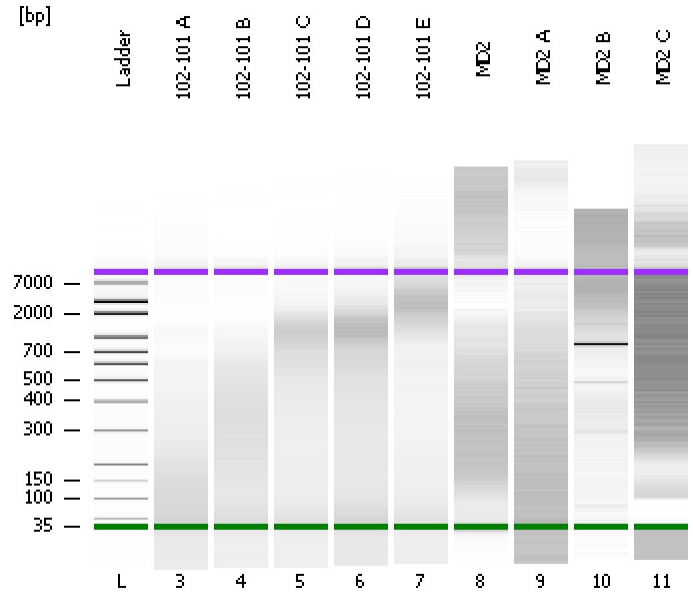
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electrophoresis File Run Summary



Instrument Information:

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

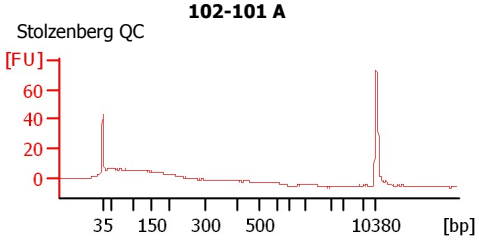
Assay Information:

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

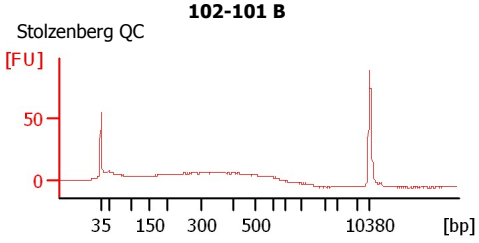
Chip Information:

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

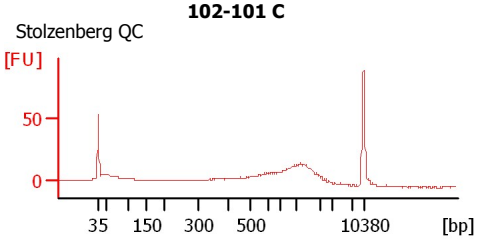
102-101 A



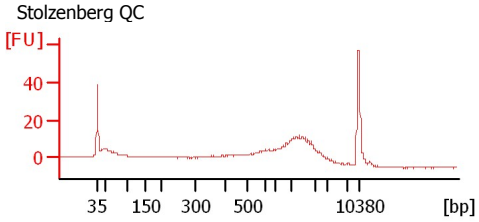
102-101 B



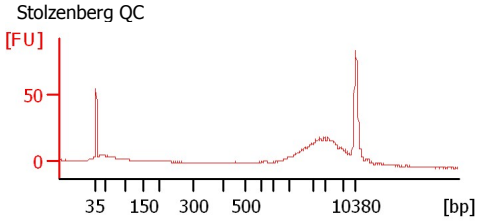
102-101 C



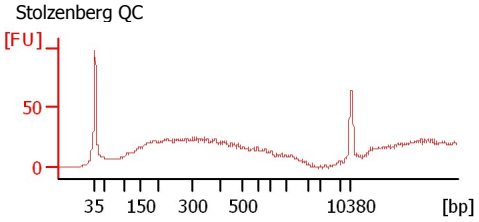
102-101 D



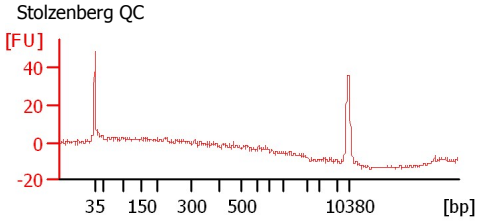
102-101 E



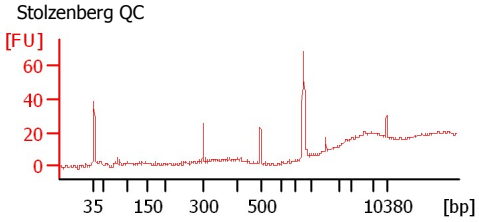
MD2



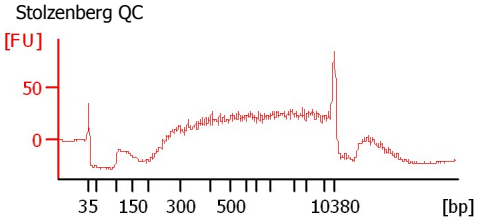
MD2 A



MD2 B



MD2 C



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
102-101 A	Stolzenberg QC	☐	✔			
102-101 B	Stolzenberg QC	☐	✔			
102-101 C	Stolzenberg QC	☐	✔			
102-101 D	Stolzenberg QC	☐	✔			
102-101 E	Stolzenberg QC	☐	✔			
MD2	Stolzenberg QC	☐	✔			
MD2 A	Stolzenberg QC	☐	✔			
MD2 B	Stolzenberg QC	☐	✔			
MD2 C	Stolzenberg QC	☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

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

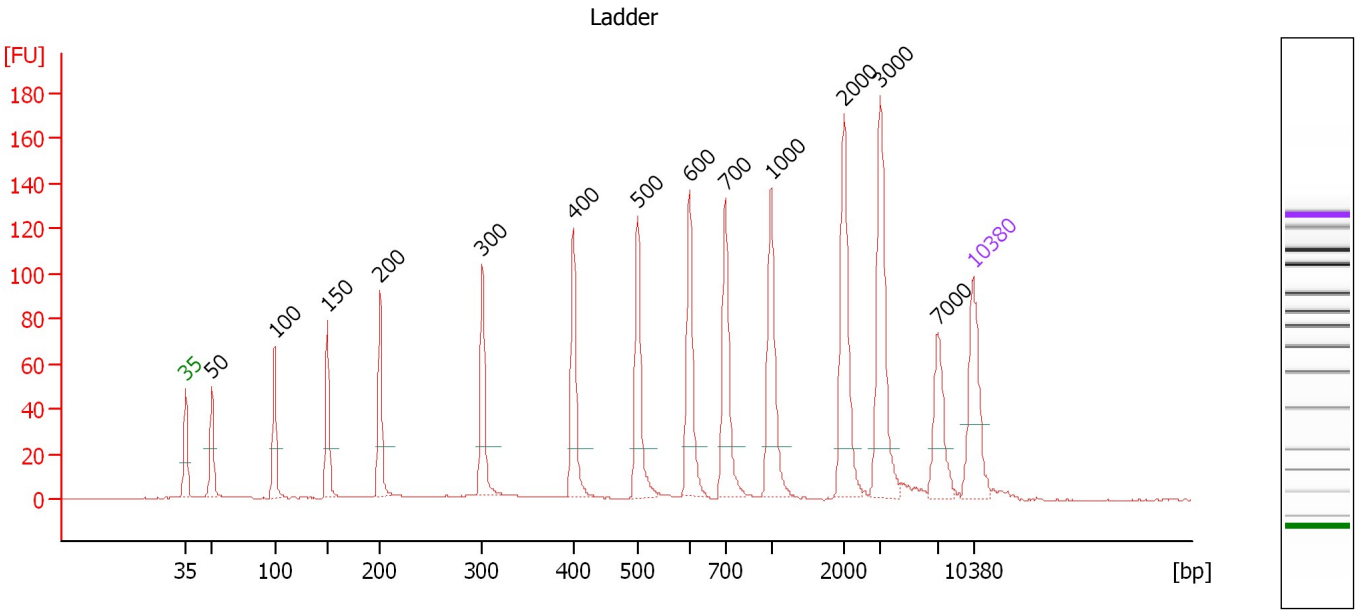
Ladder

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:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

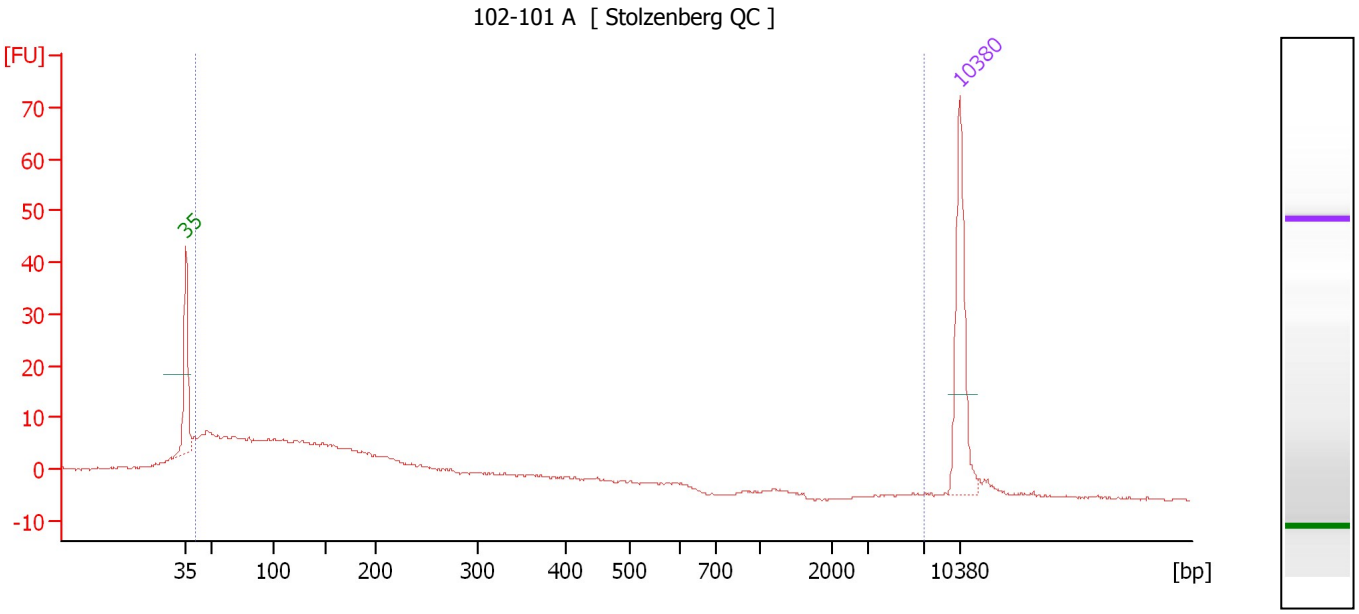
Peak table for Ladder

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	45.32
3		100	150.00	2,272.7	Ladder Peak	50.91
4		150	150.00	1,515.2	Ladder Peak	55.61
5		200	150.00	1,136.4	Ladder Peak	60.25
6		300	150.00	757.6	Ladder Peak	69.40
7		400	150.00	568.2	Ladder Peak	77.45
8		500	150.00	454.5	Ladder Peak	83.19
9		600	150.00	378.8	Ladder Peak	87.79
10		700	150.00	324.7	Ladder Peak	90.96
11		1,000	150.00	227.3	Ladder Peak	95.04
12		2,000	150.00	113.6	Ladder Peak	101.53
13		3,000	150.00	75.8	Ladder Peak	104.75
14		7,000	150.00	32.5	Ladder Peak	109.87
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 102-101 A

Number of peaks found:	0	Corr. Area 1:	263.6
Noise:	0.2		

Peak table for sample 3 : 102-101 A

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

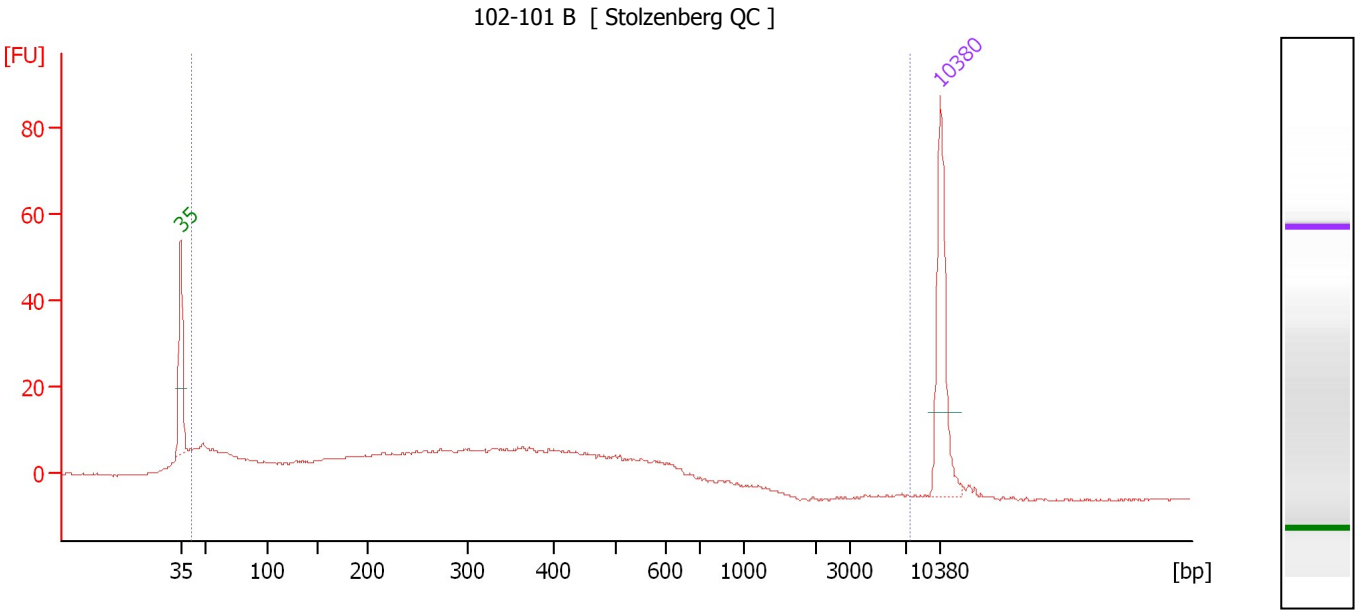
Region table for sample 3 : 102-101 A

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
41	6,894	161	263.6	9,064.0	594.97	92	65.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 102-101 B

Number of peaks found:	0	Corr. Area 1:	439.3
Noise:	0.2		

Peak table for sample 4 : 102-101 B

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

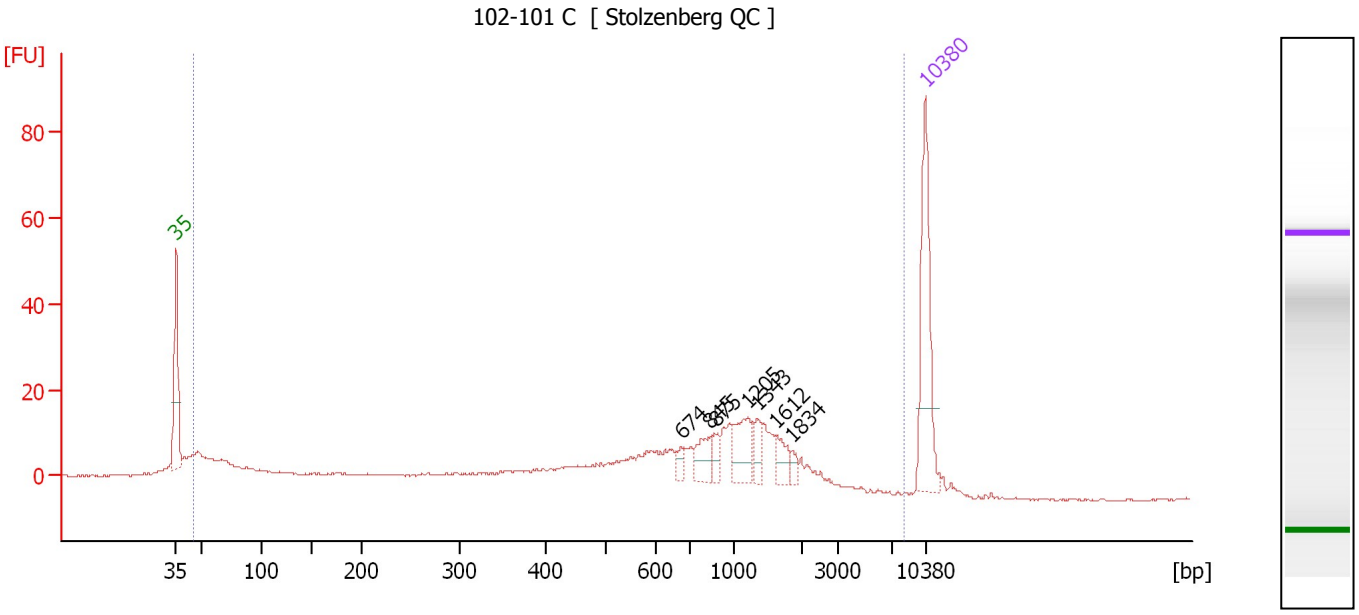
Region table for sample 4 : 102-101 B

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
42	7,334	323	439.3	7,127.8	719.63	96	56.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 102-101 C

Number of peaks found:	7	Corr. Area 1:	401.4
Noise:	0.2		

Peak table for sample 5 : 102-101 C

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		674	7.97	17.9		90.15
3		845	20.13	36.1		92.94
4		875	10.78	18.7		93.33
5		1,205	29.22	36.7		96.37
6		1,343	10.84	12.2		97.27
7		1,612	14.78	13.9		99.01
8		1,834	5.50	4.5		100.45
9	▶	10,380	75.00	10.9	Upper Marker	113.00

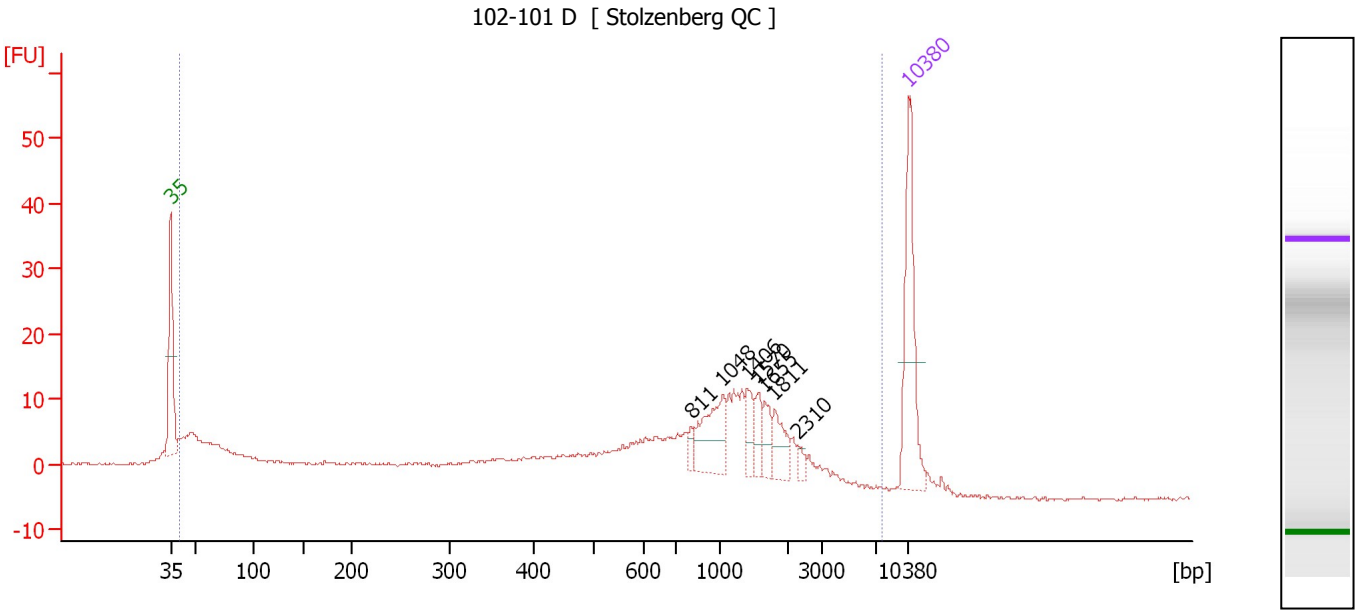
Region table for sample 5 : 102-101 C

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
46	8,287	859	401.4	4,136.4	569.23	93	81.6

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 102-101 D

Number of peaks found:	7	Corr. Area 1:	346.4
Noise:	0.2		

Peak table for sample 6 : 102-101 D

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	811	8.39	15.7		92.47
3	1,048	46.70	67.5		95.35
4	1,406	17.67	19.0		97.67
5	1,570	14.25	13.8		98.74
6	1,655	15.10	13.8		99.29
7	1,811	21.20	17.7		100.30
8	2,310	5.28	3.5		102.53
9	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 6 : 102-101 D

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
41	7,713	966	346.4	5,731.5	699.74	96	86.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

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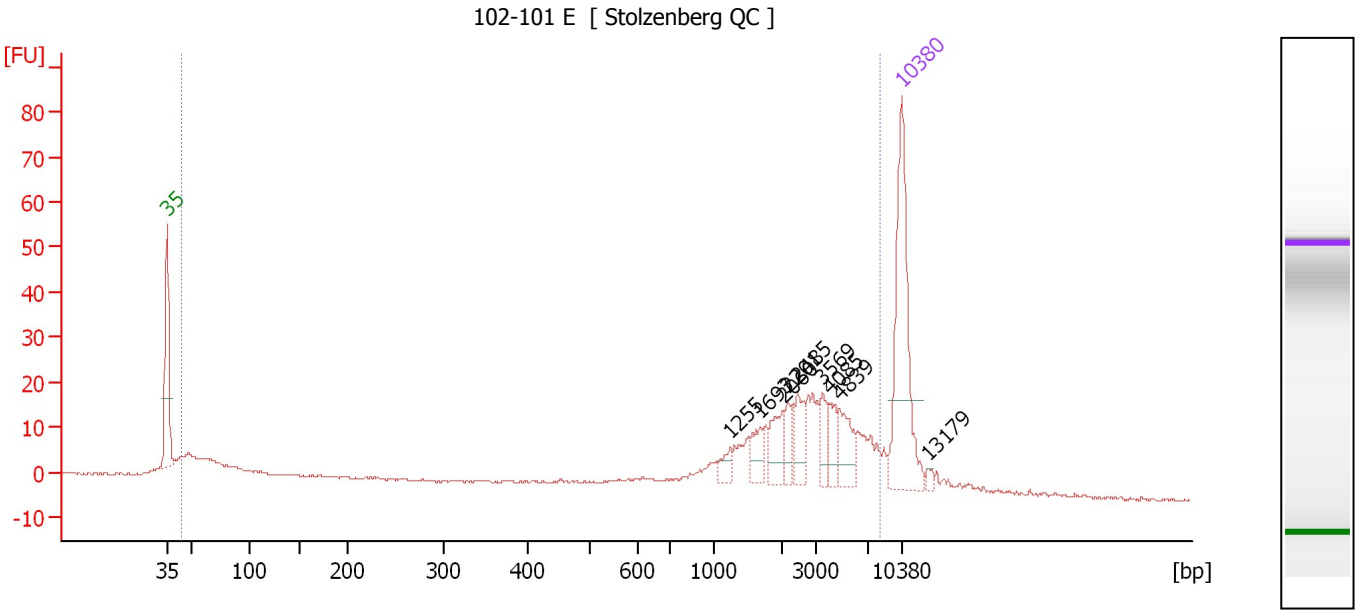


Overall Results for sample 7 : 102-101 E

Number of peaks found:	9	Corr. Area 1:	316.4
Noise:	0.2		

Peak table for sample 7 : 102-101 E

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	1,255	7.42	9.0		96.69
3	1,693	12.06	10.8		99.54
4	2,060	17.18	12.6		101.72
5	2,201	8.87	6.1		102.18
6	2,485	15.31	9.3		103.09
7	3,569	10.95	4.6		105.48
8	4,085	11.44	4.2		106.14
9	4,839	19.09	6.0		107.11
10	10,380	75.00	10.9	Upper Marker	113.00
11	13,179	0.00	0.0		115.59

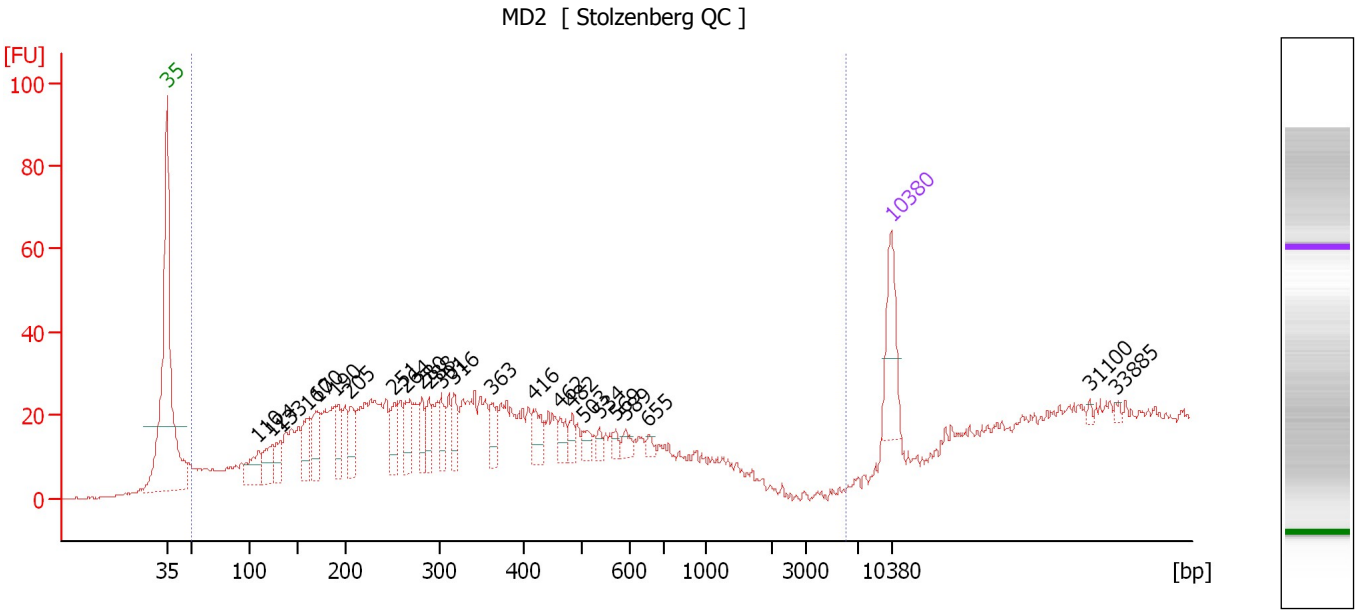
Region table for sample 7 : 102-101 E

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
44	8,206	2,722	316.4	2,011.4	299.45	90	73.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : MD2

Number of peaks found:	24	Corr. Area 1:	770.1
Noise:	0.3		

Peak table for sample 8 : MD2

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	110	68.21	943.1		51.81
3	124	53.84	658.5		53.15
4	133	43.43	496.0		53.98
5	160	63.84	605.7		56.51
6	170	72.61	646.4		57.48
7	190	56.07	448.0		59.29
8	205	51.32	378.9		60.73
9	251	49.16	296.8		64.91
10	264	49.32	283.2		66.09
11	280	42.66	230.7		67.59
12	288	41.61	218.8		68.31
13	301	40.34	202.9		69.49
14	316	39.97	191.7		70.68
15	363	38.16	159.5		74.44
16	416	39.91	145.4		78.36
17	462	26.46	86.8		80.99
18	482	19.26	60.5		82.18
19	503	19.03	57.4		83.31
20	534	11.25	31.9		84.75
21	569	9.77	26.0		86.35
22	589	15.56	40.0		87.28
23	655	9.35	21.6		89.55
24	10,380	75.00	10.9	Upper Marker	113.00
25	31,100	0.00	0.0		132.18

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electropherogram Summary Continued ...

... Peak table for sample 8 : MD2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	33,885	0.00	0.0		134.75

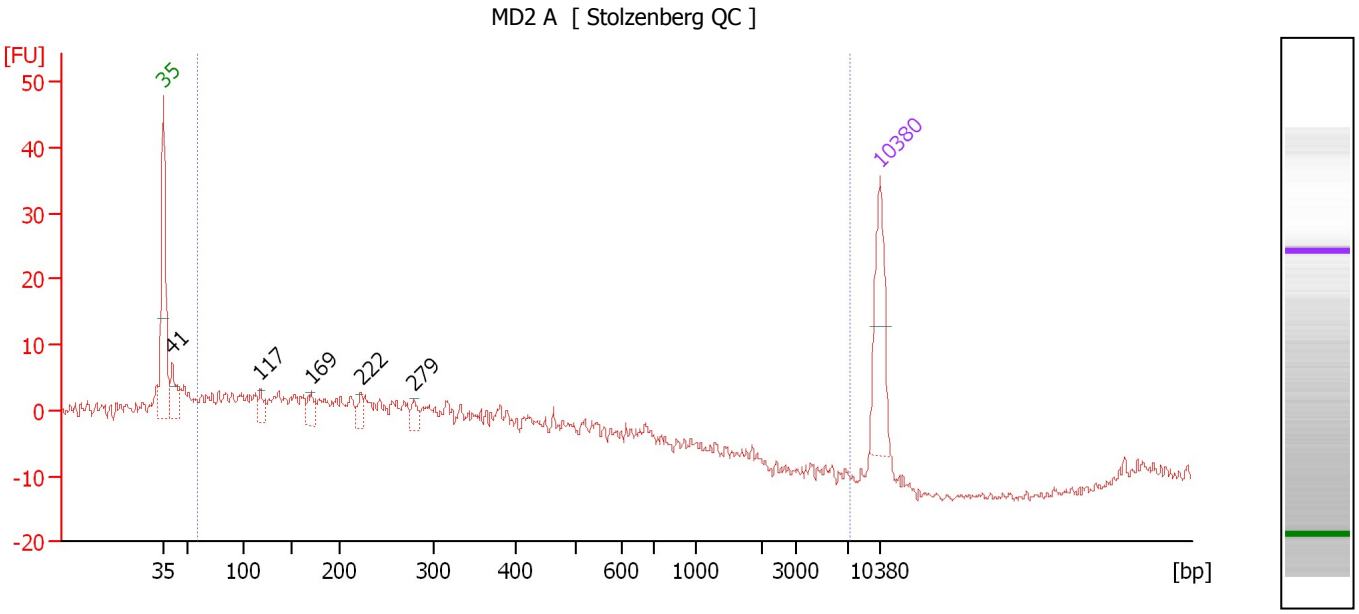
Region table for sample 8 : MD2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color Conc. [pg/µl]	% of Total	Size distribution in CV [%]
51	6,047	288	770.1	15,991.0	2,067.48	96	45.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : MD2 A

Number of peaks found:	5	Corr. Area 1:	165.0
Noise:	0.7		

Peak table for sample 9 : MD2 A

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		41	47.58	1,770.5		43.88
3		117	20.80	270.3		52.47
4		169	23.45	209.6		57.42
5		222	14.73	100.3		62.31
6		279	14.95	81.1		67.51
7	▶	10,380	75.00	10.9	Upper Marker	113.00

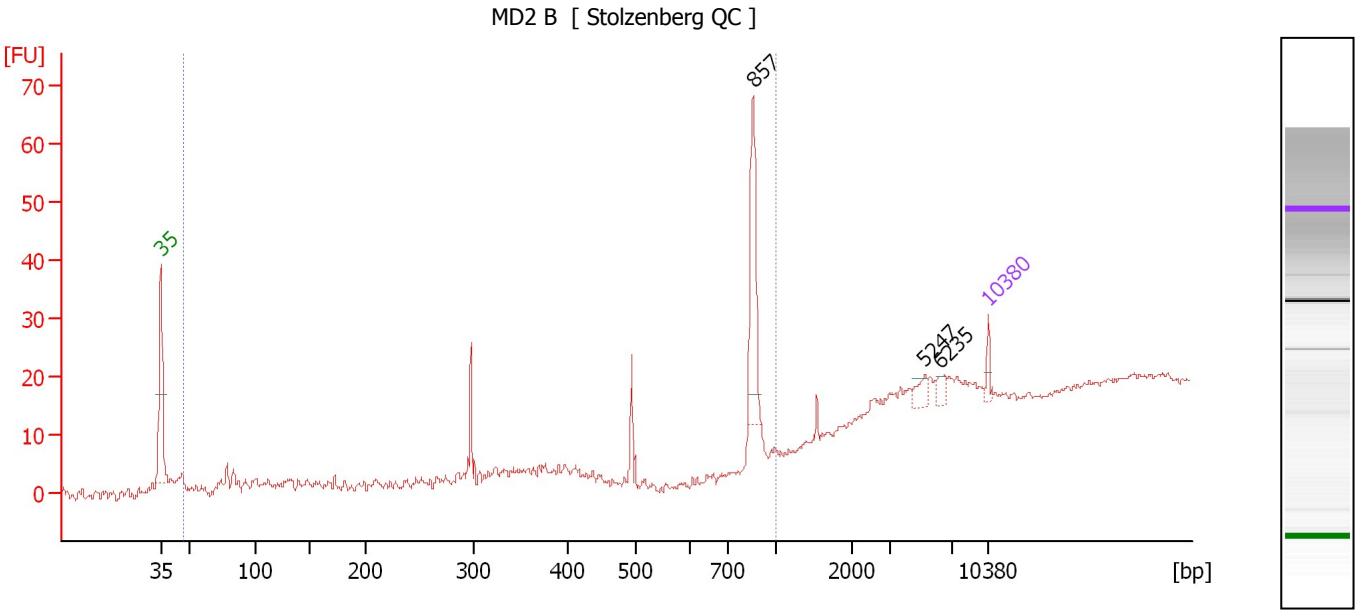
Region table for sample 9 : MD2 A

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
60	7,190	271	165.0	4,758.7	517.50	84	56.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : MD2 B

Number of peaks found:	3	Corr. Area 1:	46.3
Noise:	0.6		

Peak table for sample 10 : MD2 B

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	857	973.17	1,720.3		93.10
3	5,247	137.99	39.8		107.63
4	6,235	99.65	24.2		108.89
5	10,380	75.00	10.9	Upper Marker	113.00

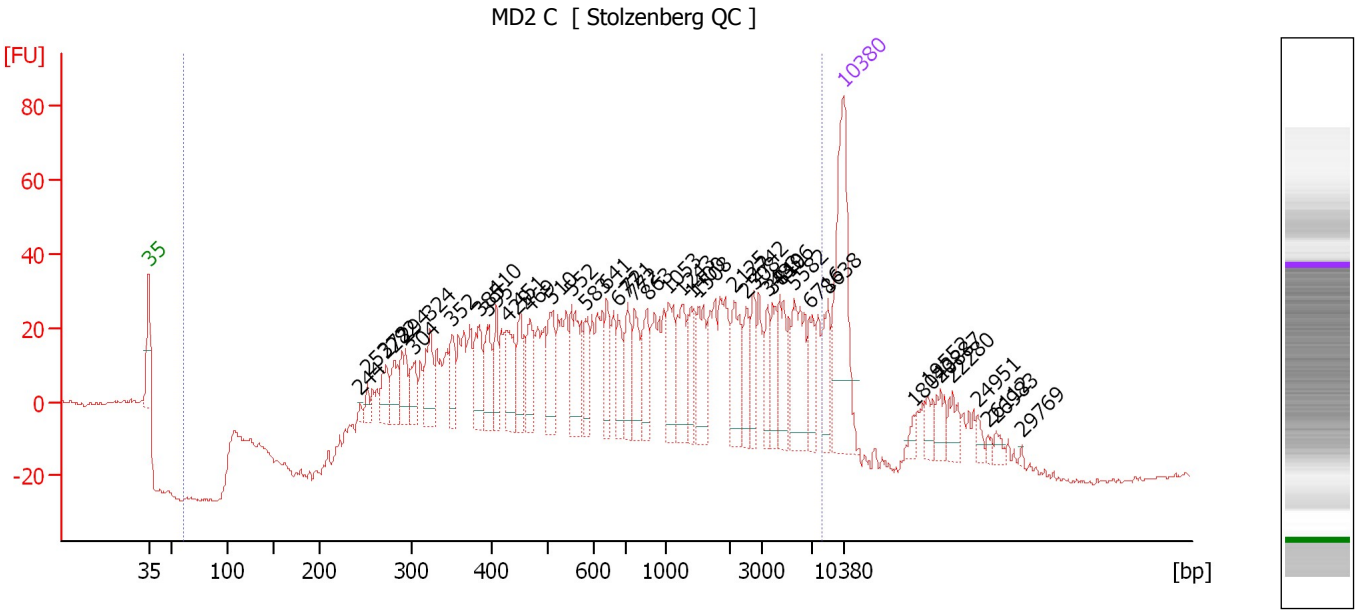
Region table for sample 10 : MD2 B

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
48	1,000	773	46.3	4,699.8	1,321.23	46	26.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electropherogram Summary Continued ...



Overall Results for sample 11 : MD2 C

Number of peaks found:	43	Corr. Area 1:	1,459.6
Noise:	0.7		

Peak table for sample 11 : MD2 C

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	244	3.77	23.4		64.27
3	253	7.54	45.2		65.08
4	272	19.10	106.3		66.85
5	282	20.87	112.3		67.71
6	294	24.94	128.6		68.84
7	304	18.81	93.8		69.70
8	324	31.47	147.3		71.31
9	352	19.64	84.6		73.57
10	385	31.54	124.1		76.25
11	395	26.26	100.7		77.06
12	410	21.29	78.7		78.03
13	429	26.20	92.6		79.10
14	451	26.23	88.1		80.39
15	469	28.90	93.4		81.41
16	510	31.97	94.9		83.67
17	552	37.42	102.6		85.60
18	583	19.78	51.4		87.00
19	641	21.34	50.4		89.09
20	677	20.66	46.2		90.22
21	721	23.34	49.1		91.24
22	772	25.02	49.1		91.94
23	863	25.42	44.6		93.18
24	1,053	27.64	39.8		95.38
25	1,243	27.65	33.7		96.61

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Electropherogram Summary Continued ...

... Peak table for sample 11 : MD2 C

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	1,400	19.08	20.7		97.64
27	1,508	27.38	27.5		98.33
28	2,125	27.86	19.9		101.93
29	2,508	16.76	10.1		103.17
30	2,742	16.67	9.2		103.92
31	3,483	14.92	6.5		105.37
32	3,819	16.18	6.4		105.80
33	4,406	23.46	8.1		106.55
34	5,582	39.38	10.7		108.06
35	6,716	16.21	3.7		109.51
36	8,638	19.10	3.4		111.39
37	10,380	75.00	10.9	Upper Marker	113.00
38	18,043	0.00	0.0		120.09
39	19,552	0.00	0.0		121.49
40	20,887	0.00	0.0		122.72
41	22,280	0.00	0.0		124.01
42	24,951	0.00	0.0		126.48
43	26,112	0.00	0.0		127.56
44	26,983	0.00	0.0		128.36
45	29,769	0.00	0.0		130.94

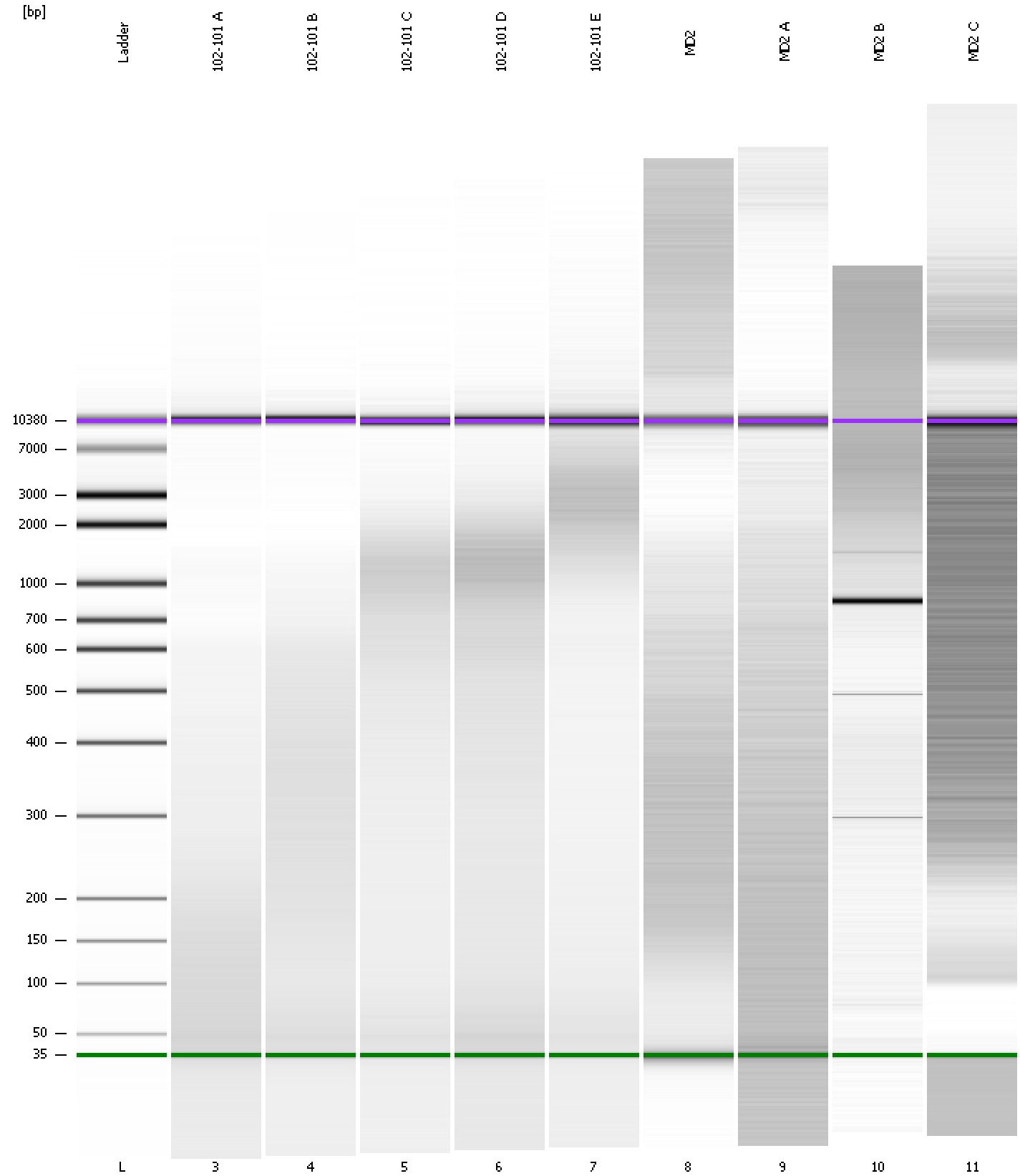
Region table for sample 11 : MD2 C

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
60	8,079	1,669	1,459.6	2,966.6	1,162.28	92	100.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Gel Image

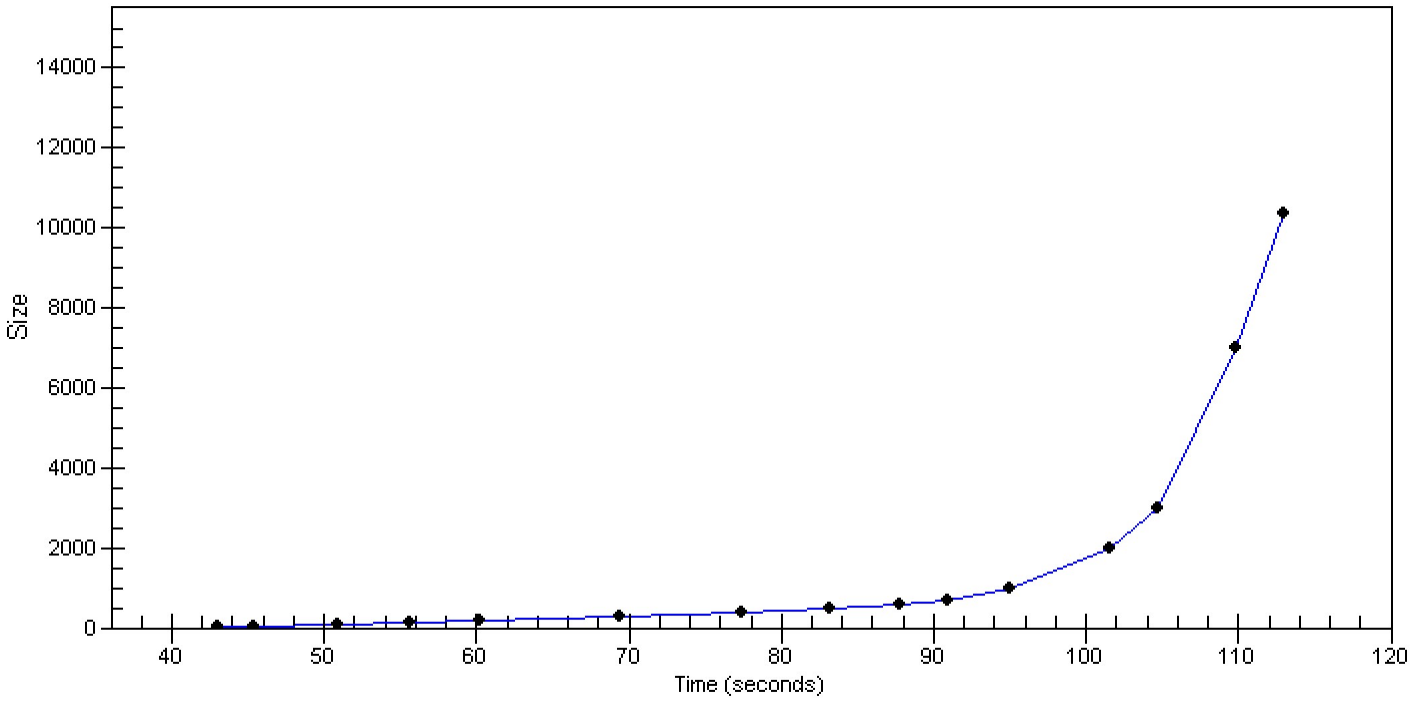


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...00 expert\data\2016-05-03\2016-05-03_001_Stolzenberg_QC.xad

Created: 5/3/2016 10:28:40 AM
Modified: 5/3/2016 11:19:48 AM

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		5/3/2016 11:09:59 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-05-03\2016-05-03_001.xad)		Instrument	Run		5/3/2016 10:28:45 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/3/2016 10:28:45 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/3/2016 10:28:45 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/3/2016 10:28:45 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/3/2016 10:28:45 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/3/2016 10:28:45 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/3/2016 10:28:45 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1