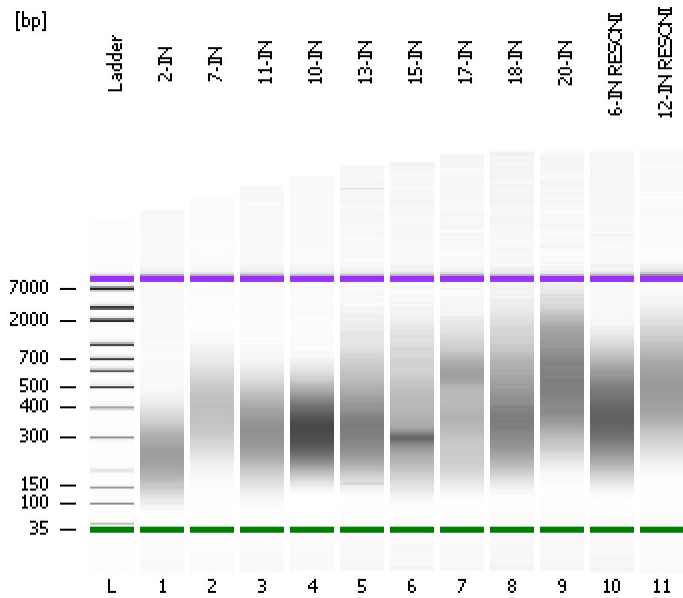


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
Modified: 7/11/2012 12:09:54 PM

Electrophoresis File Run Summary



Instrument Information:

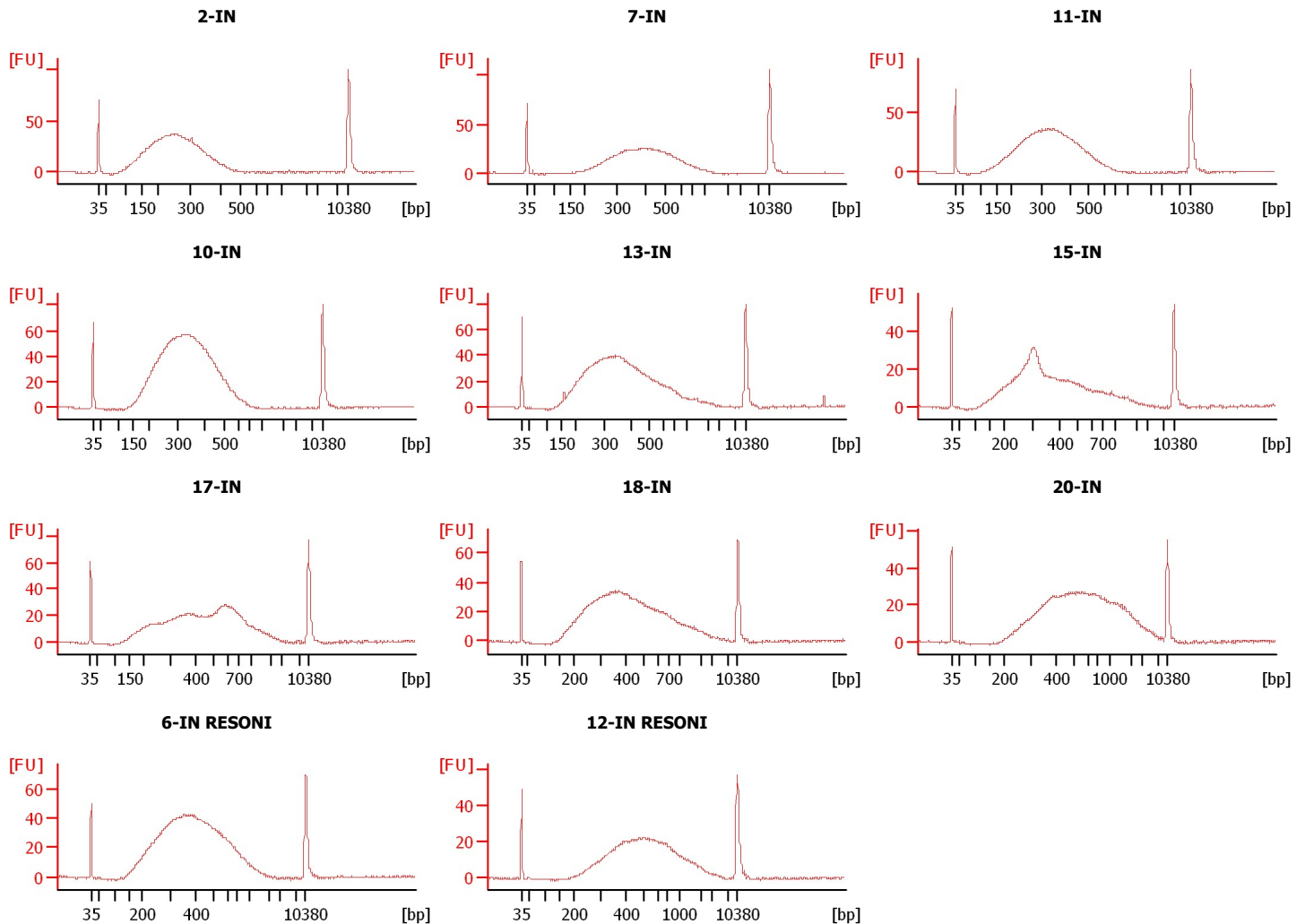
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
Modified: 7/11/2012 12:09:54 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
2-IN		<input type="checkbox"/>	✓			
7-IN		<input type="checkbox"/>	✓			
11-IN		<input type="checkbox"/>	✓			
10-IN		<input type="checkbox"/>	✓			
13-IN		<input type="checkbox"/>	✓			
15-IN		<input type="checkbox"/>	✓			
17-IN		<input type="checkbox"/>	✓			
18-IN		<input type="checkbox"/>	✓			
20-IN		<input type="checkbox"/>	✓			
6-IN RESONI		<input type="checkbox"/>	✓			
12-IN RESONI		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
Modified: 7/11/2012 12:09:54 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

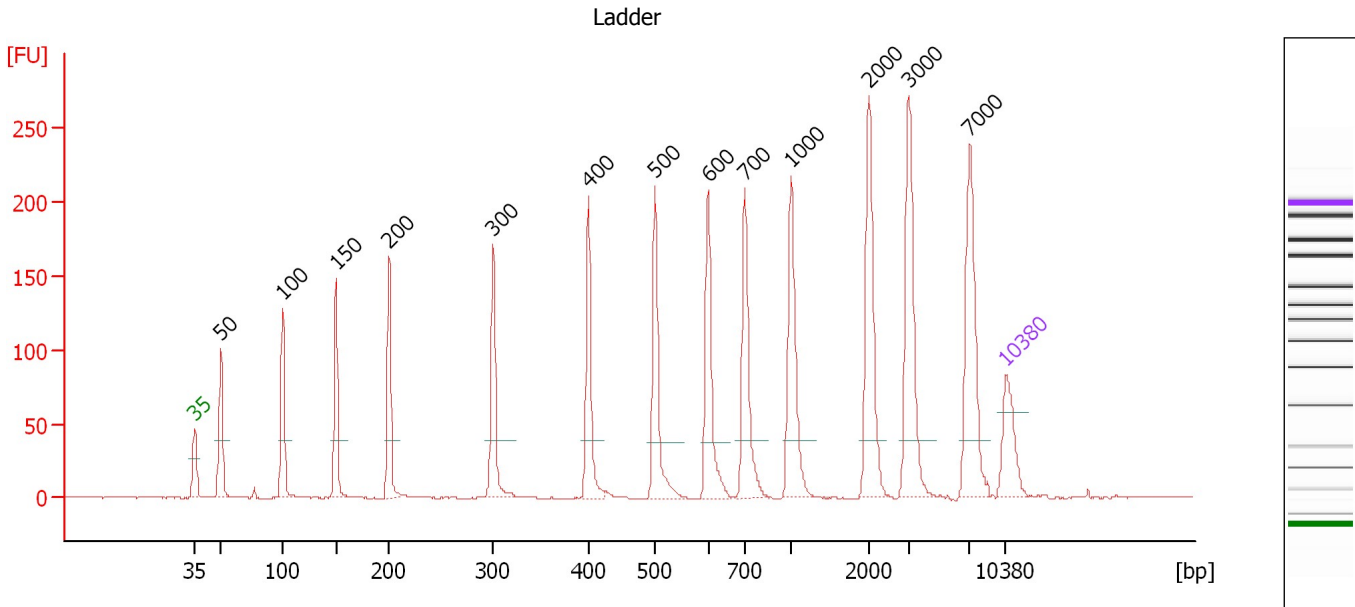
Ladder

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:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
 Modified: 7/11/2012 12:09:54 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

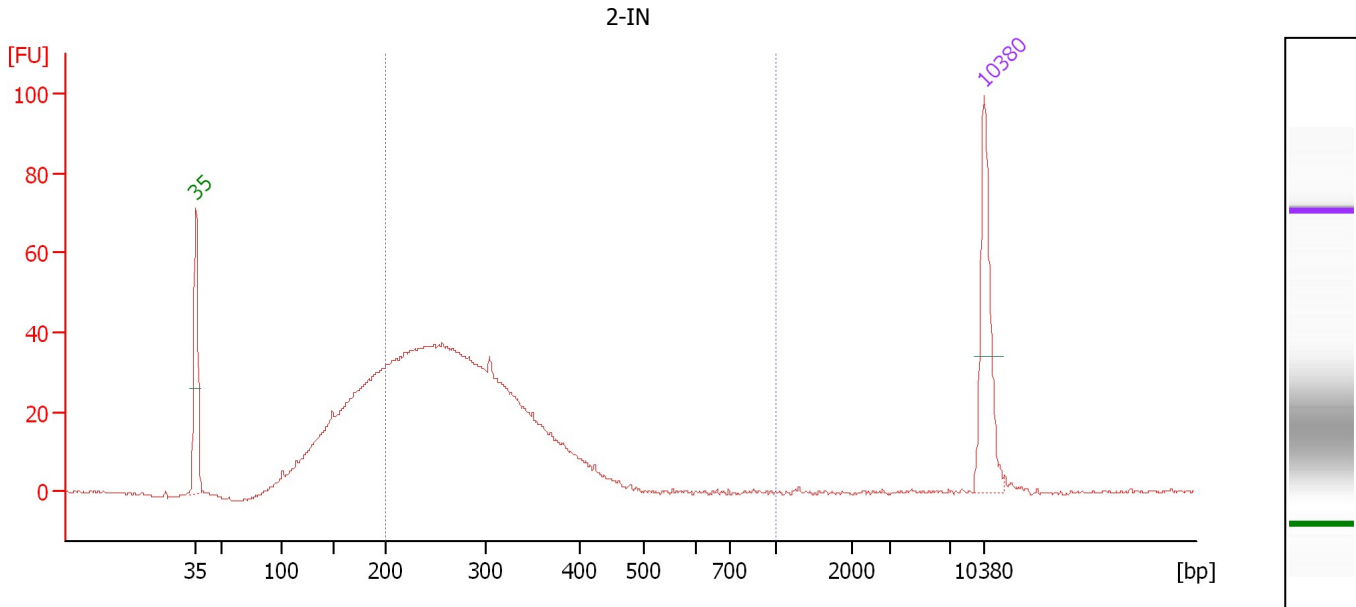
Peak table for Ladder

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:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
 Modified: 7/11/2012 12:09:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 2-IN

Number of peaks found: 0 Corr. Area 1: 733.2
 Noise: 0.2

Peak table for sample 1 : 2-IN

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

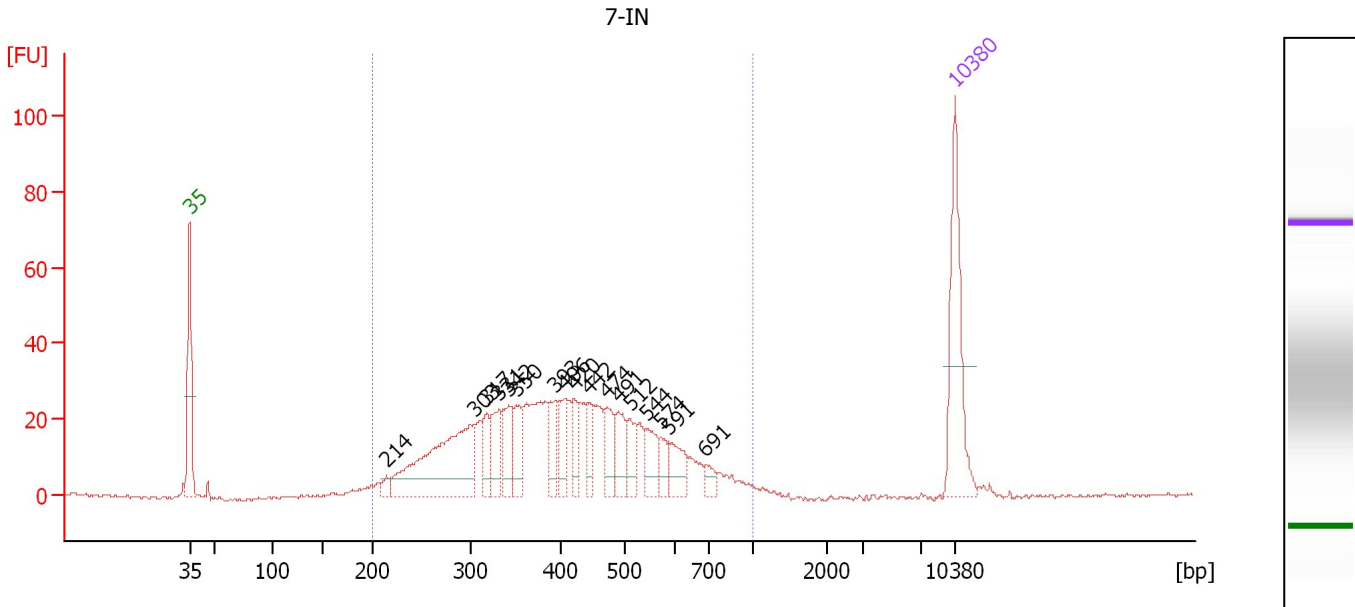
Region table for sample 1 : 2-IN

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	286	5,644.6	1,017.29	733.2	71	20.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
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Electropherogram Summary Continued ...



Overall Results for sample 2 : 7-IN

Number of peaks found: 17 Corr. Area 1: 698.4
 Noise: 0.5

Peak table for sample 2 : 7-IN

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	214	9.44	66.9	
3	303	172.26	860.4	
4	317	25.16	120.3	
5	331	32.78	150.2	
6	342	37.50	166.2	
7	350	29.86	129.4	
8	393	26.78	103.3	
9	406	24.82	92.7	
10	420	24.34	87.8	
11	442	23.20	79.5	
12	474	30.03	96.1	
13	491	29.38	90.7	
14	512	23.99	71.1	
15	544	26.69	74.4	
16	574	13.95	36.9	
17	591	25.11	64.4	
18	691	10.64	23.3	
19	10,380	75.00	10.9	Upper Marker

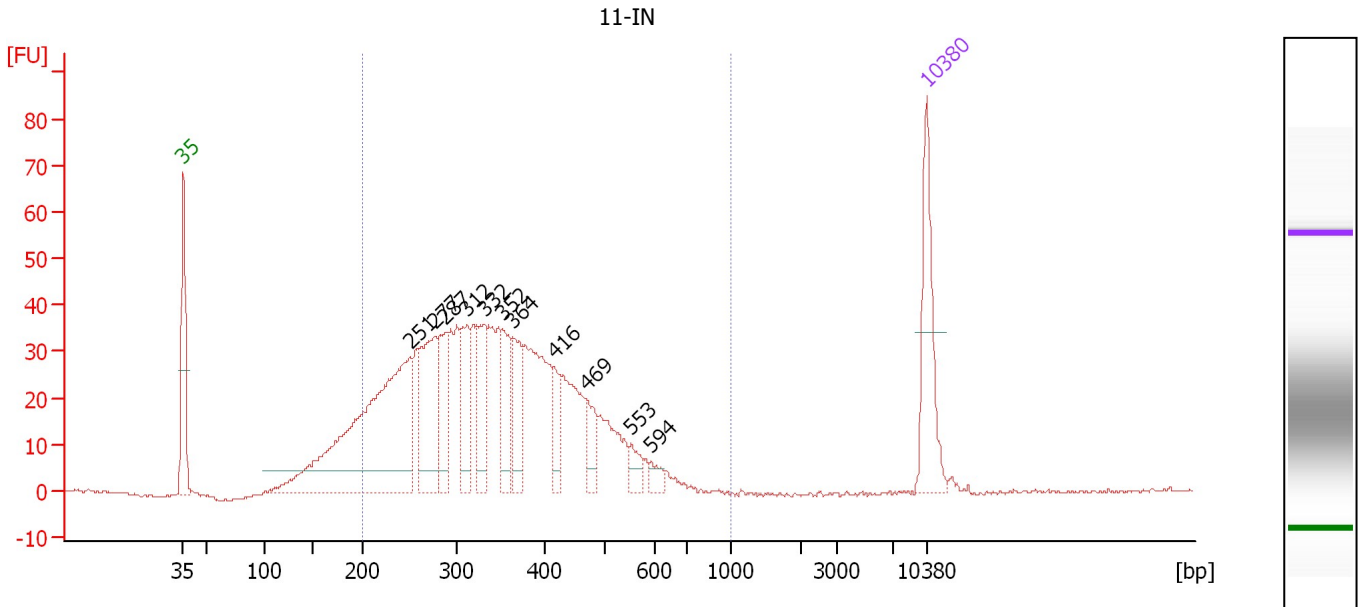
Region table for sample 2 : 7-IN

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	422	3,259.7	799.30	698.4	98	31.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
 Modified: 7/11/2012 12:09:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 11-IN

Number of peaks found: 11 Corr. Area 1: 972.3
 Noise: 0.4

Peak table for sample 3 : 11-IN

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	251	431.14	2,606.5	
3	277	129.78	710.0	
4	287	68.71	362.7	
5	312	71.22	345.8	
6	332	72.15	329.7	
7	352	59.02	254.3	
8	364	57.76	240.5	
9	416	33.30	121.2	
10	469	33.23	107.4	
11	553	17.47	47.9	
12	594	10.88	27.8	
13	10,380	75.00	10.9	Upper Marker

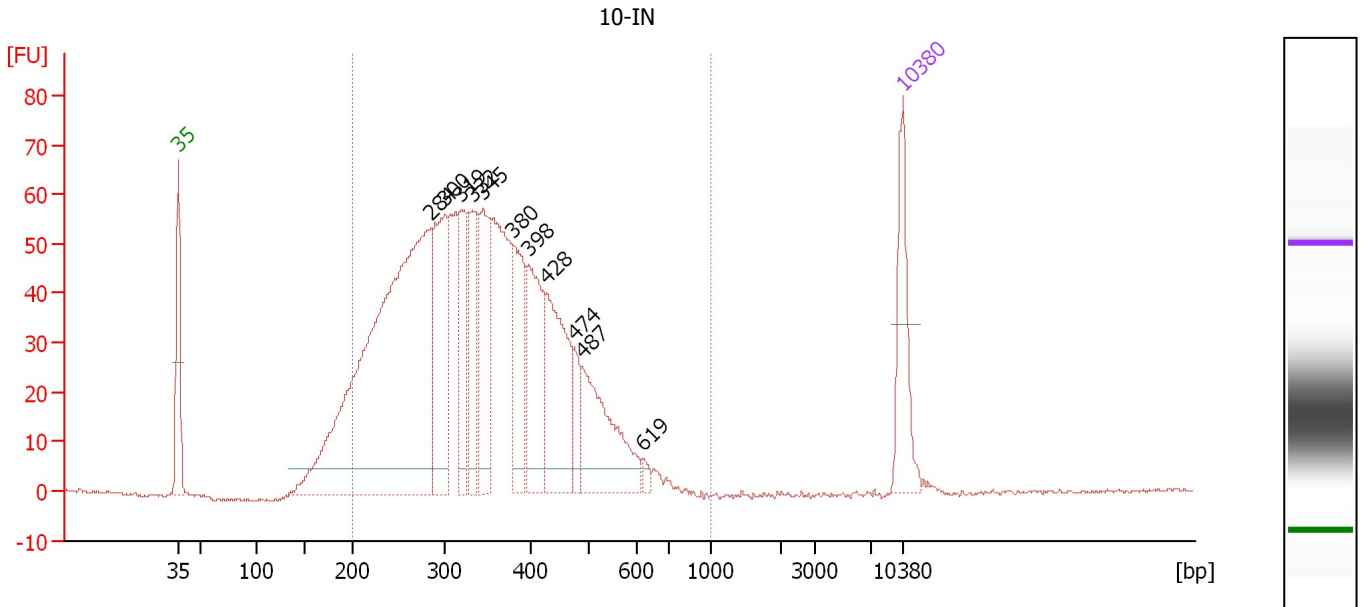
Region table for sample 3 : 11-IN

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	350	6,704.3	1,402.20	972.3	90	27.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
 Modified: 7/11/2012 12:09:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 10-IN

Number of peaks found: 11 Corr. Area 1: 1,512.4
 Noise: 0.3

Peak table for sample 4 : 10-IN

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	284	884.35	4,713.0	
3	300	182.25	921.1	
4	319	115.51	548.4	
5	332	105.64	481.7	
6	345	125.49	550.5	
7	380	113.51	452.1	
8	398	136.05	518.0	
9	428	170.71	603.8	
10	474	34.16	109.2	
11	487	151.29	470.2	
12	619	8.01	19.6	
13	10,380	75.00	10.9	Upper Marker

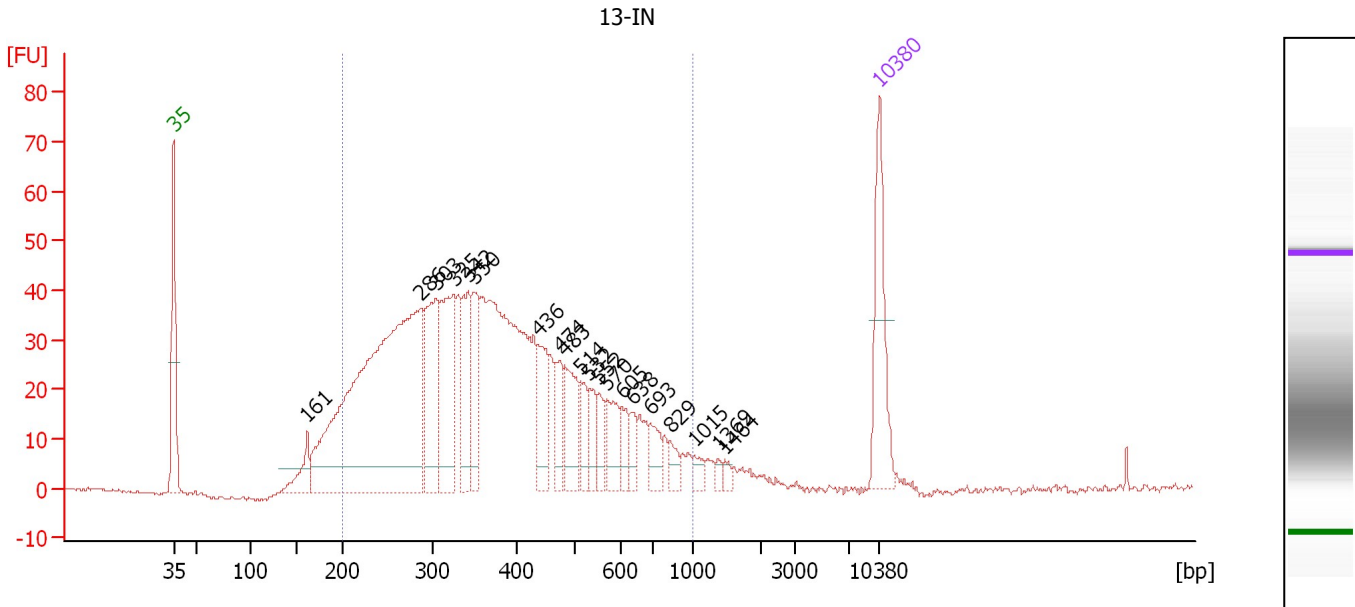
Region table for sample 4 : 10-IN

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	349	11,131.6	2,333.36	1,512.4	94	26.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
 Modified: 7/11/2012 12:09:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 13-IN

Number of peaks found: 20 Corr. Area 1: 1,192.1
 Noise: 0.2

Peak table for sample 5 : 13-IN

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	161	39.33	370.9	
3	286	640.06	3,388.8	
4	303	122.04	610.4	
5	325	127.51	595.0	
6	342	77.16	341.8	
7	350	59.41	256.9	
8	436	56.01	194.4	
9	474	37.16	118.8	
10	483	57.31	179.6	
11	514	25.94	76.5	
12	532	25.39	72.3	
13	552	20.32	55.8	
14	570	36.55	97.2	
15	605	19.81	49.7	
16	638	16.53	39.3	
17	693	22.85	50.0	
18	829	14.22	26.0	
19	1,015	9.13	13.6	
20	1,369	4.93	5.5	
21	1,464	5.37	5.6	
22	10,380	75.00	10.9	Upper Marker

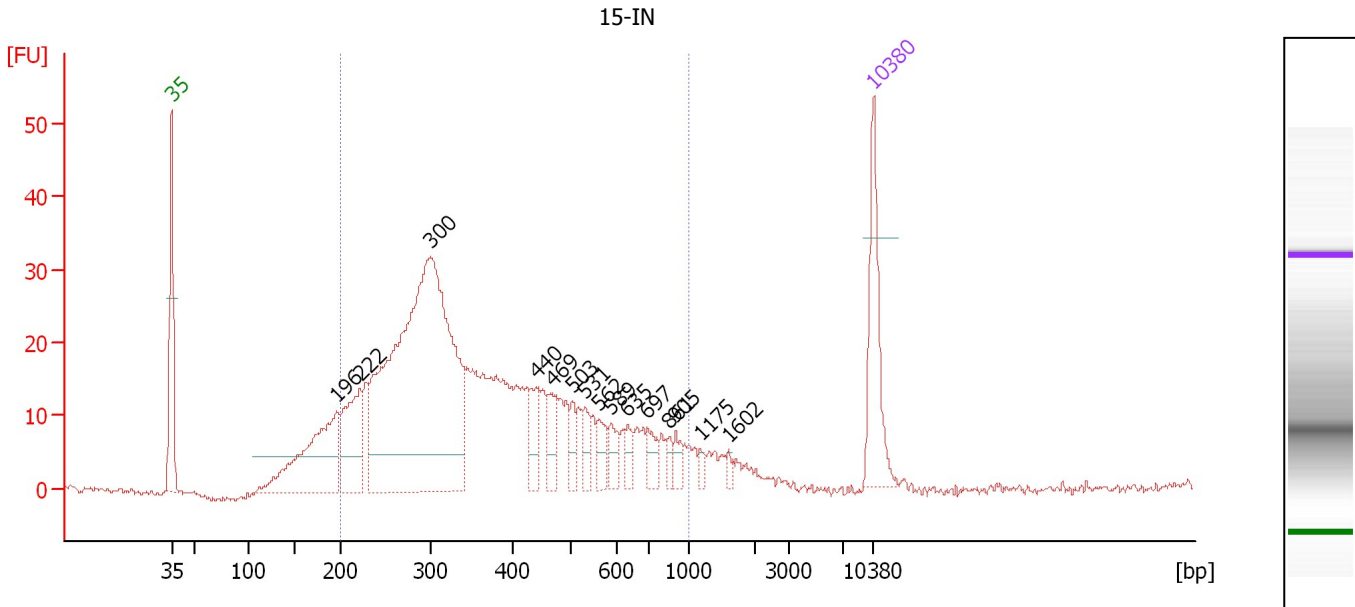
Region table for sample 5 : 13-IN

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	391	8,200.0	1,807.66	1,192.1	91	36.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
 Modified: 7/11/2012 12:09:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 15-IN

Number of peaks found: 15 Corr. Area 1: 626.1
 Noise: 0.4

Peak table for sample 6 : 15-IN

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	196	190.63	1,470.1	
3	222	110.35	753.5	
4	300	719.66	3,633.8	
5	440	36.50	125.7	
6	469	33.42	107.9	
7	503	19.92	60.0	
8	531	20.36	58.0	
9	562	24.11	65.0	
10	589	20.38	52.5	
11	635	12.52	29.8	
12	697	19.90	43.2	
13	861	9.36	16.5	
14	905	13.70	22.9	
15	1,175	6.15	7.9	
16	1,602	4.95	4.7	
17	10,380	75.00	10.9	Upper Marker

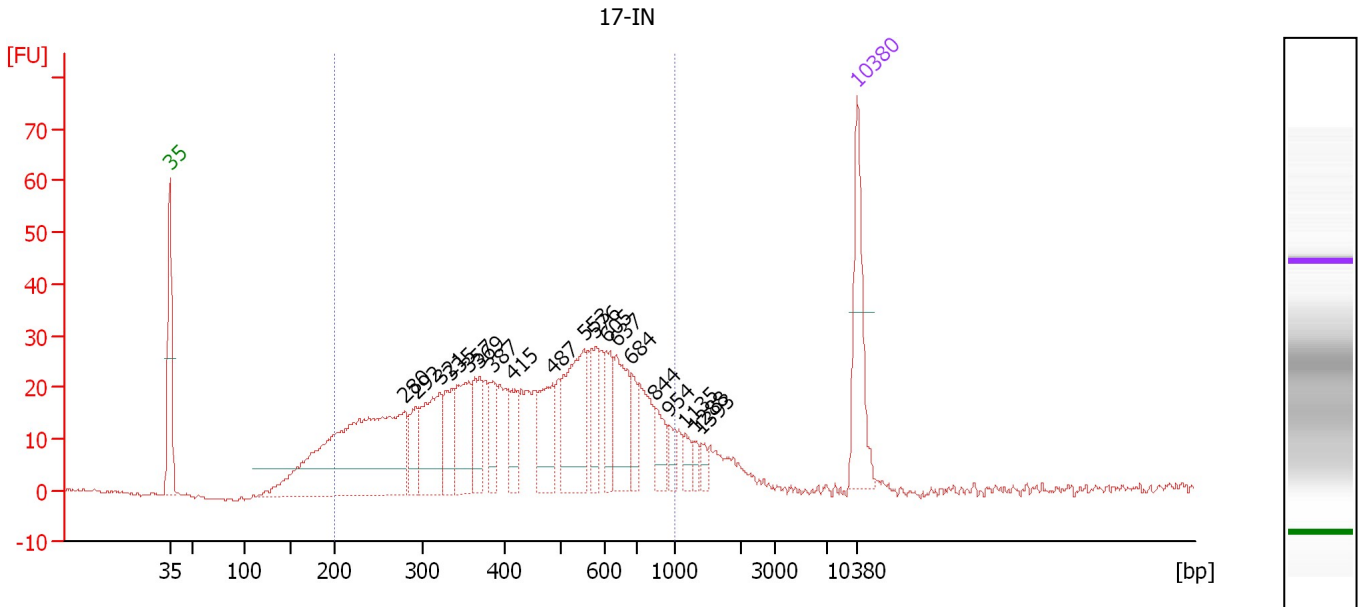
Region table for sample 6 : 15-IN

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	388	6,584.3	1,424.81	626.1	88	40.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
 Modified: 7/11/2012 12:09:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 17-IN

Number of peaks found: 19 Corr. Area 1: 818.5
 Noise: 0.4

Peak table for sample 7 : 17-IN

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	280	382.09	2,070.0	
3	292	39.74	205.9	
4	321	100.79	475.2	
5	335	51.33	232.0	
6	357	78.64	333.8	
7	369	49.87	204.5	
8	387	39.59	154.9	
9	415	33.15	121.1	
10	487	65.90	205.2	
11	553	113.00	309.4	
12	576	36.60	96.3	
13	605	38.61	96.7	
14	637	64.57	153.5	
15	684	26.30	58.3	
16	844	26.26	47.1	
17	954	14.43	22.9	
18	1,135	11.46	15.3	
19	1,288	8.34	9.8	
20	1,393	7.58	8.2	
21	10,380	75.00	10.9	Upper Marker

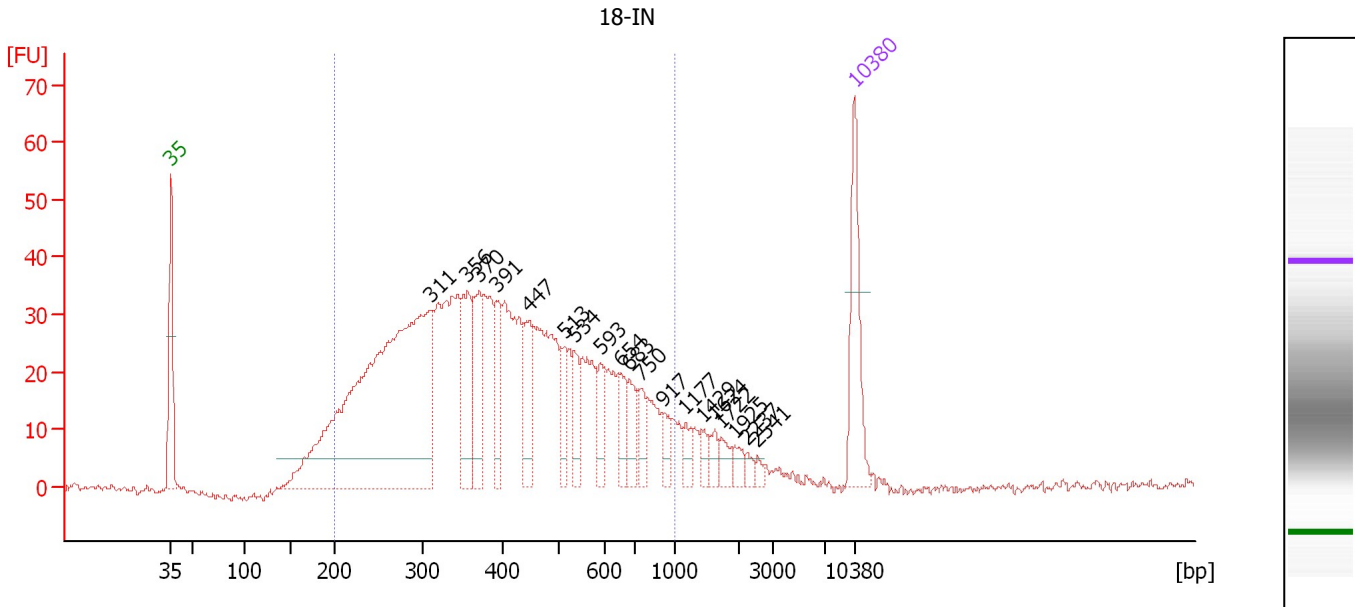
Region table for sample 7 : 17-IN

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	466	5,242.7	1,307.58	818.5	87	38.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
 Modified: 7/11/2012 12:09:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 18-IN

Number of peaks found: 19 Corr. Area 1: 1,058.6
 Noise: 0.8

Peak table for sample 8 : 18-IN

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	311	733.16	3,576.4	
3	356	94.20	401.3	
4	370	82.71	338.5	
5	391	52.04	201.8	
6	447	60.64	205.7	
7	513	35.03	103.5	
8	534	37.07	105.1	
9	593	31.09	79.4	
10	654	32.24	74.7	
11	683	30.09	66.7	
12	750	25.52	51.6	
13	917	16.33	27.0	
14	1,177	13.50	17.4	
15	1,429	9.48	10.0	
16	1,624	12.57	11.7	
17	1,722	13.34	11.7	
18	1,925	11.49	9.0	
19	2,237	6.08	4.1	
20	2,541	4.84	2.9	
21	10,380	75.00	10.9	Upper Marker

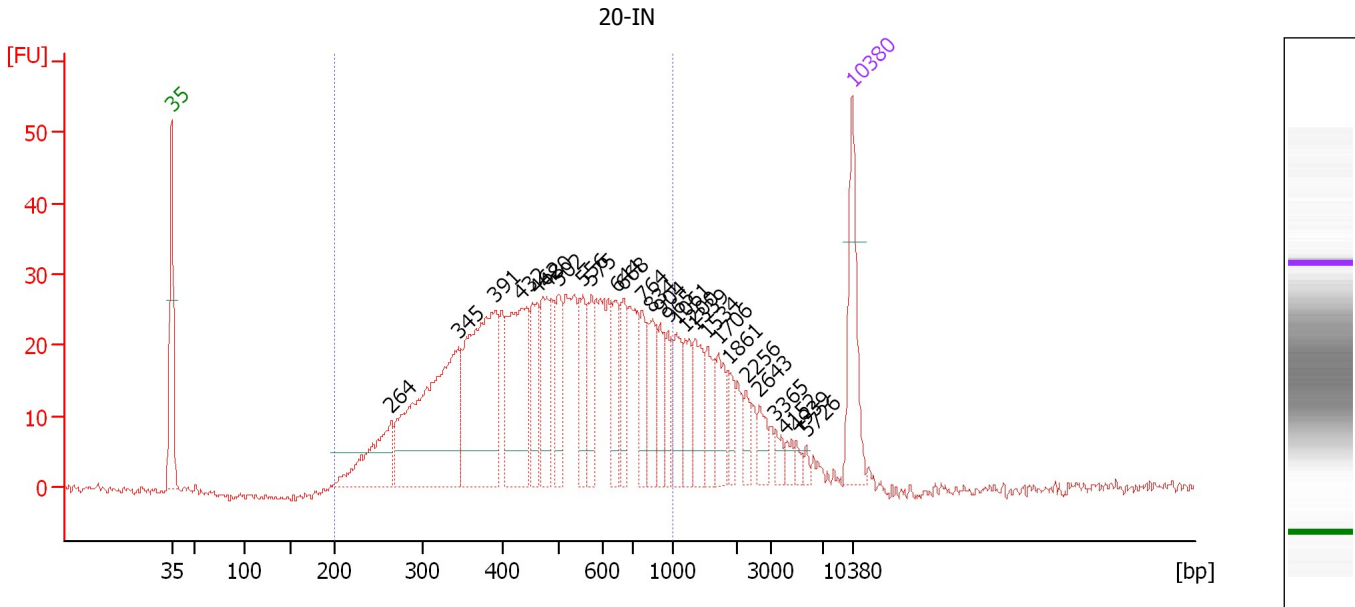
Region table for sample 8 : 18-IN

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	424	8,444.1	1,976.29	1,058.6	90	38.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
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Electropherogram Summary Continued ...



Overall Results for sample 9 : 20-IN

Number of peaks found: 27 Corr. Area 1: 796.6
 Noise: 0.6

Peak table for sample 9 : 20-IN

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	264	109.31	626.2	
3	345	314.89	1,382.4	
4	391	250.44	970.3	
5	432	170.37	597.6	
6	462	65.50	214.6	
7	480	74.29	234.7	
8	502	50.15	151.4	
9	556	60.16	163.9	
10	575	44.48	117.1	
11	644	49.23	115.8	
12	668	45.91	104.1	
13	764	38.44	76.2	
14	834	57.14	103.8	
15	904	34.98	58.7	
16	965	30.07	47.2	
17	1,061	39.97	57.1	
18	1,200	35.73	45.1	
19	1,339	45.98	52.0	
20	1,534	32.29	31.9	
21	1,706	36.07	32.0	
22	1,861	18.31	14.9	
23	2,256	17.52	11.8	
24	2,643	18.87	10.8	
25	3,365	11.08	5.0	
26	4,152	9.09	3.3	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad


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Electropherogram Summary Continued ...

... Peak table for sample 9 : 20-IN

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	4,939	7.09	2.2	
28	5,726	4.75	1.3	
29	10,380	75.00	10.9	Upper Marker

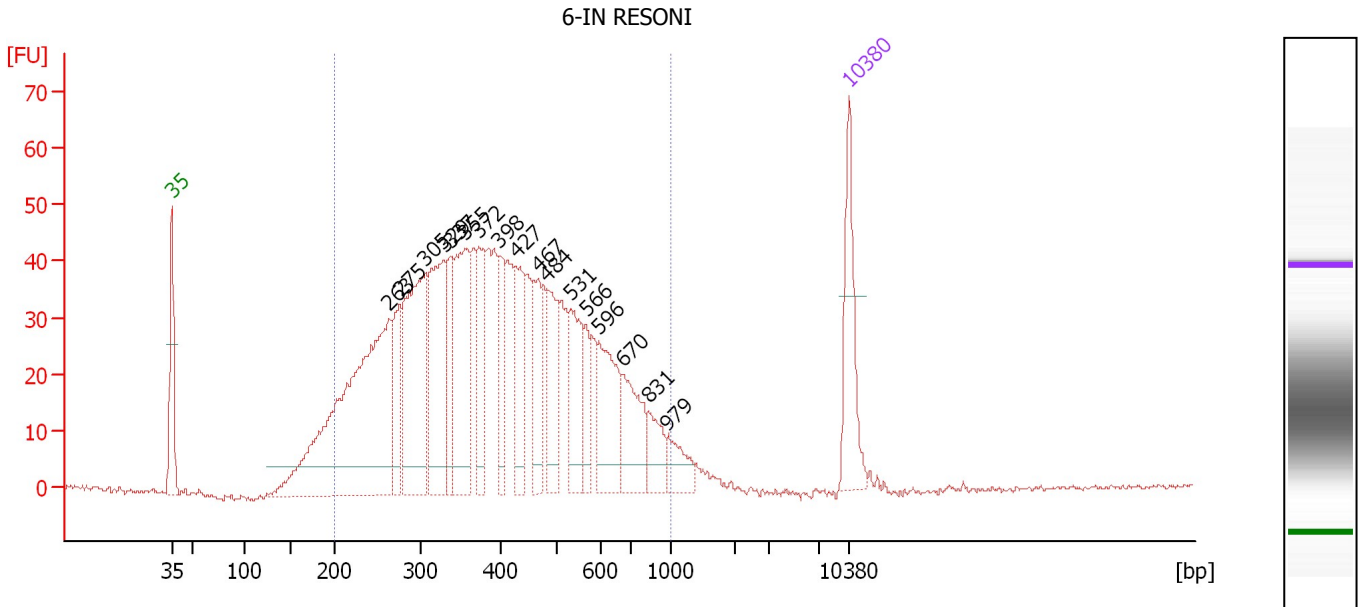
Region table for sample 9 : 20-IN

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	508	6,525.1	1,843.14	796.6	80	35.1	

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
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Electropherogram Summary Continued ...



Overall Results for sample 10 : 6-IN RESONI

Number of peaks found: 17 Corr. Area 1: 1,299.5
 Noise: 0.5

Peak table for sample 10 : 6-IN RESONI

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	263	514.92	2,964.1	
3	275	81.48	448.2	
4	305	226.53	1,126.4	
5	329	178.71	821.9	
6	337	69.42	311.7	
7	355	162.26	692.8	
8	372	86.84	353.5	
9	398	60.39	229.7	
10	427	82.23	291.6	
11	467	75.12	243.5	
12	484	80.60	252.4	
13	531	79.83	227.6	
14	566	34.99	93.6	
15	596	92.95	236.5	
16	670	79.95	180.8	
17	831	35.13	64.1	
18	979	29.91	46.3	
19	10,380	75.00	10.9	Upper Marker

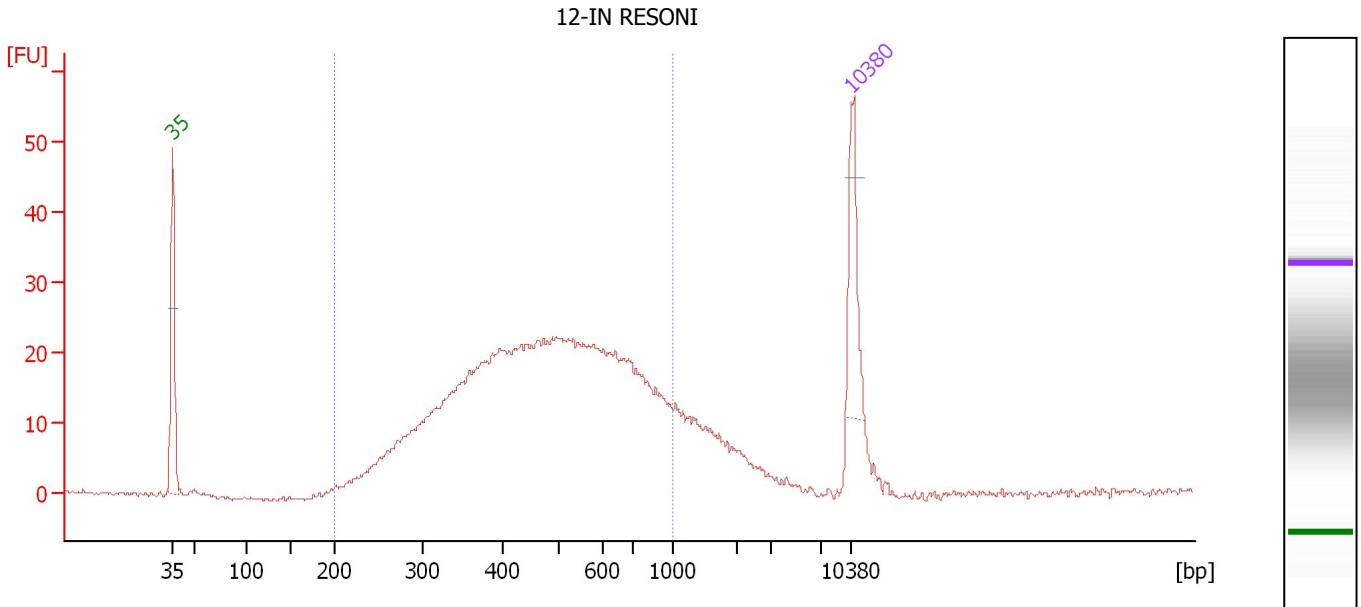
Region table for sample 10 : 6-IN RESONI

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	418	9,425.3	2,214.18	1,299.5	94	35.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
 Modified: 7/11/2012 12:09:54 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : 12-IN RESONI

Number of peaks found: 0 Corr. Area 1: 605.4
 Noise: 0.3

Peak table for sample 11 : 12-IN RESONI

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

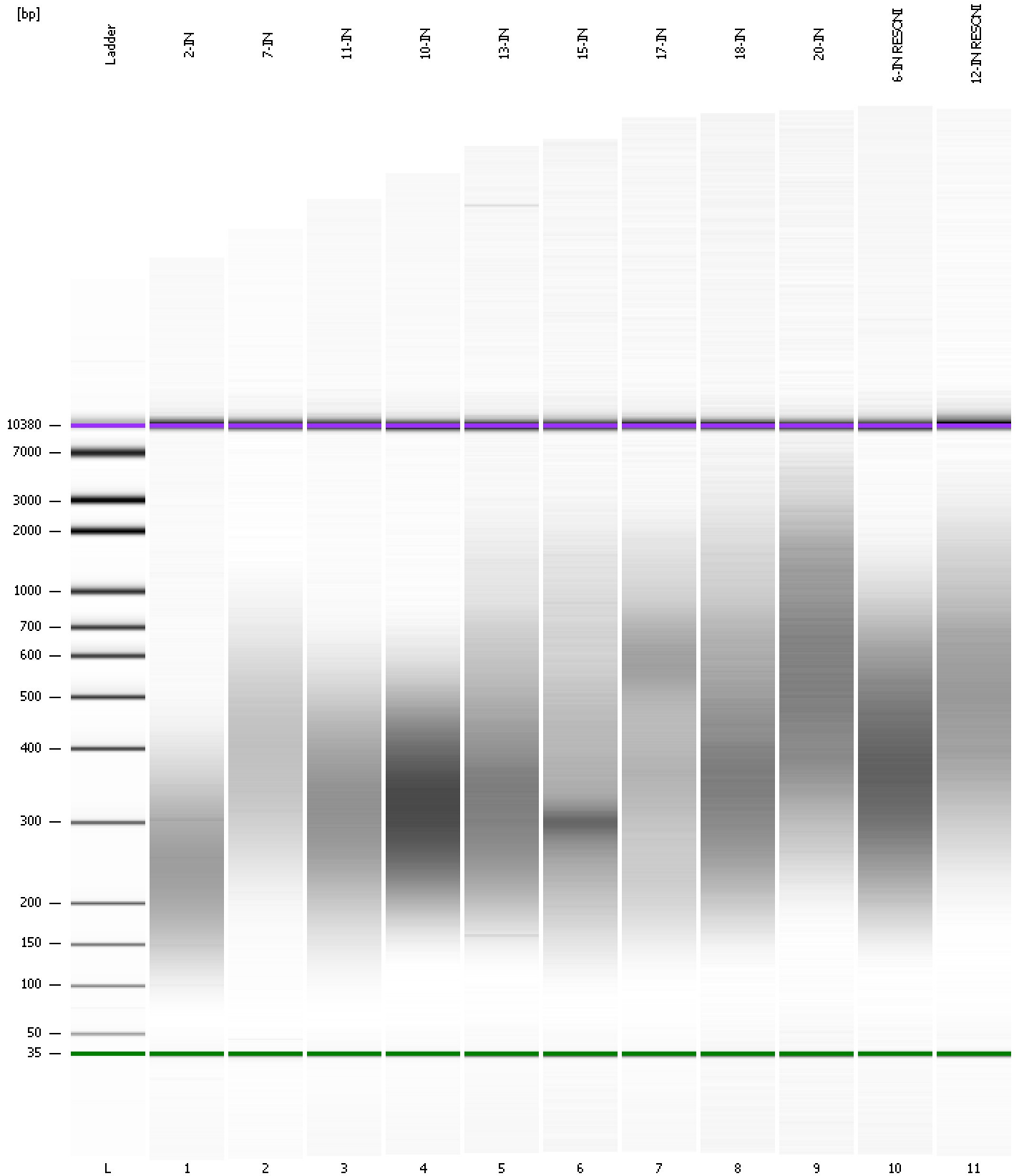
Region table for sample 11 : 12-IN RESONI

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	499	5,955.7	1,679.96	605.4	88	33.8	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
Modified: 7/11/2012 12:09:54 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad

Created: 7/11/2012 11:28:29 AM
 Modified: 7/11/2012 12:09:54 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		7/11/2012 12:09:49 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-07-11\2012-07-11_003.xad)		Instrument	Run		7/11/2012 11:28:35 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/11/2012 11:28:35 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/11/2012 11:28:35 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/11/2012 11:28:35 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/11/2012 11:28:35 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/11/2012 11:28:35 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/11/2012 11:28:35 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1