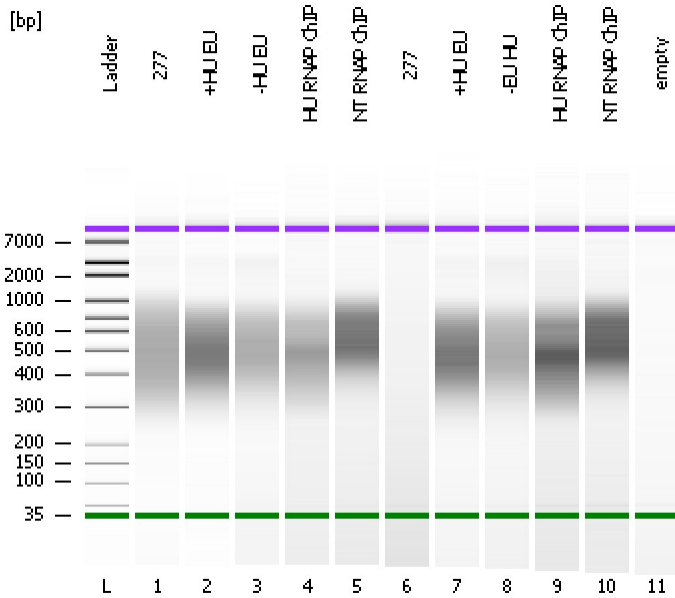


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
Modified: 12/27/2016 12:17:02 PM

Electrophoresis File Run Summary



Instrument Information:

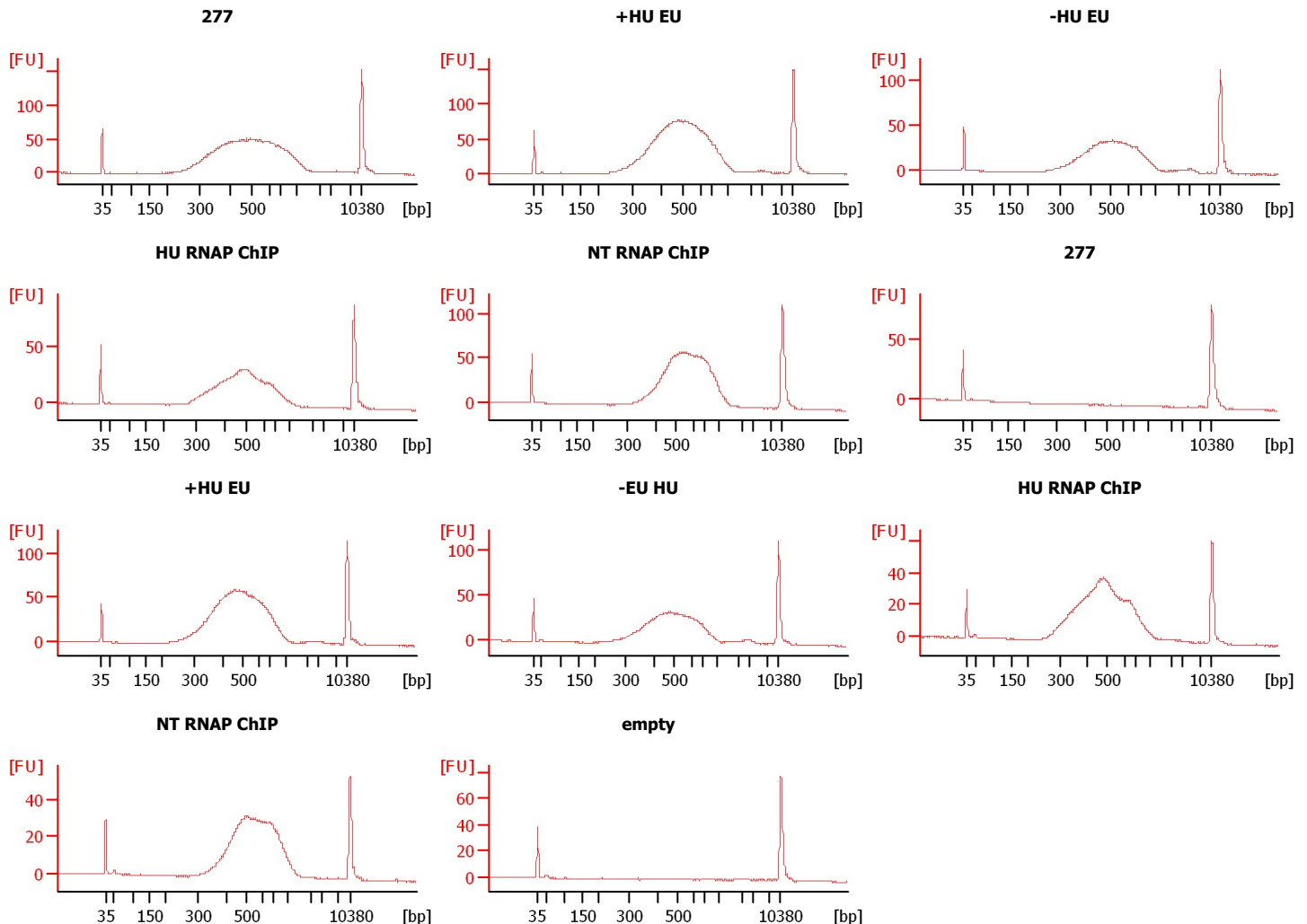
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
277		<input type="checkbox"/>	✓			
+HU EU		<input type="checkbox"/>	✓			
-HU EU		<input type="checkbox"/>	✓			
HU RNAP ChIP		<input type="checkbox"/>	✓			
NT RNAP ChIP		<input type="checkbox"/>	✓			
277		<input type="checkbox"/>	✓			
+HU EU		<input type="checkbox"/>	✓			
-EU HU		<input type="checkbox"/>	✓			
HU RNAP ChIP		<input type="checkbox"/>	✓			
NT RNAP ChIP		<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\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
Modified: 12/27/2016 12:17:02 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

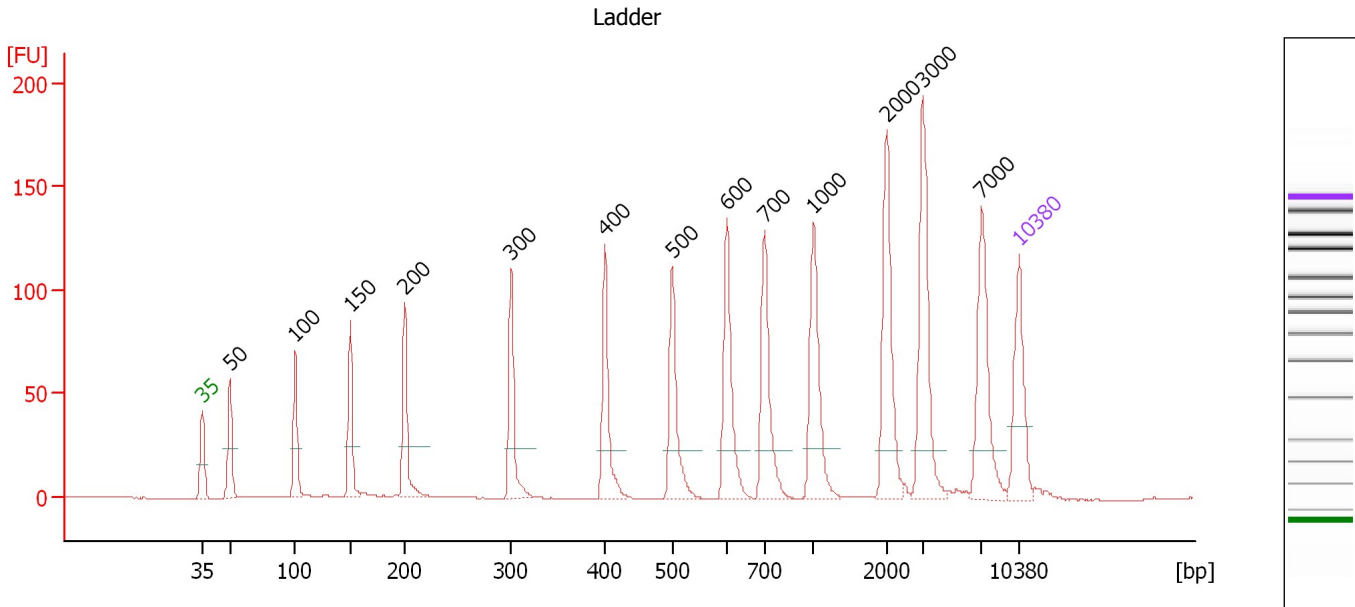
Ladder

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\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

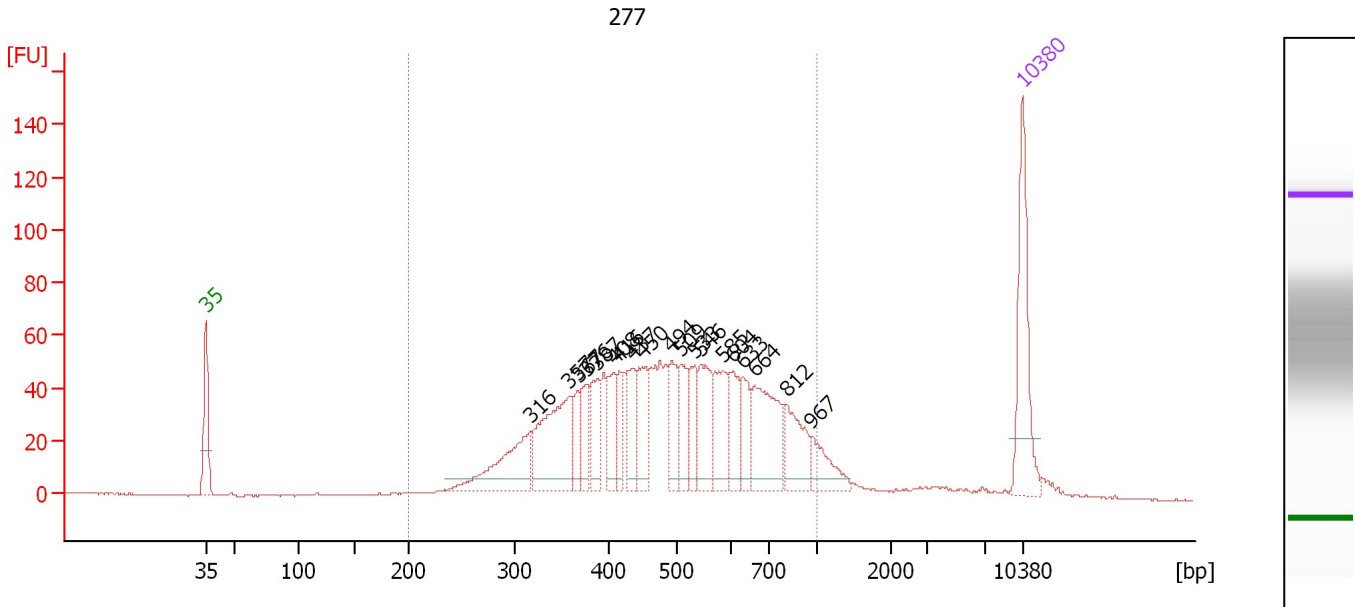
Peak table for Ladder

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	45.38
3	100	150.00	2,272.7	Ladder Peak	50.96
4	150	150.00	1,515.2	Ladder Peak	55.66
5	200	150.00	1,136.4	Ladder Peak	60.33
6	300	150.00	757.6	Ladder Peak	69.47
7	400	150.00	568.2	Ladder Peak	77.52
8	500	150.00	454.5	Ladder Peak	83.28
9	600	150.00	378.8	Ladder Peak	87.99
10	700	150.00	324.7	Ladder Peak	91.19
11	1,000	150.00	227.3	Ladder Peak	95.35
12	2,000	150.00	113.6	Ladder Peak	101.66
13	3,000	150.00	75.8	Ladder Peak	104.77
14	7,000	150.00	32.5	Ladder Peak	109.80
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 277

Number of peaks found: 19 Corr. Area 1: 1,396.1
 Noise: 0.2

Peak table for sample 1 : 277

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	316	95.25	456.0		70.80
3	357	122.55	519.6		74.09
4	367	28.12	116.1		74.87
5	376	35.82	144.3		75.60
6	387	41.10	160.7		76.51
7	408	37.54	139.4		77.98
8	416	29.01	105.7		78.43
9	437	42.66	148.1		79.62
10	450	51.72	174.1		80.40
11	494	40.50	124.3		82.92
12	509	39.17	116.7		83.69
13	533	35.16	100.0		84.84
14	546	58.70	163.0		85.43
15	585	53.38	138.2		87.30
16	604	35.21	88.3		88.13
17	633	33.33	79.8		89.04
18	664	89.91	205.1		90.05
19	812	48.58	90.6		92.75
20	967	30.25	47.4		94.89
21	10,380	75.00	10.9	Upper Marker	113.00

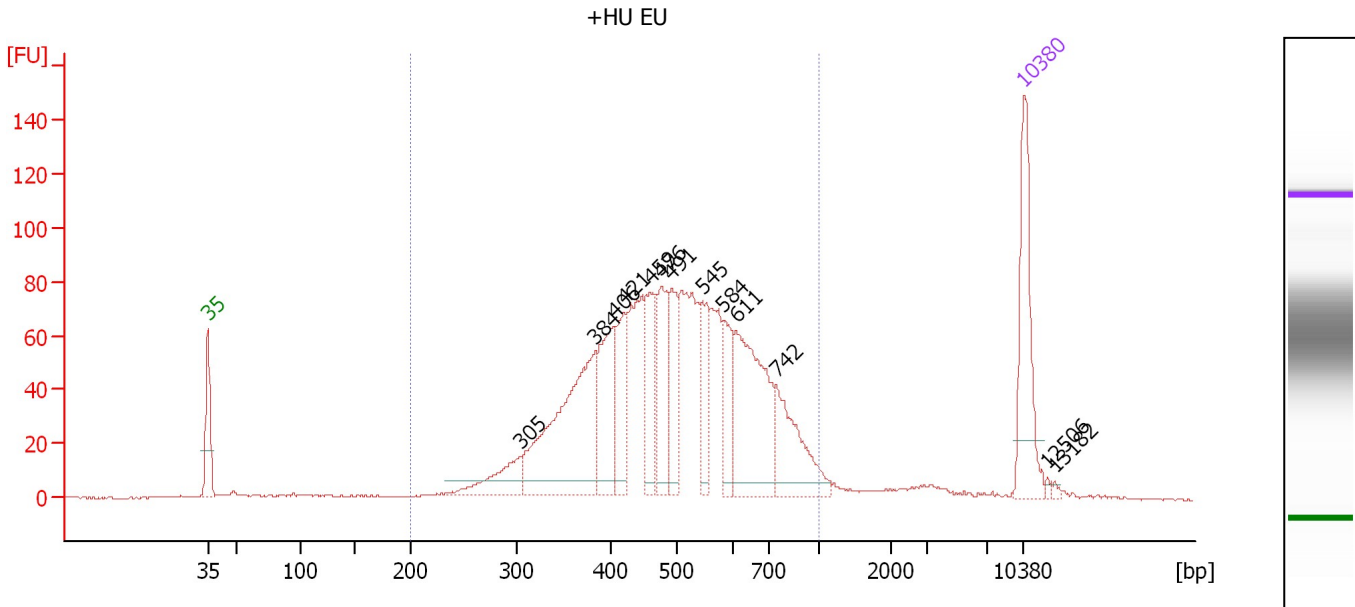
Region table for sample 1 : 277

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	508	1,396.1	3,952.1	1,157.94	93	31.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : +HU EU

Number of peaks found: 13 Corr. Area 1: 1,713.4
 Noise: 0.3

Peak table for sample 2 : +HU EU

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	305	46.83	232.8		69.86
3	384	207.49	819.1		76.22
4	406	90.22	336.7		77.86
5	421	65.88	237.1		78.73
6	459	66.33	218.9		80.93
7	476	76.35	243.1		81.89
8	491	53.10	163.9		82.76
9	545	48.89	135.9		85.41
10	584	45.94	119.2		87.24
11	611	141.55	351.0		88.34
12	742	78.79	160.9		91.77
13	10,380	75.00	10.9	Upper Marker	113.00
14	12,506	0.00	0.0		115.01
15	13,182	0.00	0.0		115.65

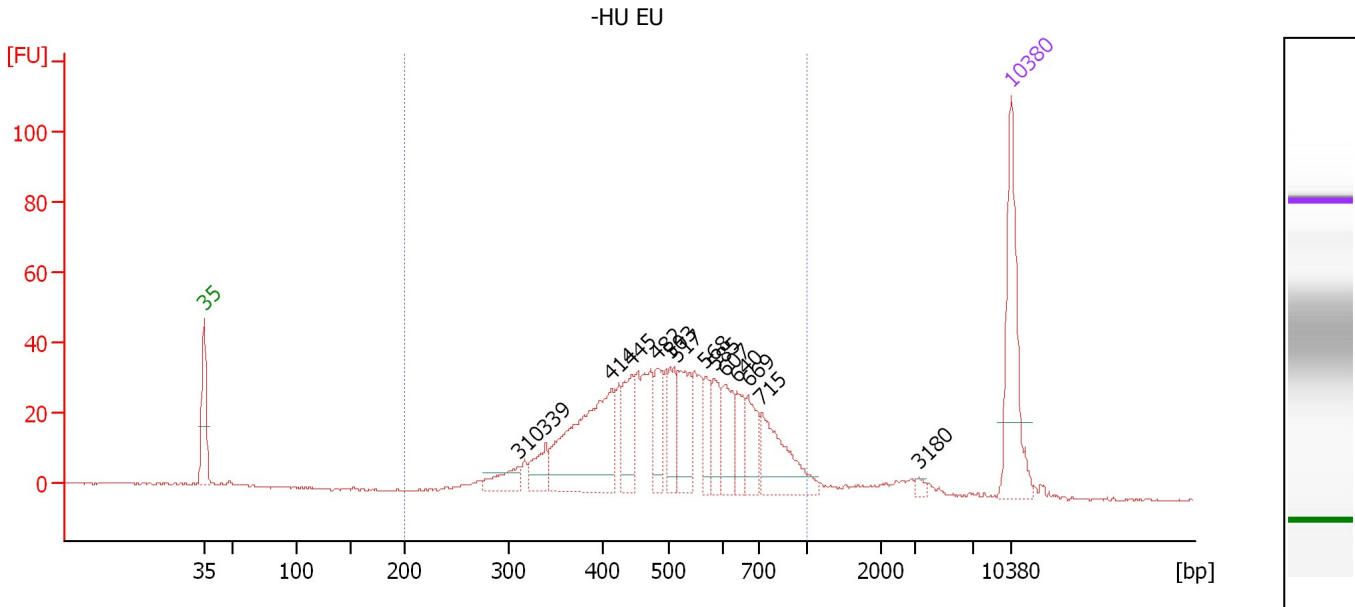
Region table for sample 2 : +HU EU

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	506	1,713.4	4,151.0	1,251.96	95	27.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : -HU EU

Number of peaks found: 14 Corr. Area 1: 756.0
 Noise: 0.3

Peak table for sample 3 : -HU EU

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	310	26.04	127.2		70.30
3	339	27.90	124.7		72.61
4	414	152.66	558.2		78.35
5	445	46.64	158.9		80.11
6	482	33.34	104.8		82.23
7	503	36.68	110.4		83.44
8	517	52.15	152.8		84.08
9	568	26.14	69.7		86.49
10	585	27.95	72.4		87.28
11	607	35.88	89.6		88.20
12	640	24.50	58.0		89.27
13	669	33.10	75.0		90.19
14	715	66.25	140.5		91.39
15	3,180	3.17	1.5		105.00
16	10,380	75.00	10.9	Upper Marker	113.00

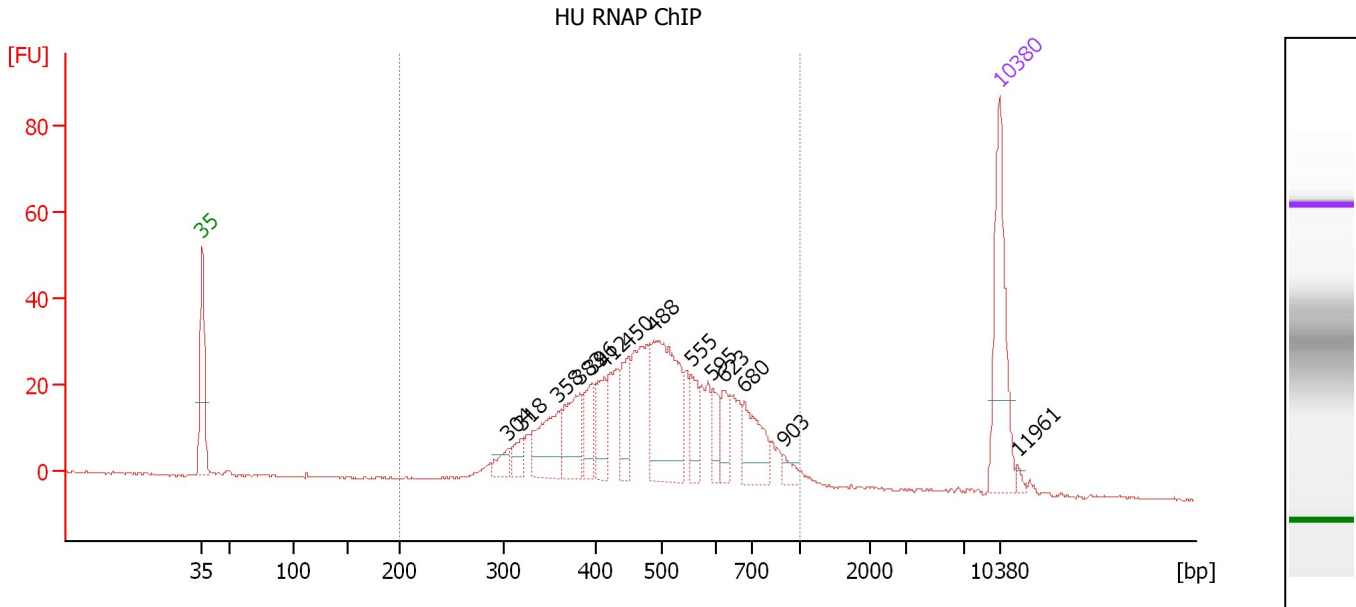
Region table for sample 3 : -HU EU

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	520	756.0	2,365.6	736.42	93	27.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : HU RNAP ChIP

Number of peaks found: 14 Corr. Area 1: 670.2
 Noise: 0.3

Peak table for sample 4 : HU RNAP 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	304	14.39	71.7		69.81
3	318	15.47	73.7		70.93
4	358	58.24	246.3		74.16
5	383	54.51	215.8		76.13
6	396	29.50	112.8		77.20
7	412	38.03	139.7		78.23
8	450	38.50	129.7		80.39
9	488	127.41	395.7		82.59
10	555	26.51	72.4		85.86
11	595	19.68	50.1		87.73
12	623	20.50	49.9		88.72
13	680	44.16	98.4		90.54
14	903	8.49	14.3		94.00
15	10,380	75.00	10.9	Upper Marker	113.00
16	11,961	0.00	0.0		114.50

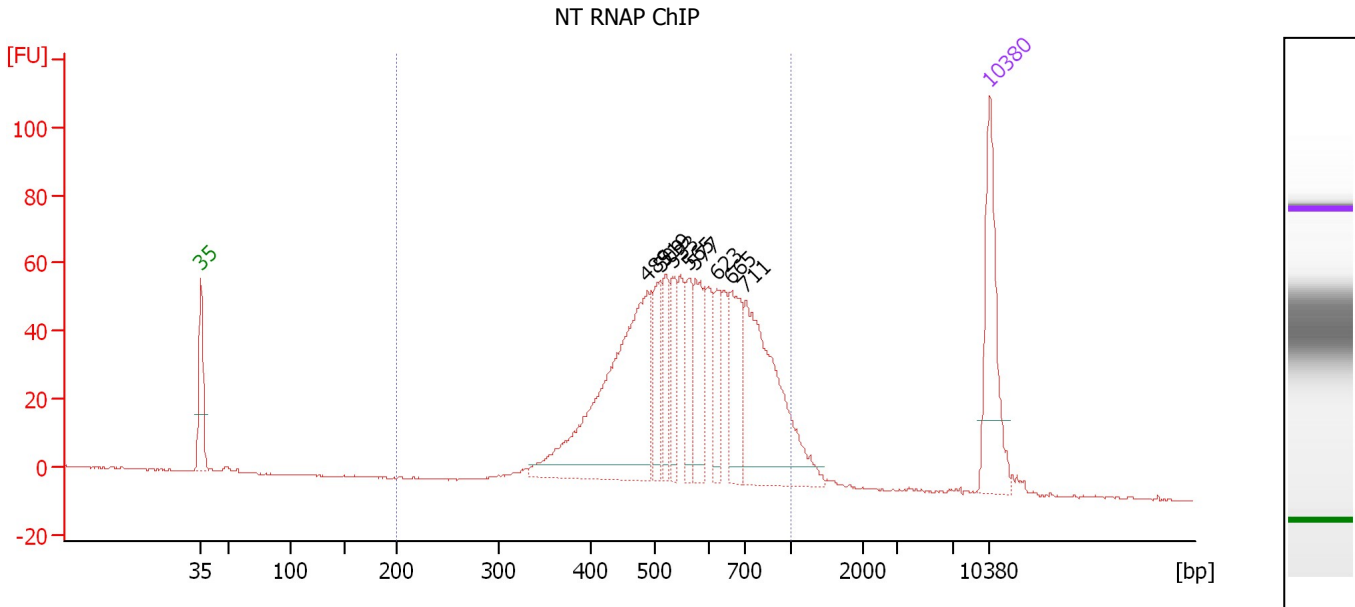
Region table for sample 4 : HU RNAP ChIP

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	501	670.2	2,644.8	790.93	95	27.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NT RNAP ChIP

Number of peaks found: 9 Corr. Area 1: 1,096.2
 Noise: 0.2

Peak table for sample 5 : NT RNAP 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	489	283.38	878.4		82.64
3	509	51.03	151.8		83.72
4	519	40.63	118.5		84.20
5	533	39.73	112.8		84.86
6	565	40.44	108.5		86.32
7	577	54.91	144.3		86.89
8	623	36.72	89.3		88.74
9	665	64.56	147.2		90.06
10	711	176.38	376.1		91.34
11	10,380	75.00	10.9	Upper Marker	113.00

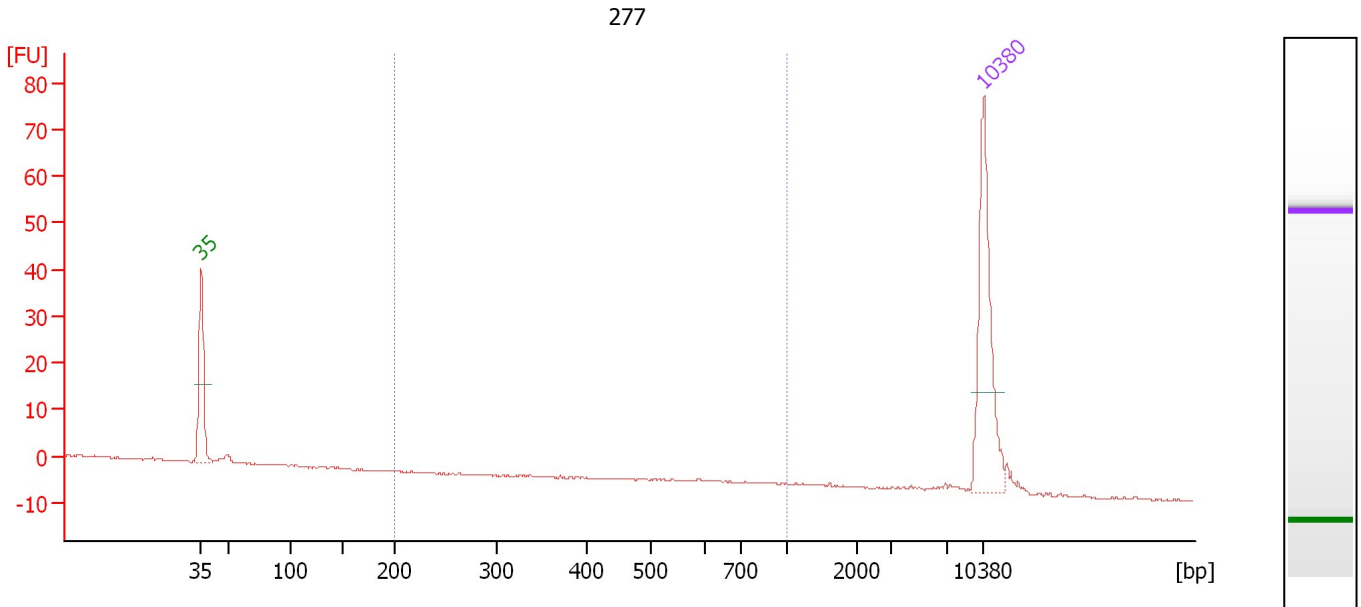
Region table for sample 5 : NT RNAP ChIP

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	583	1,096.2	2,591.1	921.97	95	24.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 277

Number of peaks found: 0 Corr. Area 1: 1.0
 Noise: 0.2

Peak table for sample 6 : 277

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

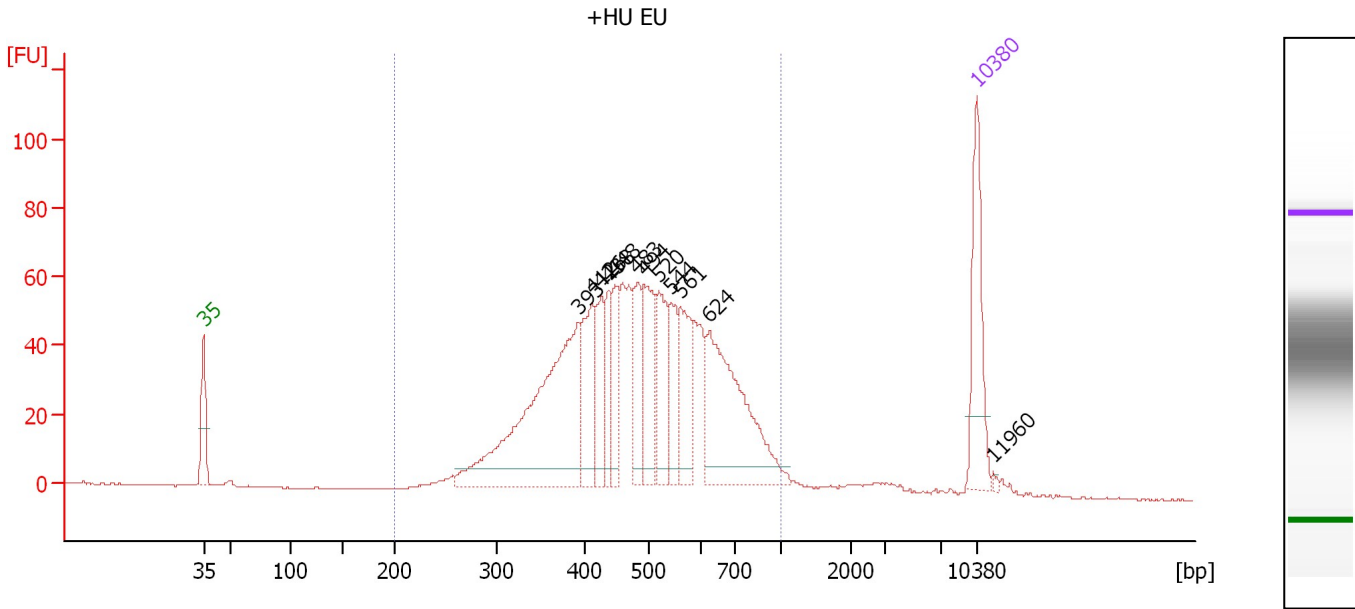
Region table for sample 6 : 277

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	745	1.0	2.2	1.05	7	18.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : +HU EU

Number of peaks found: 12 Corr. Area 1: 1,312.0
 Noise: 0.2

Peak table for sample 7 : +HU EU

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	393	335.42	1,293.9		76.94
3	412	84.33	310.4		78.19
4	426	58.05	206.5		79.01
5	438	45.75	158.4		79.69
6	448	54.14	183.2		80.27
7	483	63.69	199.8		82.30
8	494	89.97	276.1		82.92
9	520	70.06	204.1		84.23
10	544	52.96	147.6		85.34
11	561	73.95	199.7		86.16
12	624	188.20	456.8		88.77
13	10,380	75.00	10.9	Upper Marker	113.00
14	11,960	0.00	0.0		114.50

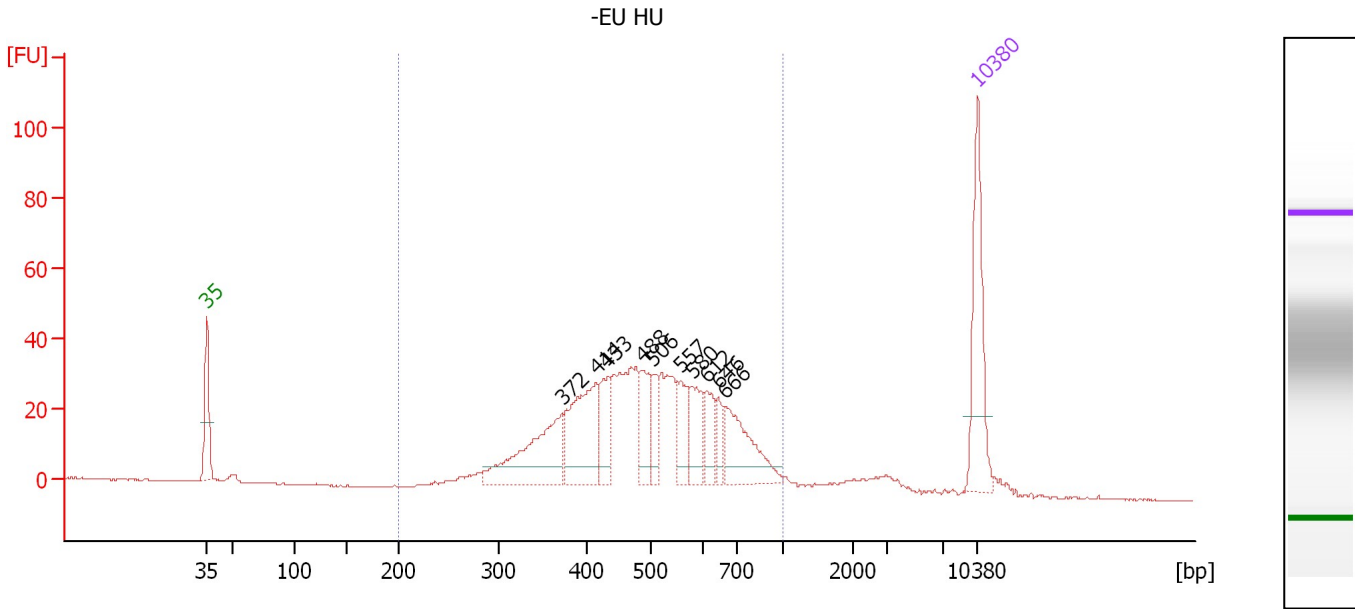
Region table for sample 7 : +HU EU

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	499	1,312.0	4,589.4	1,369.33	96	27.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : -EU HU

Number of peaks found: 10 Corr. Area 1: 731.8
 Noise: 0.2

Peak table for sample 8 : -EU HU

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	372	117.31	477.4		75.29
3	414	108.57	397.1		78.34
4	433	39.33	137.7		79.40
5	488	40.31	125.1		82.60
6	506	25.21	75.5		83.57
7	557	32.76	89.0		85.99
8	580	40.64	106.1		87.05
9	612	29.18	72.3		88.36
10	646	17.83	41.8		89.47
11	666	70.49	160.4		90.10
12	10,380	75.00	10.9	Upper Marker	113.00

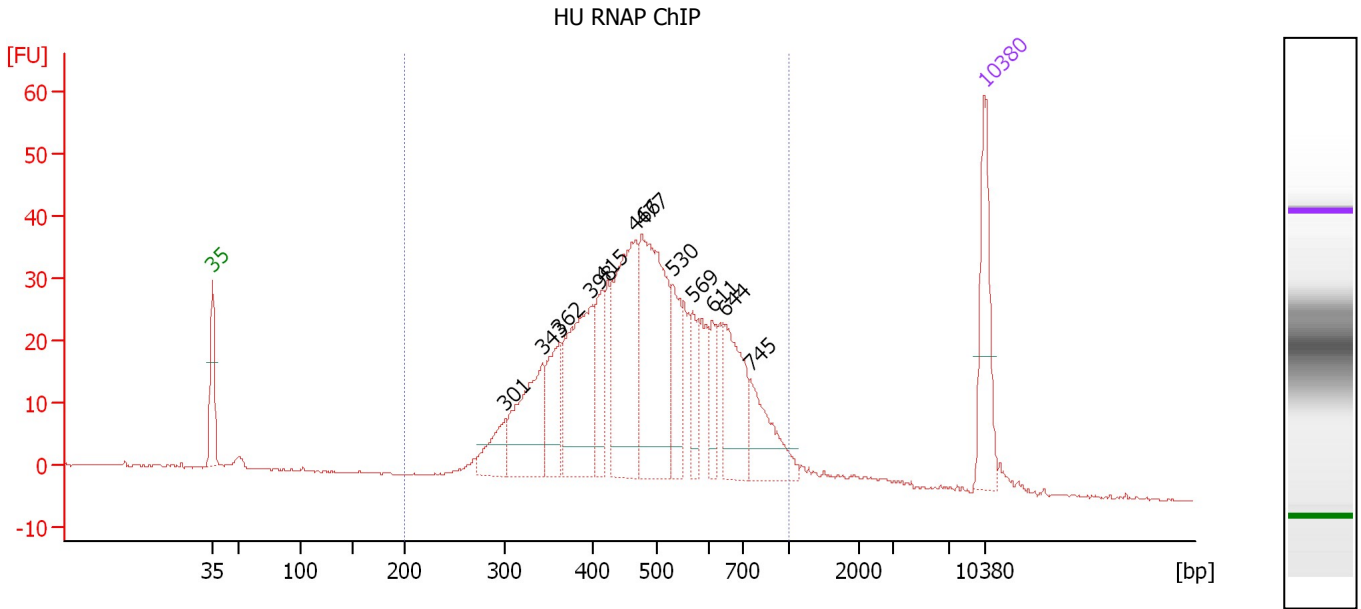
Region table for sample 8 : -EU HU

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	506	731.8	2,616.0	792.36	93	27.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : HU RNAP ChIP

Number of peaks found: 12 Corr. Area 1: 780.4
 Noise: 0.2

Peak table for sample 9 : HU RNAP 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	301	51.42	258.8		69.56
3	343	126.13	556.9		72.94
4	362	75.52	316.3		74.44
5	398	176.66	671.8		77.40
6	415	63.55	232.2		78.36
7	466	206.14	670.4		81.31
8	477	231.21	734.8		81.94
9	530	64.03	183.0		84.70
10	569	32.97	87.8		86.54
11	611	30.06	74.6		88.33
12	644	97.70	229.9		89.39
13	745	72.65	147.8		91.81
14	10,380	75.00	10.9	Upper Marker	113.00

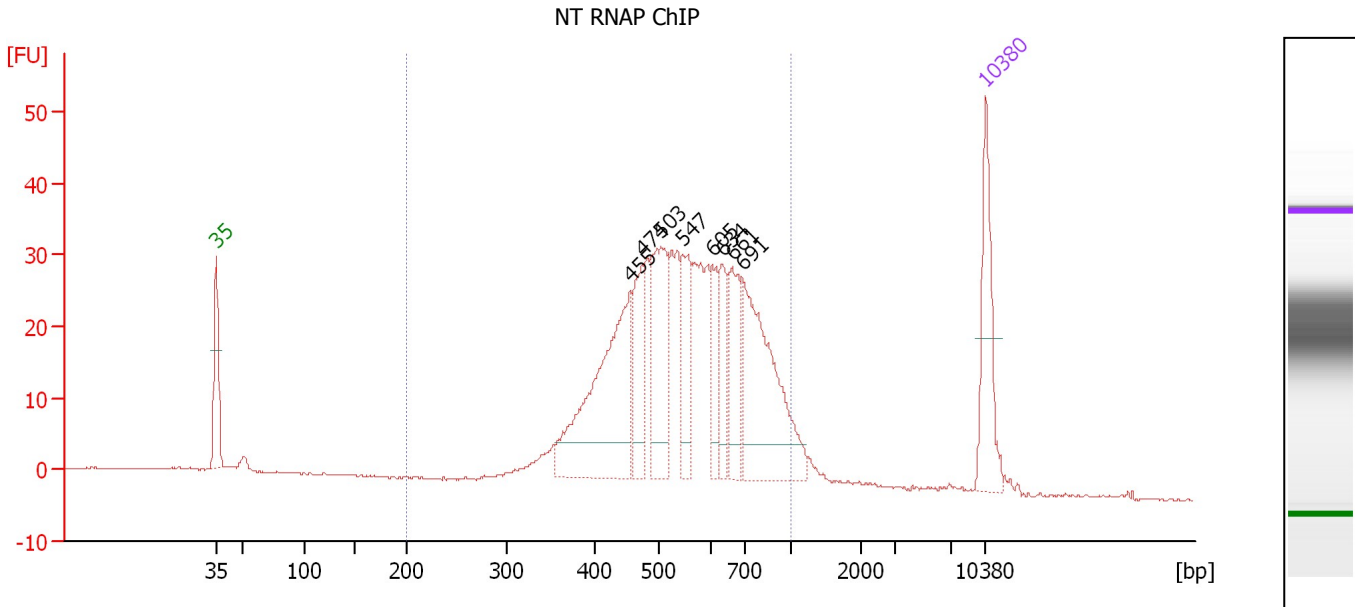
Region table for sample 9 : HU RNAP ChIP

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	497	780.4	4,970.9	1,471.88	93	28.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : NT RNAP ChIP

Number of peaks found: 8 Corr. Area 1: 595.0
 Noise: 0.1

Peak table for sample 10 : NT RNAP 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	455	259.44	864.5		80.67
3	474	76.21	243.6		81.79
4	503	138.61	417.3		83.44
5	547	69.06	191.4		85.48
6	605	41.53	104.0		88.15
7	634	44.94	107.5		89.07
8	661	66.23	151.8		89.94
9	691	210.58	461.5		90.91
10	10,380	75.00	10.9	Upper Marker	113.00

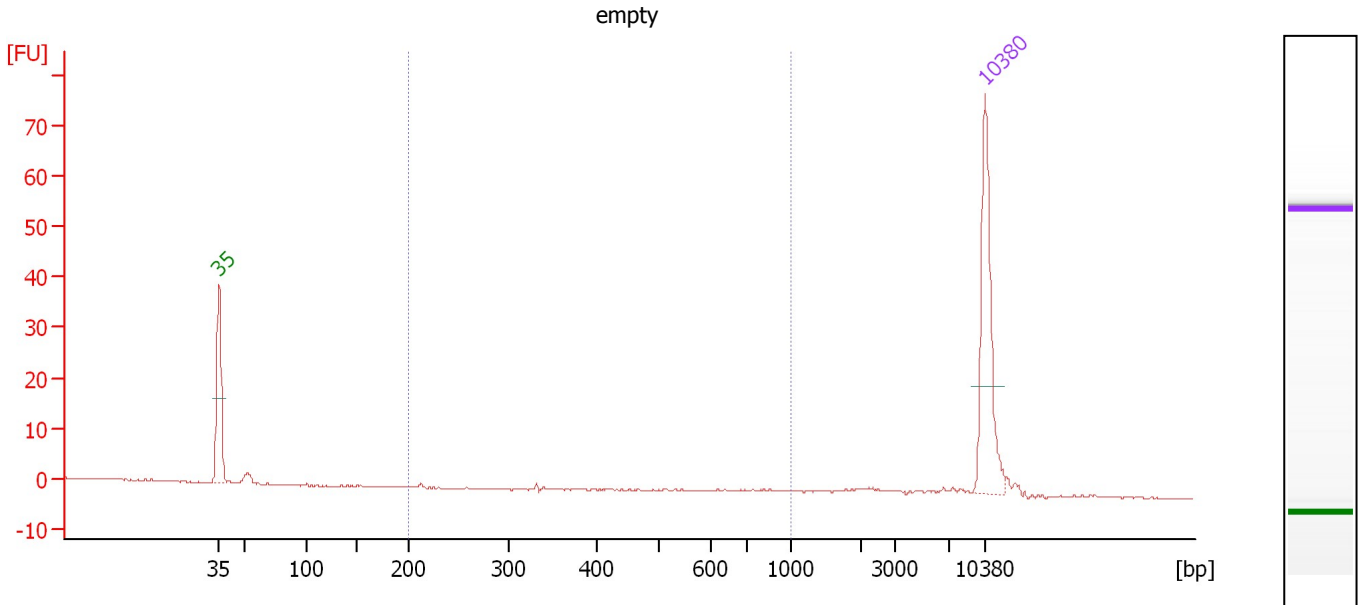
Region table for sample 10 : NT RNAP ChIP

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	567	595.0	3,677.2	1,270.24	93	25.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : empty

Number of peaks found: 0 Corr. Area 1: 1.2
 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

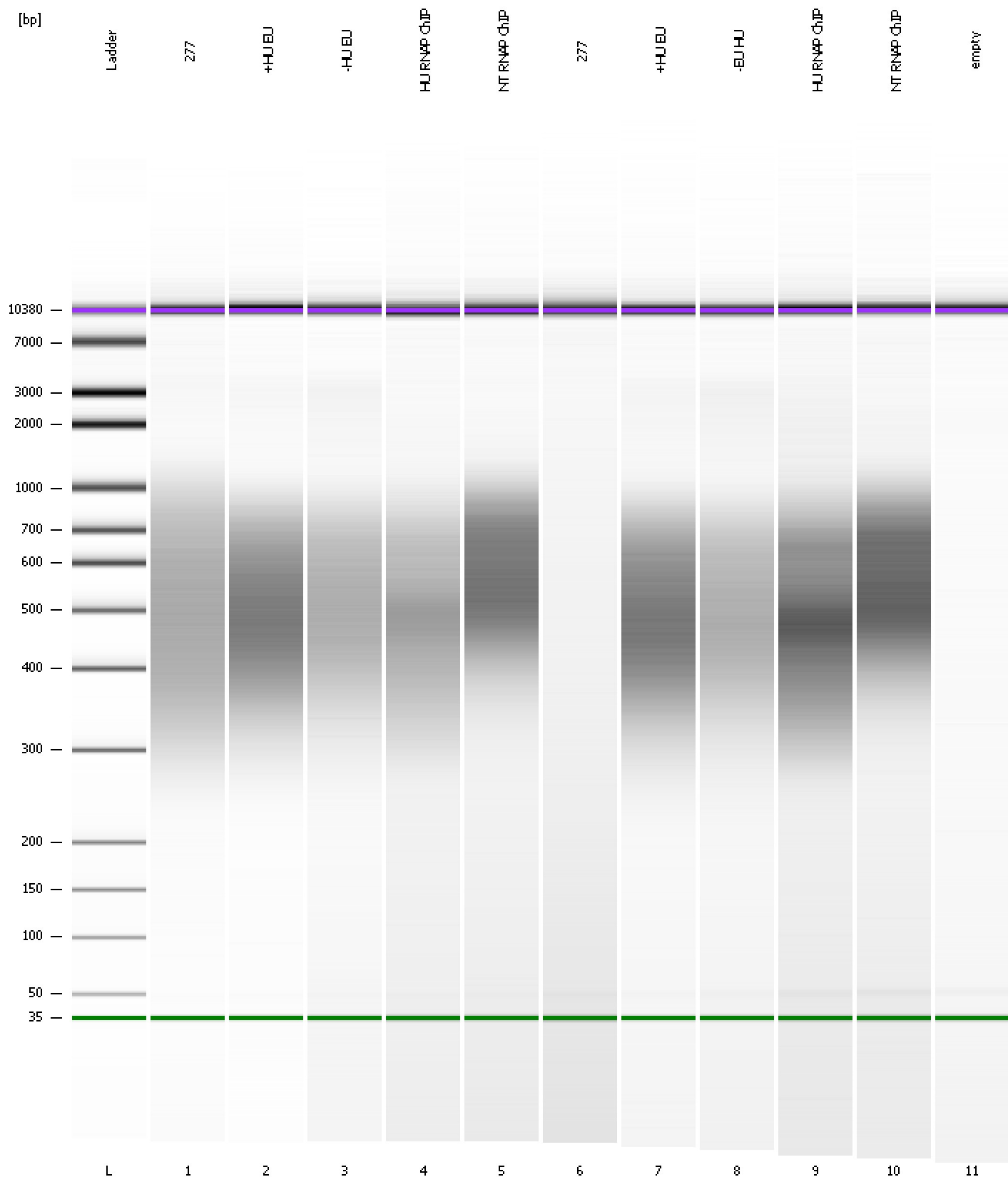
Region table for sample 11 : empty

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	723	1.2	4.5	1.74	7	27.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
Modified: 12/27/2016 12:17:02 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-12-27\2016-12-27_002.xad

Created: 12/27/2016 11:35:45 AM
 Modified: 12/27/2016 12:17:02 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		12/27/2016 12:17:01 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\2016-12-27\2016-12-27_002.xad)		Instrument	Run		12/27/2016 11:35:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/27/2016 11:35:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/27/2016 11:35:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/27/2016 11:35:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/27/2016 11:35:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/27/2016 11:35:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/27/2016 11:35:51 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1