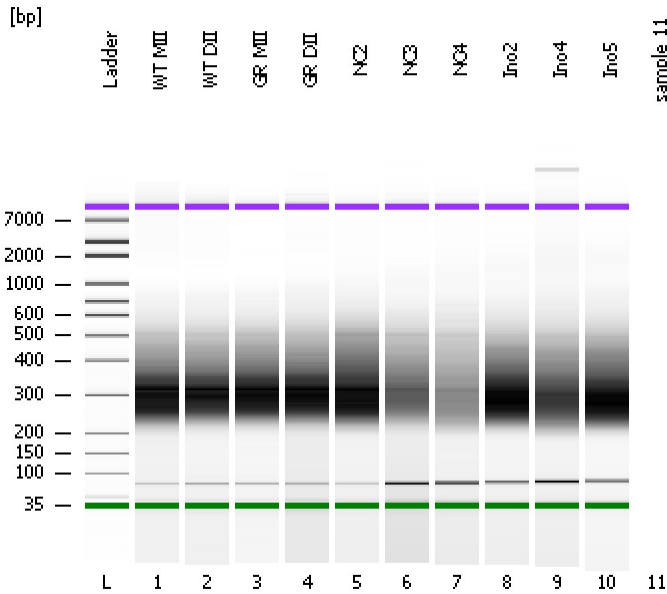


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
Modified: 7/11/2016 1:37:27 PM

Electrophoresis File Run Summary



Instrument Information:

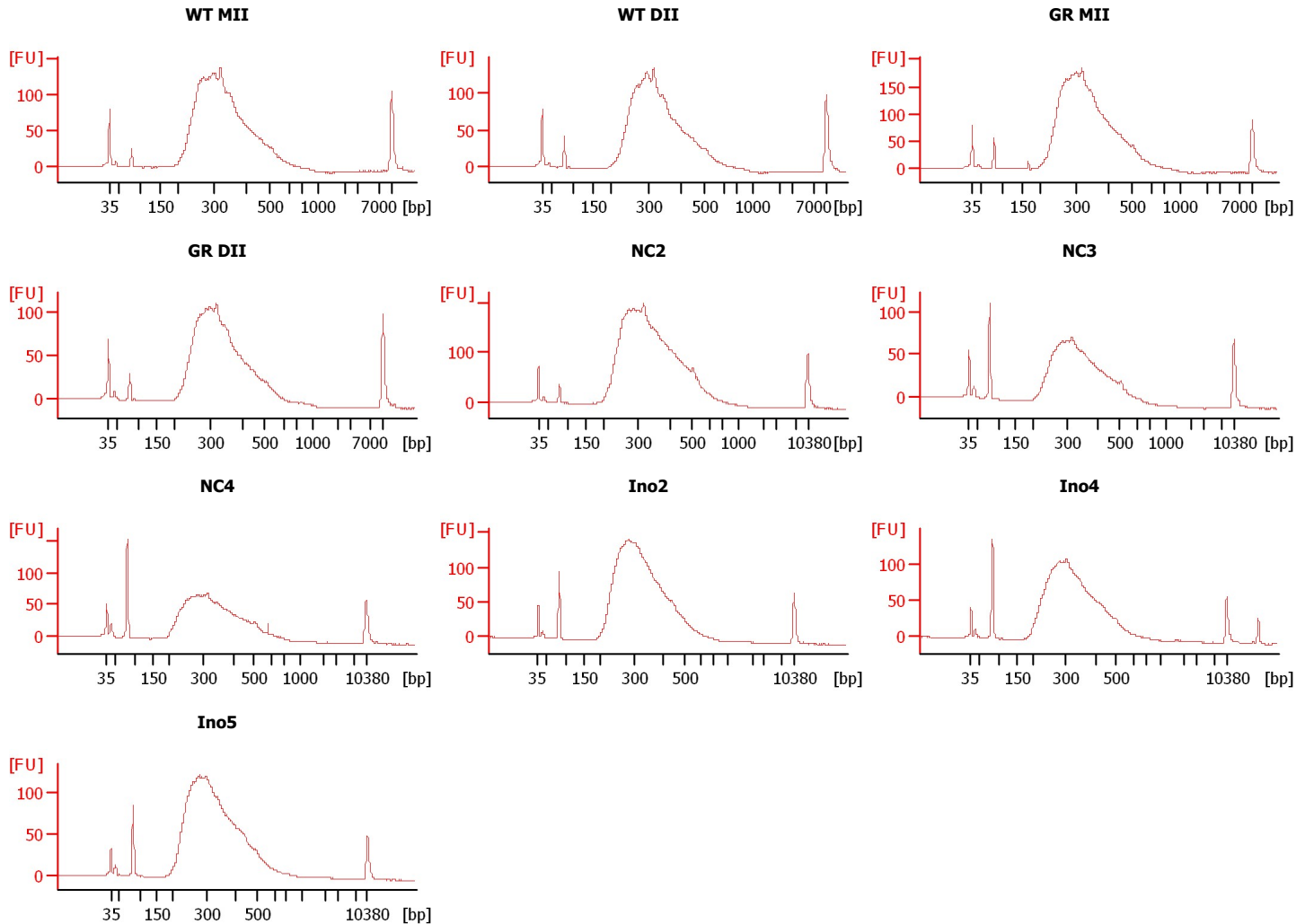
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
Modified: 7/11/2016 1:37:27 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WT MII		<input type="checkbox"/>	✓			
WT DII		<input type="checkbox"/>	✓			
GR MII		<input type="checkbox"/>	✓			
GR DII		<input type="checkbox"/>	✓			
NC2		<input type="checkbox"/>	✓			
NC3		<input type="checkbox"/>	✓			
NC4		<input type="checkbox"/>	✓			
Ino2		<input type="checkbox"/>	✓			
Ino4		<input type="checkbox"/>	✓			
Ino5		<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\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
Modified: 7/11/2016 1:37:27 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

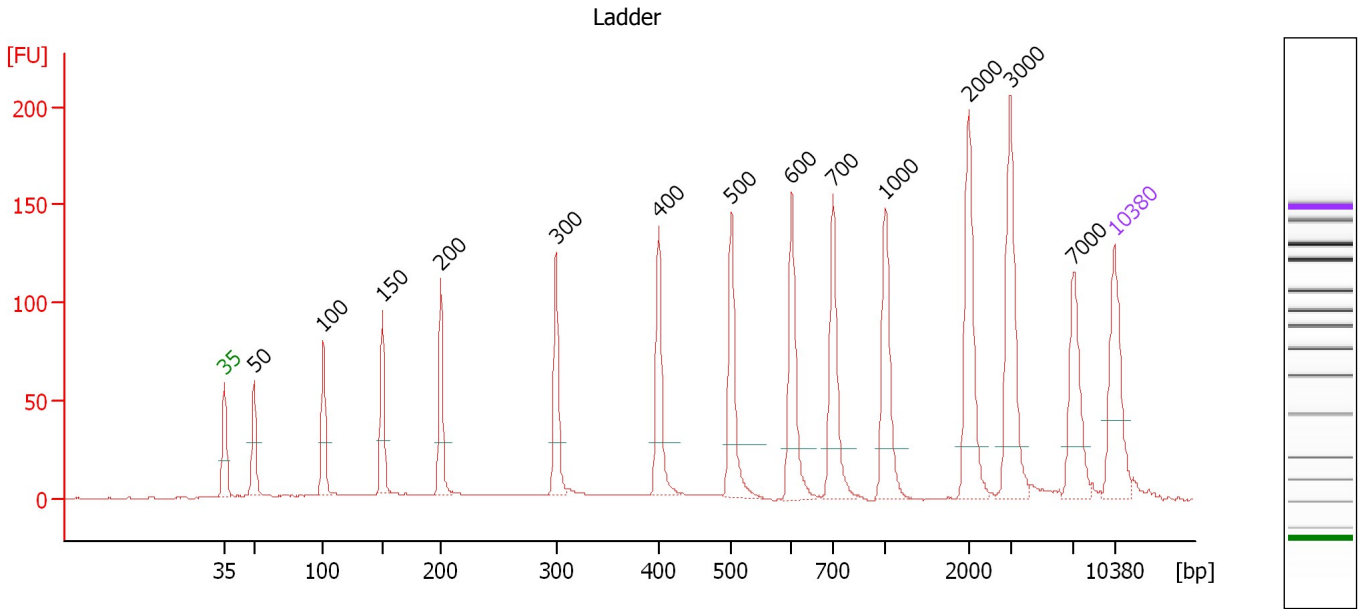
Ladder

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\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

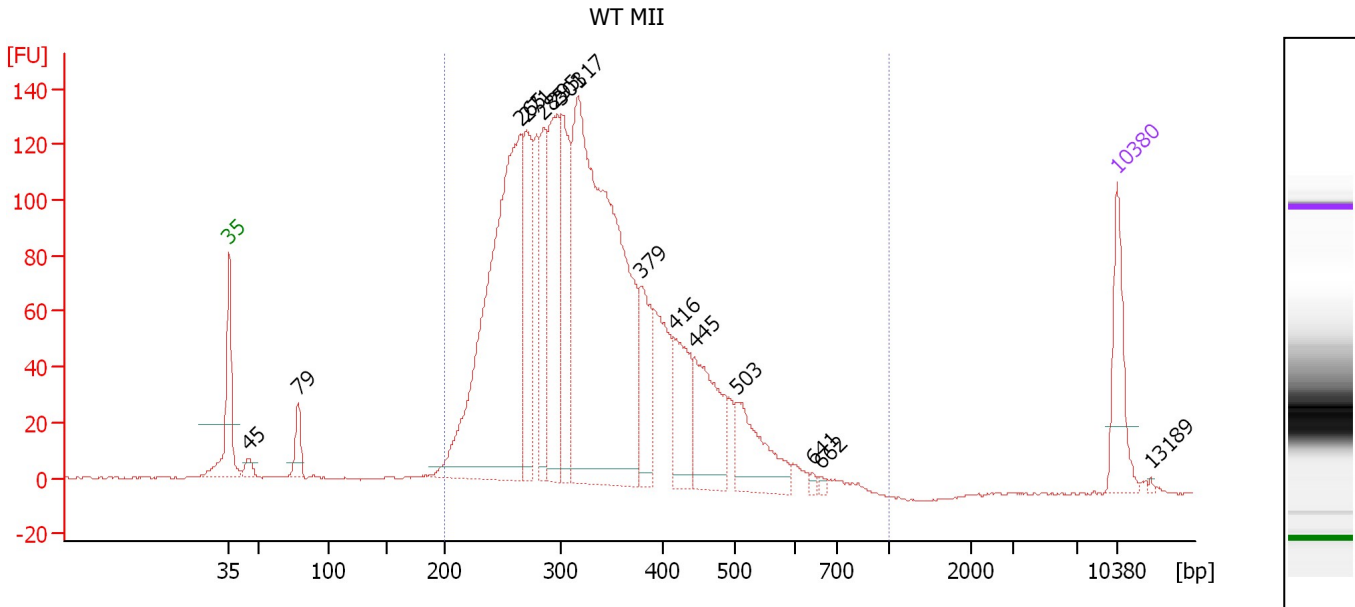
Peak table for Ladder

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	45.35
3	100	150.00	2,272.7	Ladder Peak	50.80
4	150	150.00	1,515.2	Ladder Peak	55.41
5	200	150.00	1,136.4	Ladder Peak	60.03
6	300	150.00	757.6	Ladder Peak	69.09
7	400	150.00	568.2	Ladder Peak	77.14
8	500	150.00	454.5	Ladder Peak	82.89
9	600	150.00	378.8	Ladder Peak	87.63
10	700	150.00	324.7	Ladder Peak	90.90
11	1,000	150.00	227.3	Ladder Peak	95.01
12	2,000	150.00	113.6	Ladder Peak	101.55
13	3,000	150.00	75.8	Ladder Peak	104.82
14	7,000	150.00	32.5	Ladder Peak	109.81
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : WT MII

Number of peaks found: 15 Corr. Area 1: 2,827.9
 Noise: 0.3

Peak table for sample 1 : WT MII

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	45	18.21	614.0		44.56
3	79	47.37	913.3		48.47
4	265	816.46	4,668.9		65.91
5	271	201.67	1,127.6		66.46
6	285	145.22	771.0		67.76
7	295	272.42	1,398.6		68.65
8	301	192.04	965.7		69.19
9	317	999.13	4,768.2		70.50
10	379	112.44	449.4		75.46
11	416	116.73	425.1		78.06
12	445	157.72	537.5		79.70
13	503	116.21	350.1		83.02
14	641	4.88	11.6		88.95
15	662	4.19	9.6		89.67
16	10,380	75.00	10.9	Upper Marker	113.00
17	13,189	0.00	0.0		115.65

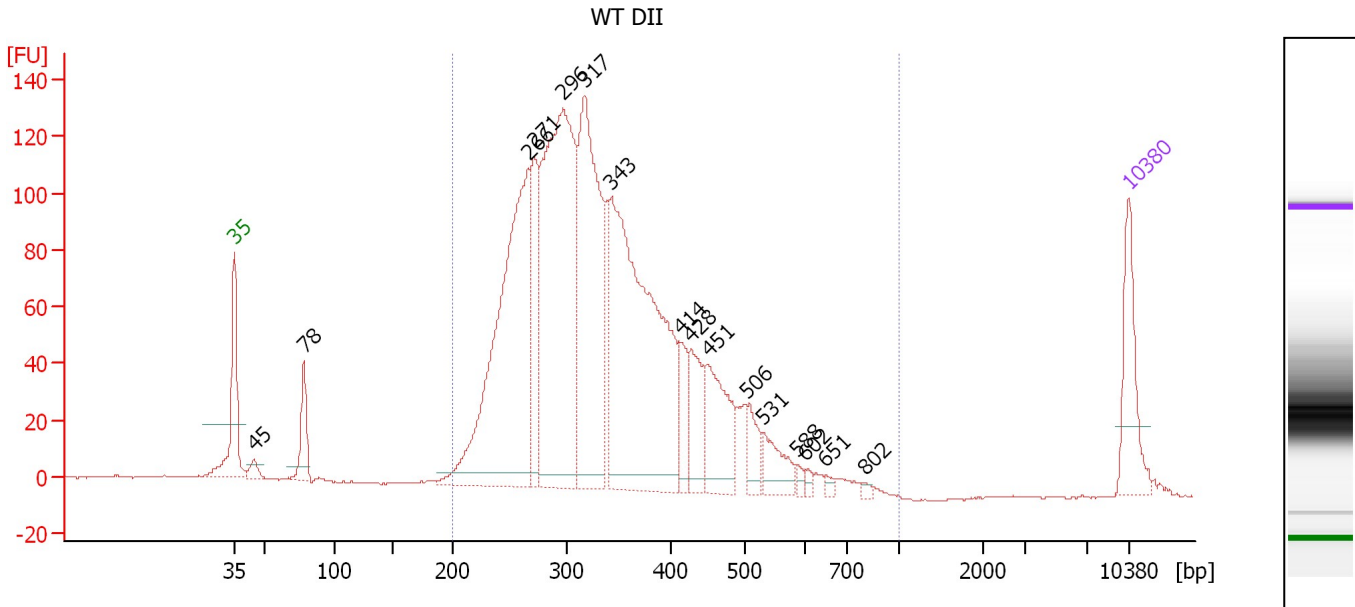
Region table for sample 1 : WT MII

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	336	2,827.9	16,771.0	3,447.40	96	25.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : WT DII

Number of peaks found: 16 Corr. Area 1: 2,578.1
 Noise: 0.3

Peak table for sample 2 : WT DII

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	45	16.89	573.8		44.50
3	78	70.66	1,368.7		48.43
4	266	622.59	3,547.5		66.00
5	271	146.08	816.8		66.46
6	296	663.08	3,395.7		68.71
7	317	448.92	2,148.4		70.42
8	343	652.79	2,887.7		72.51
9	414	50.86	186.2		77.94
10	428	78.90	279.5		78.73
11	451	122.47	411.5		80.07
12	506	38.84	116.4		83.16
13	531	50.34	143.6		84.37
14	588	7.79	20.1		87.04
15	602	6.62	16.7		87.70
16	651	6.89	16.0		89.29
17	802	4.65	8.8		92.30
18	10,380	75.00	10.9	Upper Marker	113.00

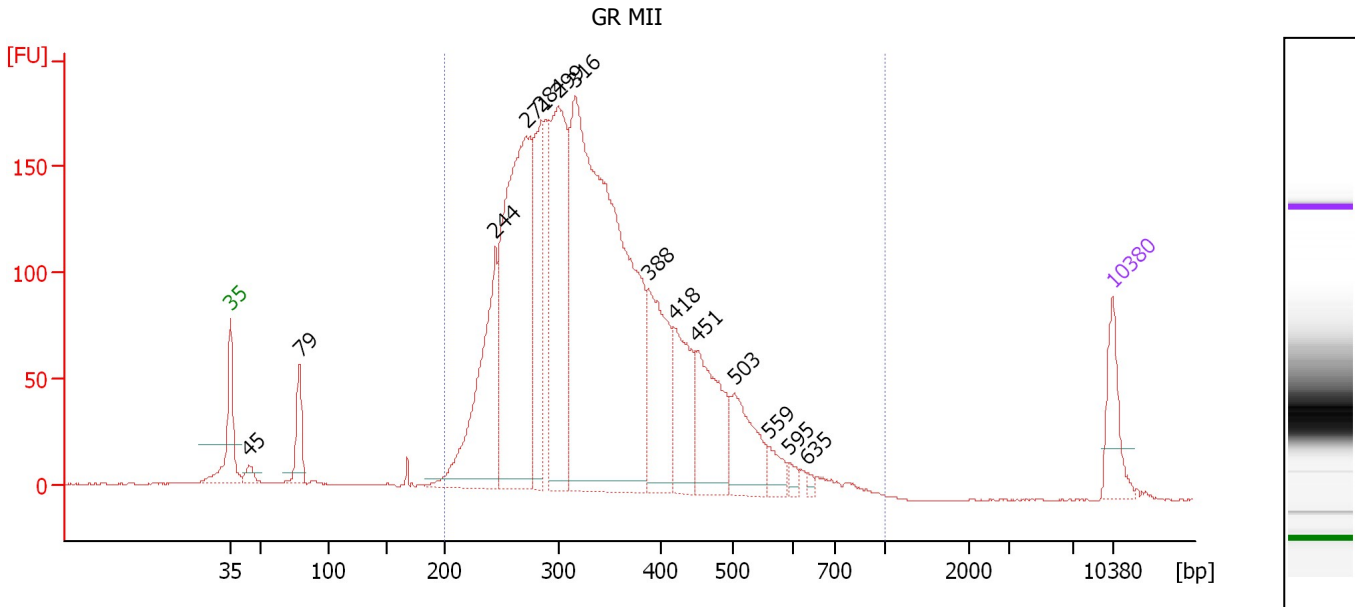
Region table for sample 2 : WT DII

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	341	2,578.1	14,104.6	2,944.85	97	25.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : GR MII

Number of peaks found: 14 Corr. Area 1: 3,788.6
 Noise: 0.3

Peak table for sample 3 : GR MII

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	45	25.27	856.2		44.52
3	79	103.74	1,992.6		48.50
4	244	436.33	2,708.6		64.02
5	271	874.50	4,886.5		66.47
6	284	281.64	1,501.4		67.66
7	299	548.92	2,780.0		69.01
8	316	1,613.80	7,741.0		70.37
9	388	284.14	1,110.0		76.16
10	418	188.11	681.4		78.19
11	451	236.90	795.2		80.09
12	503	153.88	463.8		83.01
13	559	42.17	114.3		85.68
14	595	16.20	41.3		87.37
15	635	8.46	20.2		88.76
16	10,380	75.00	10.9	Upper Marker	113.00

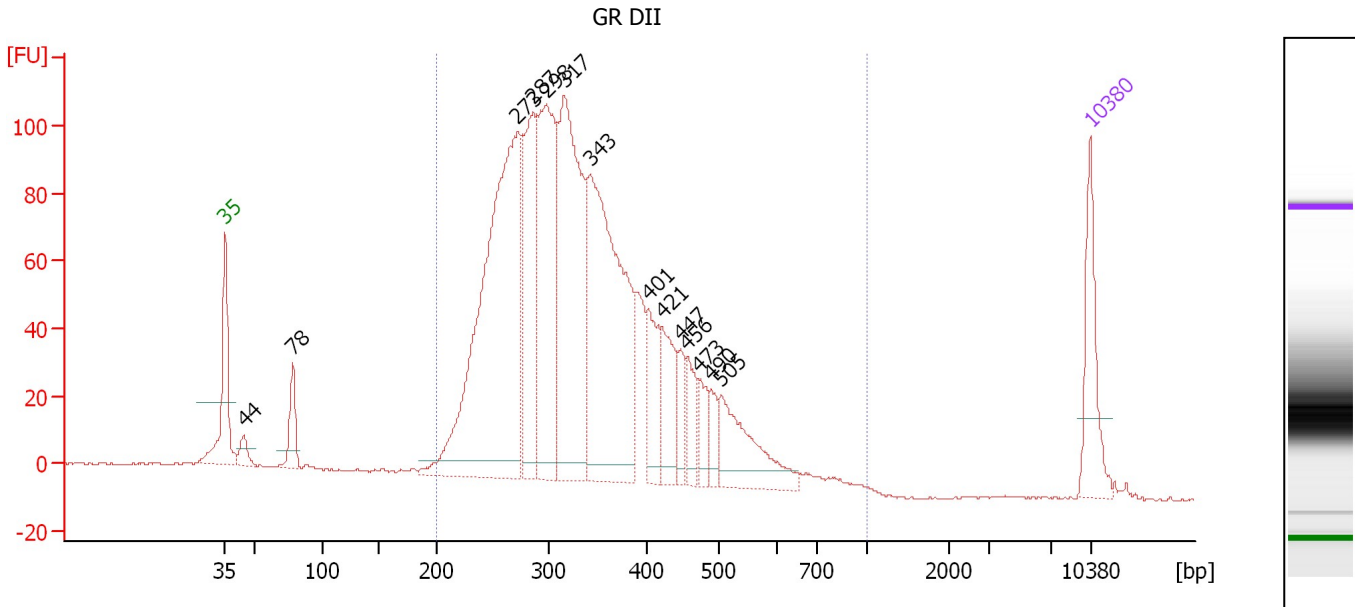
Region table for sample 3 : GR MII

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	345	3,788.6	23,010.1	4,829.50	96	26.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : GR DII

Number of peaks found: 14 Corr. Area 1: 2,263.9
 Noise: 0.3

Peak table for sample 4 : GR DII

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	44	26.54	906.4		44.47
3	78	59.83	1,157.3		48.44
4	273	752.90	4,177.2		66.65
5	287	264.68	1,395.5		67.94
6	298	329.67	1,674.3		68.94
7	317	433.67	2,073.5		70.45
8	343	507.66	2,245.0		72.52
9	401	80.37	303.3		77.22
10	421	90.10	324.3		78.35
11	447	37.65	127.6		79.86
12	456	46.14	153.2		80.37
13	473	35.71	114.4		81.32
14	490	27.20	84.1		82.32
15	505	126.27	378.7		83.14
16	10,380	75.00	10.9	Upper Marker	113.00

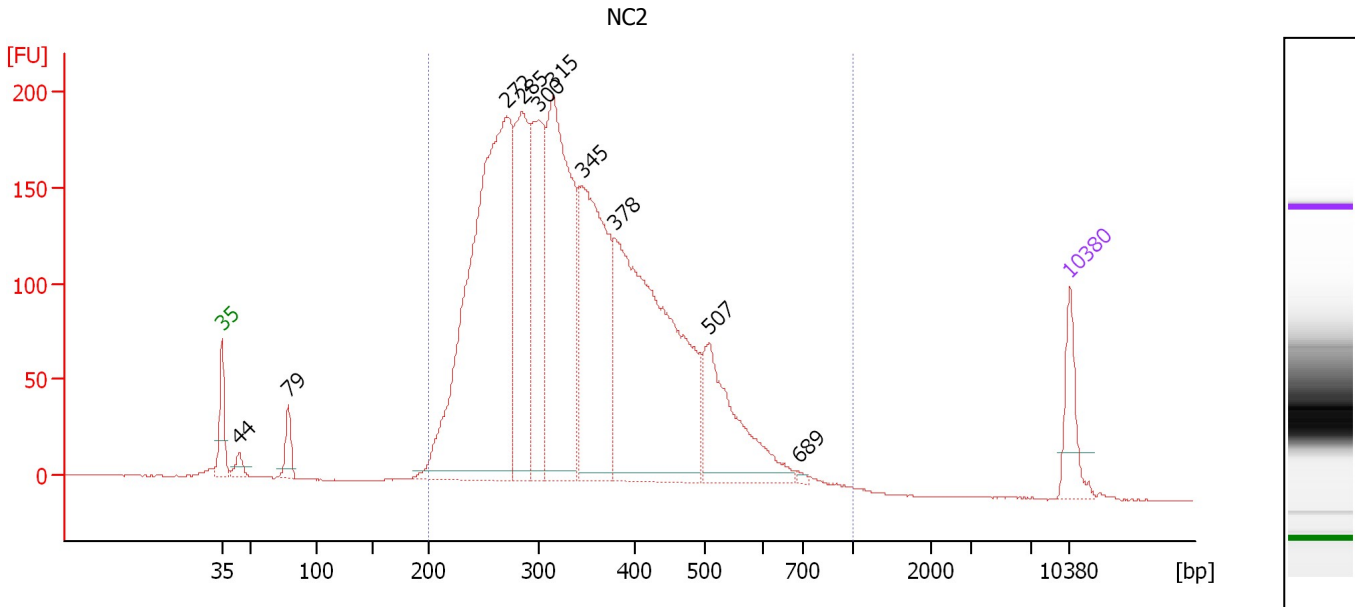
Region table for sample 4 : GR DII

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	343	2,263.9	13,652.1	2,859.44	96	26.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : NC2

Number of peaks found: 10 Corr. Area 1: 4,591.2
 Noise: 0.2

Peak table for sample 5 : NC2

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	44	34.28	1,180.4		44.41
3	79	66.28	1,278.8		48.46
4	272	1,455.05	8,118.9		66.51
5	285	466.73	2,480.0		67.74
6	300	417.30	2,105.9		69.11
7	315	786.43	3,782.7		70.30
8	345	638.86	2,805.1		72.72
9	378	1,008.83	4,039.2		75.40
10	507	308.66	923.3		83.19
11	689	6.36	14.0		90.55
12	10,380	75.00	10.9	Upper Marker	113.00

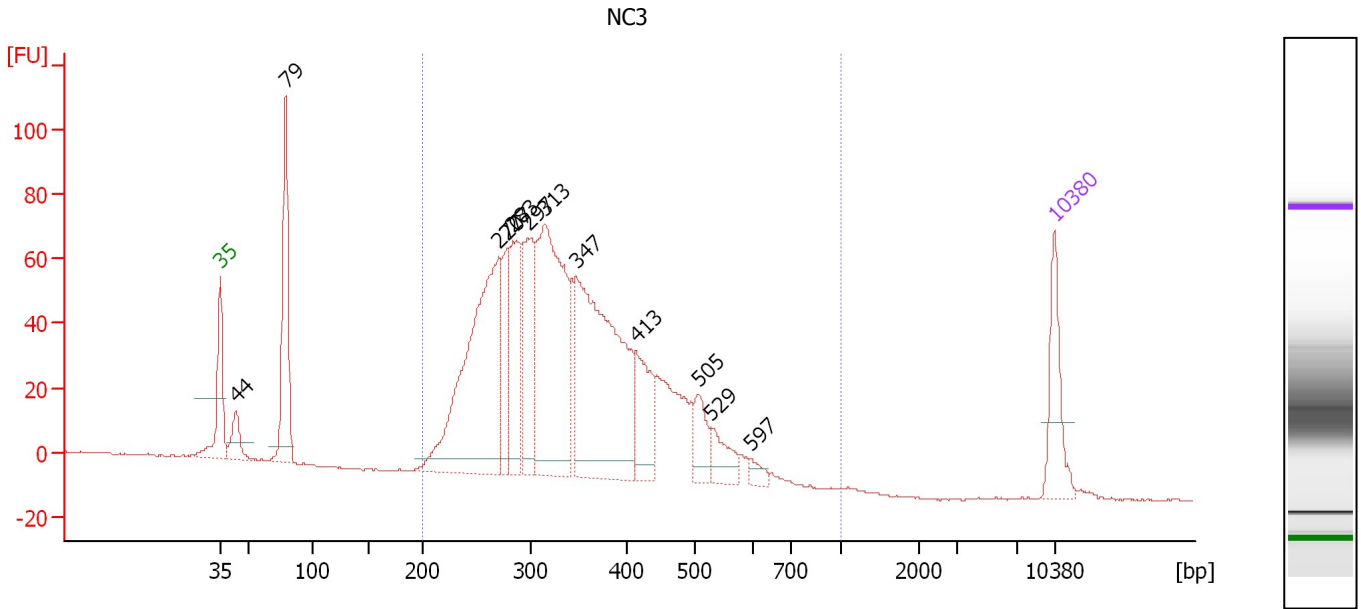
Region table for sample 5 : NC2

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	352	4,591.2	24,766.6	5,229.00	97	28.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NC3

Number of peaks found: 12 Corr. Area 1: 1,574.4
 Noise: 0.2

Peak table for sample 6 : NC3

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	44	57.37	1,995.2		44.34
3	79	274.19	5,264.5		48.50
4	270	556.94	3,122.4		66.39
5	277	106.84	584.0		67.02
6	283	180.20	964.5		67.56
7	297	184.75	942.8		68.81
8	313	463.91	2,244.3		70.15
9	347	530.56	2,316.1		72.88
10	413	112.82	413.9		77.89
11	505	56.65	170.0		83.12
12	529	47.66	136.6		84.24
13	597	14.81	37.6		87.50
14	10,380	75.00	10.9	Upper Marker	113.00

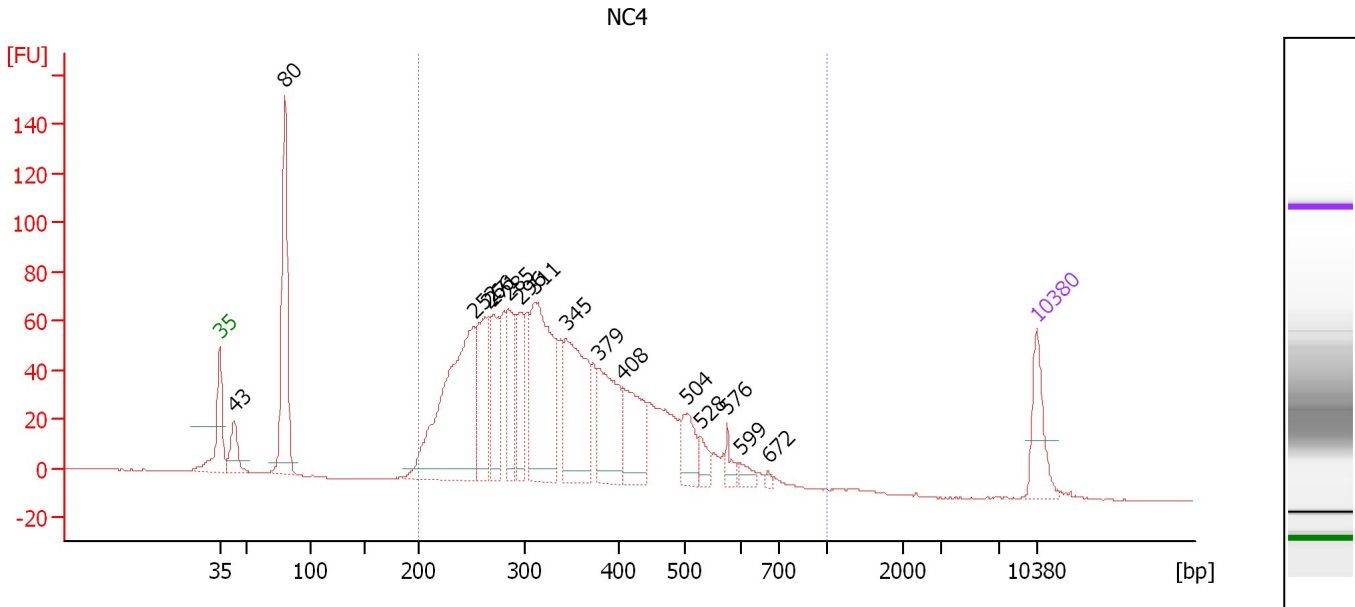
Region table for sample 6 : NC3

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	347	1,574.4	11,364.8	2,412.20	90	24.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : NC4

Number of peaks found: 16 Corr. Area 1: 1,701.4
 Noise: 0.2

Peak table for sample 7 : NC4

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	43	86.19	3,045.8		44.23
3	80	421.39	8,026.2		48.57
4	252	576.96	3,462.6		64.78
5	266	183.64	1,047.7		65.97
6	271	143.75	803.4		66.47
7	285	143.56	764.0		67.70
8	296	106.16	542.8		68.75
9	311	401.40	1,954.6		69.99
10	345	297.25	1,306.9		72.68
11	379	194.26	776.2		75.47
12	408	154.90	574.9		77.61
13	504	76.12	228.7		83.09
14	528	33.64	96.5		84.23
15	576	26.32	69.3		86.47
16	599	21.63	54.7		87.57
17	672	6.22	14.0		89.99
18	10,380	75.00	10.9	Upper Marker	113.00

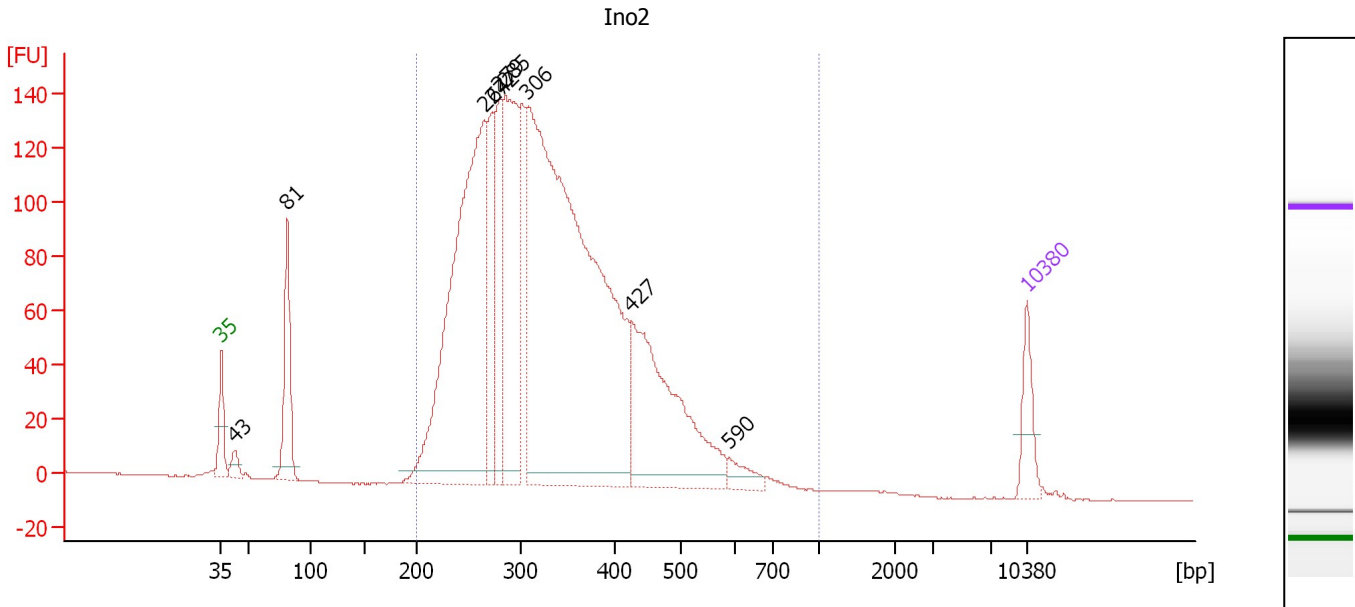
Region table for sample 7 : NC4

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	348	1,701.4	14,128.3	2,936.70	88	28.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Ino2

Number of peaks found: 9 Corr. Area 1: 2,978.8
 Noise: 0.1

Peak table for sample 8 : Ino2

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	43	43.97	1,560.4		44.20
3	81	288.27	5,382.8		48.74
4	264	1,381.45	7,924.1		65.84
5	272	283.45	1,577.0		66.58
6	279	268.46	1,458.0		67.18
7	285	610.16	3,248.4		67.69
8	306	2,439.48	12,068.7		69.59
9	427	615.56	2,186.0		78.67
10	590	46.10	118.4		87.15
11	10,380	75.00	10.9	Upper Marker	113.00

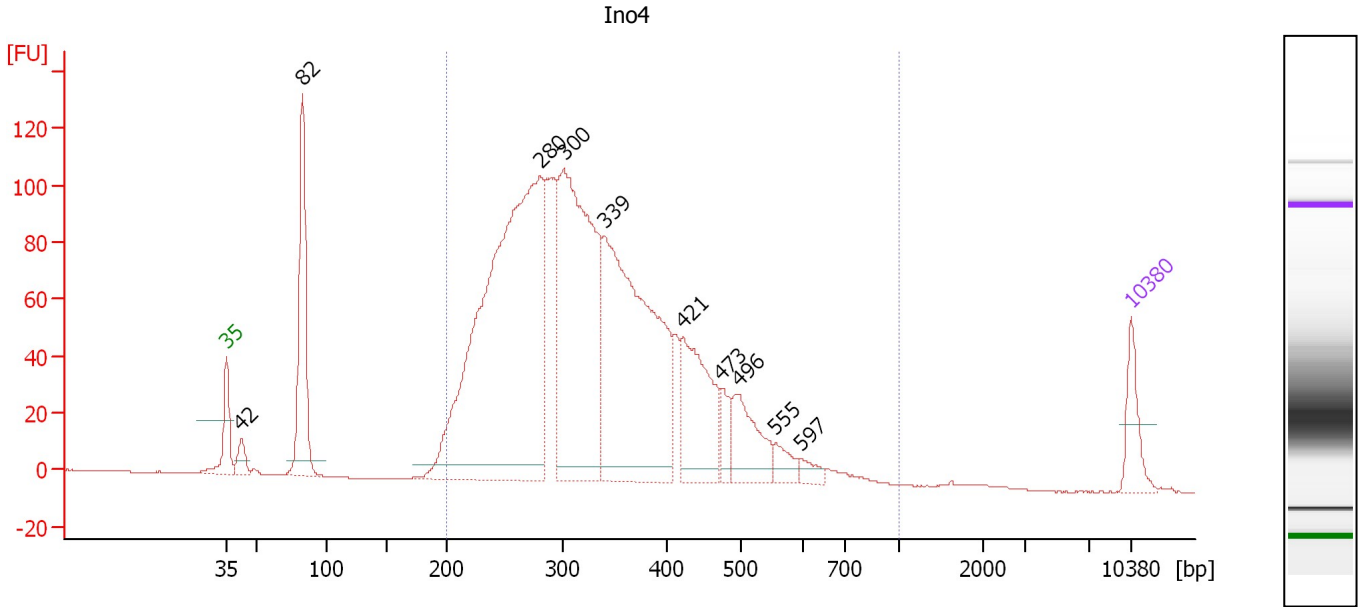
Region table for sample 8 : Ino2

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	338	2,978.8	27,389.2	5,637.76	95	26.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Ino4

Number of peaks found: 11 Corr. Area 1: 2,357.7
 Noise: 0.2

Peak table for sample 9 : Ino4

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	42	57.81	2,065.4		44.16
3	82	475.93	8,742.1		48.89
4	280	1,872.42	10,137.9		67.26
5	300	1,065.71	5,375.9		69.12
6	339	1,073.23	4,797.4		72.22
7	421	317.48	1,142.5		78.35
8	473	62.91	201.7		81.32
9	496	168.25	513.9		82.66
10	555	46.22	126.2		85.49
11	597	27.87	70.7		87.49
12	10,380	75.00	10.9	Upper Marker	113.00
13	19,578	0.00	0.0		121.67

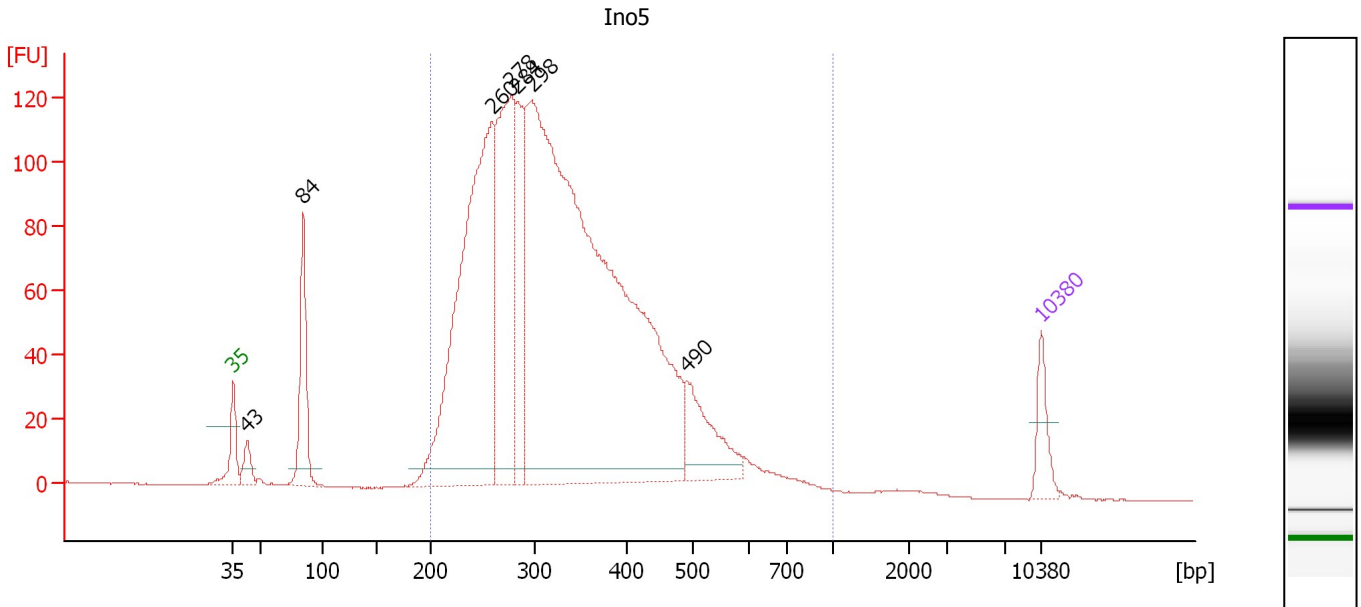
Region table for sample 9 : Ino4

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	339	2,357.7	25,073.9	5,121.76	90	28.8

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Ino5

Number of peaks found: 7 Corr. Area 1: 2,619.0
 Noise: 0.1

Peak table for sample 10 : Ino5

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	43	78.81	2,798.3		44.20
3	84	354.25	6,392.2		49.05
4	260	1,583.90	9,233.4		65.46
5	278	814.43	4,442.6		67.07
6	284	361.00	1,926.8		67.63
7	298	3,757.40	19,126.6		68.87
8	490	242.20	748.7		82.32
9	10,380	75.00	10.9	Upper Marker	113.00

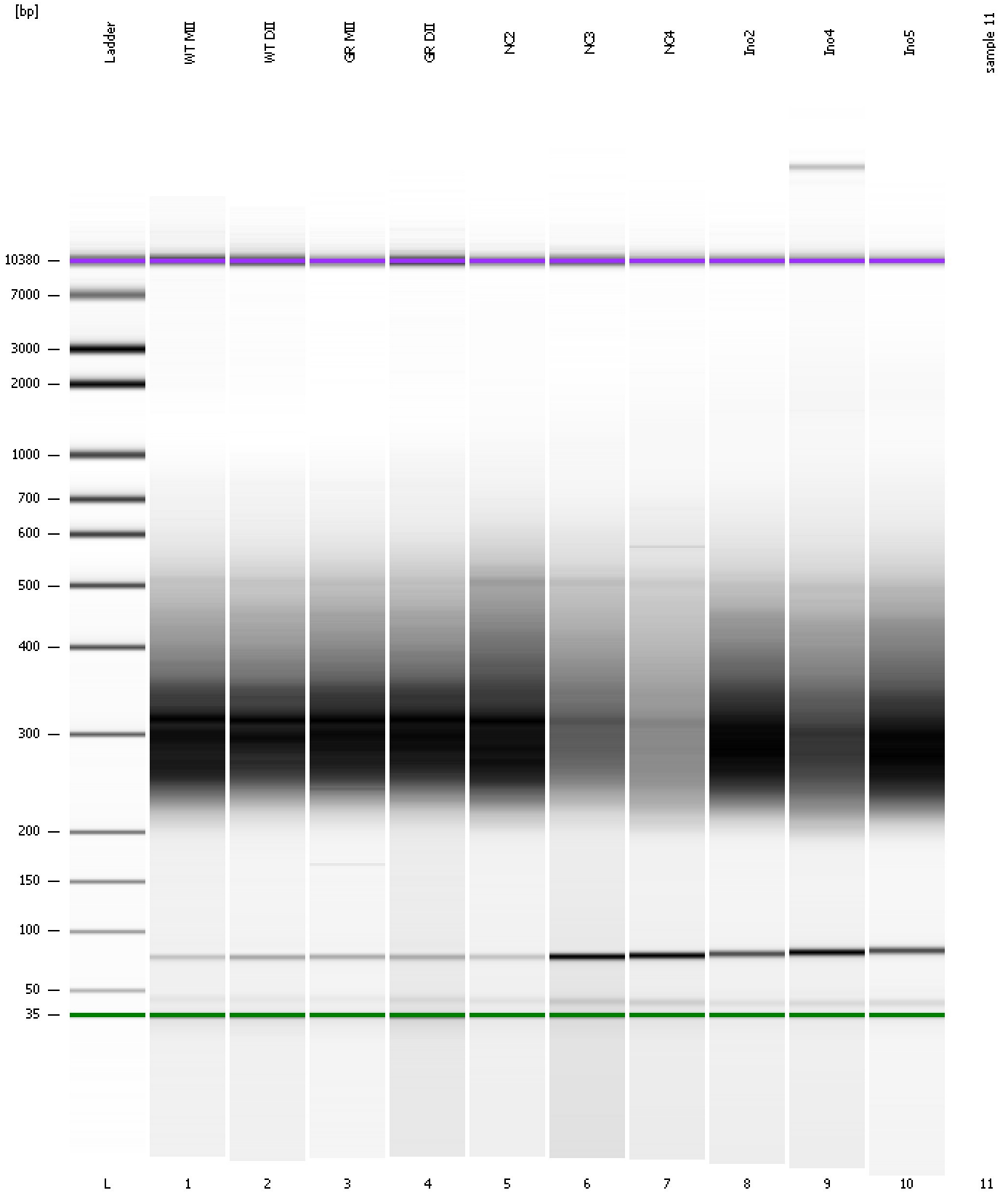
Region table for sample 10 : Ino5

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	340	2,619.0	32,848.1	6,720.99	94	28.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
Modified: 7/11/2016 1:37:27 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
Modified: 7/11/2016 1:37:27 PM

Invalid Samples

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-07-11\2016-07-11_002.xad

Created: 7/11/2016 12:56:05 PM
 Modified: 7/11/2016 1:37:27 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 11)		Instrument	Run		7/11/2016 1:34:34 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\2016-07-11\2016-07-11_002.xad)		Instrument	Run		7/11/2016 12:56:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/11/2016 12:56:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/11/2016 12:56:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/11/2016 12:56:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/11/2016 12:56:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/11/2016 12:56:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/11/2016 12:56:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1