. Area 1: 9.5
 Noise: 0.2

Peak table for sample 10 : empty

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

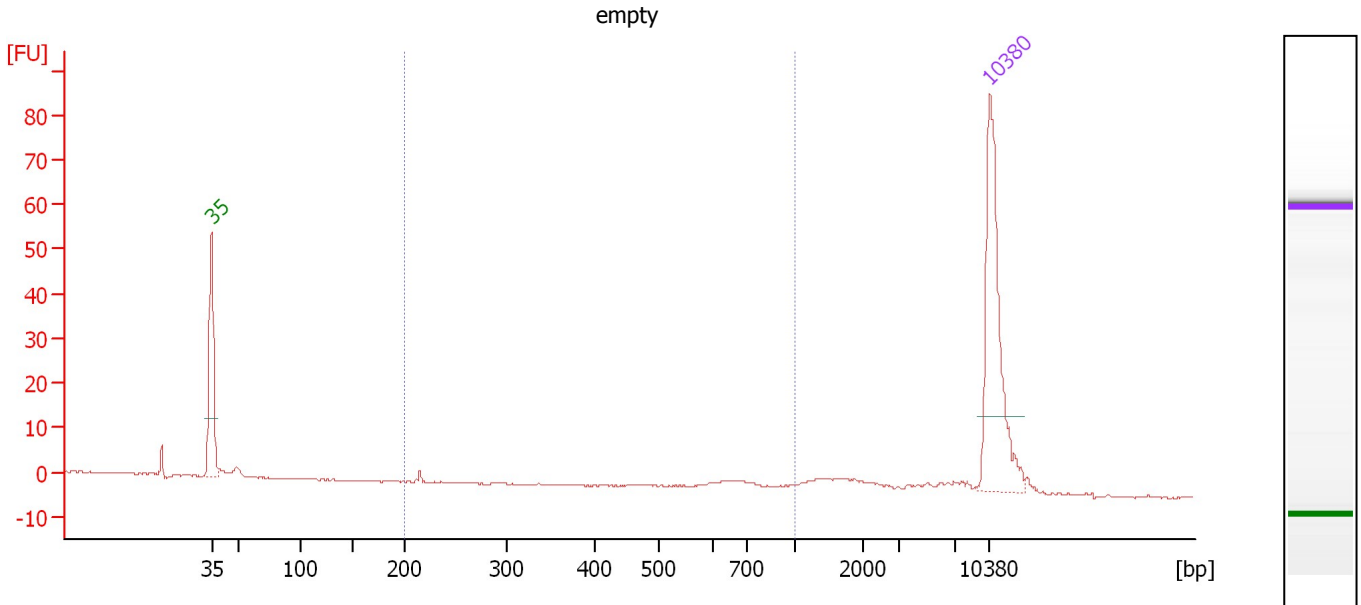
Region table for sample 10 : empty

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	630	9.5	27.5	10.62	25	23.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : empty

Number of peaks found: 0 Corr. Area 1: 6.8
 Noise: 0.1

Peak table for sample 11 : empty

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

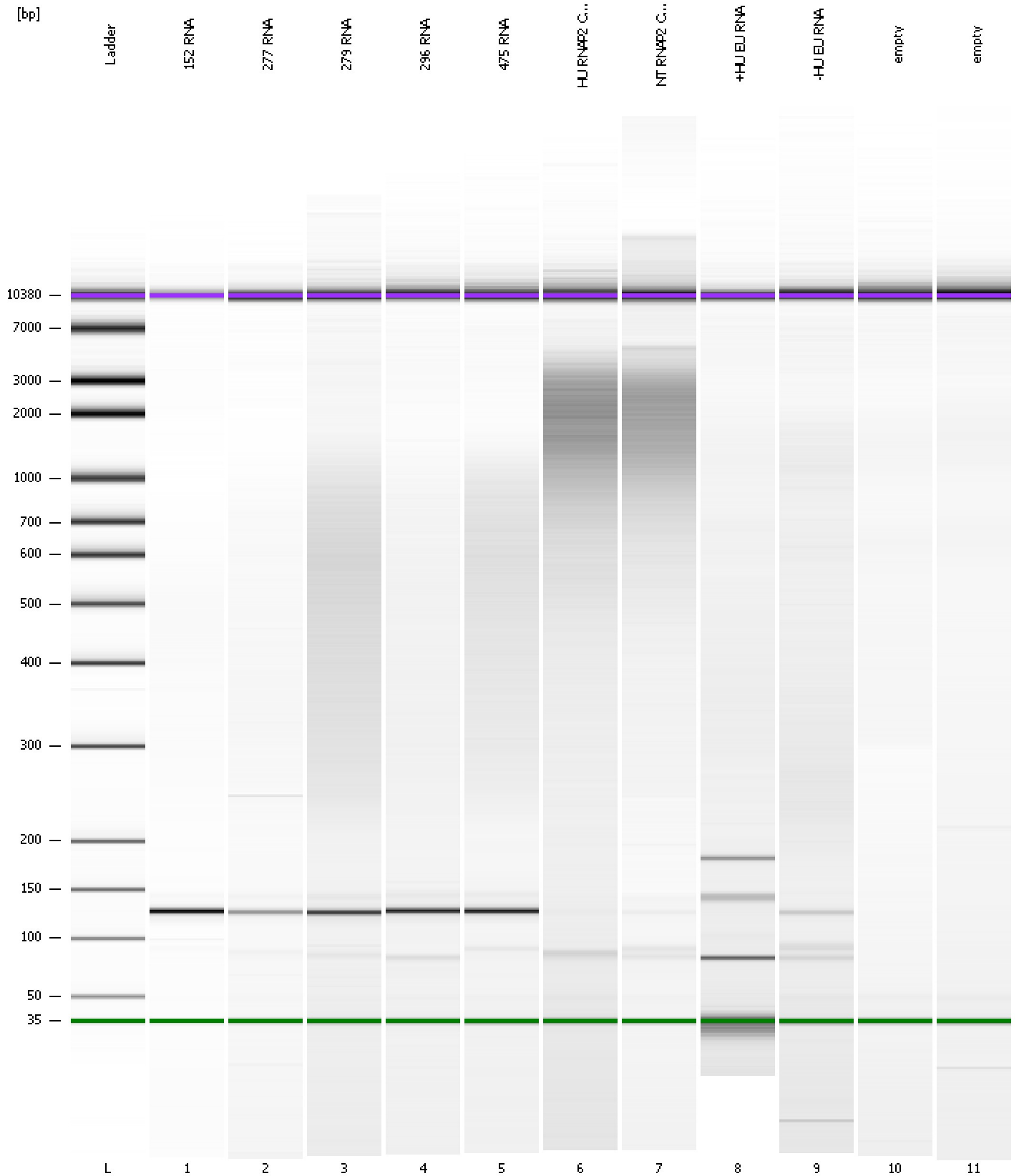
Region table for sample 11 : empty

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	678	6.8	16.7	6.19	17	22.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
Modified: 12/12/2016 4:22:30 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad

Created: 12/12/2016 3:41:30 PM
 Modified: 12/12/2016 4:22:30 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		12/12/2016 4:21:59 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-12-12\2016-12-12_002.xad)		Instrument	Run		12/12/2016 3:41:36 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/12/2016 3:41:36 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/12/2016 3:41:36 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/12/2016 3:41:36 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/12/2016 3:41:36 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/12/2016 3:41:36 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/12/2016 3:41:36 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1