Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electrophoresis File Run Summary

Instrument Information:

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

Assay Information:

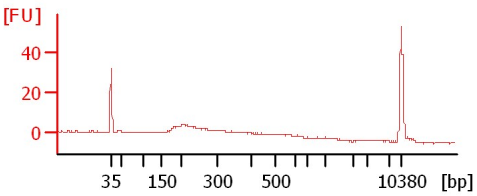
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy

Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

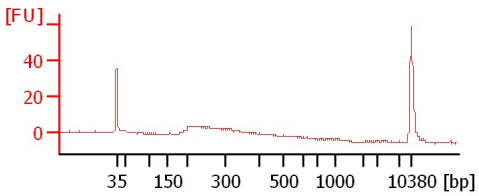
Chip Information:

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

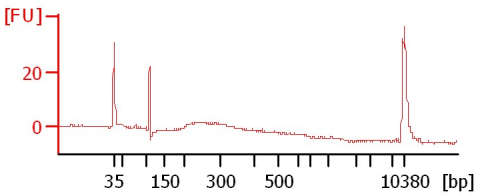
5D WT MI



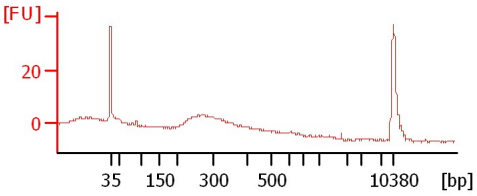
5D WT DI



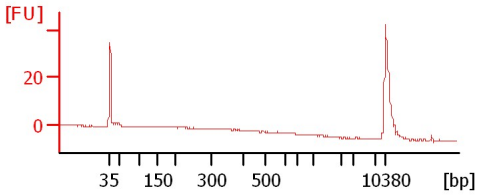
5D B1GR MI



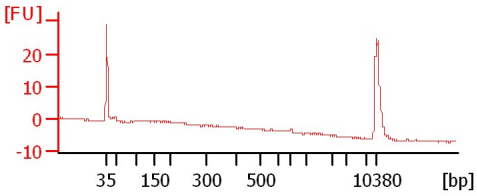
4D B1GR DI



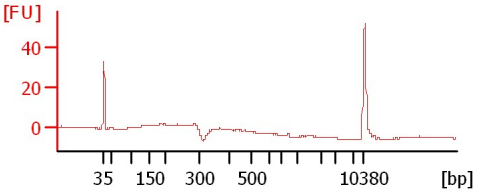
5D sDNA 120s



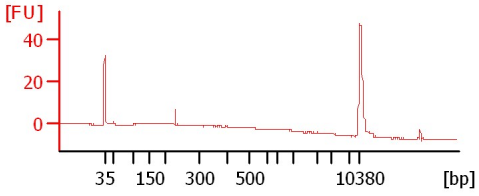
5D sDNA 180s



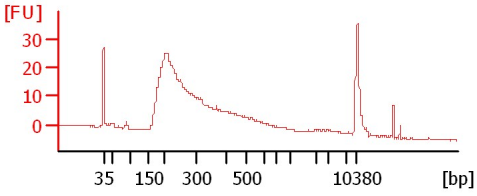
sDNA 120s



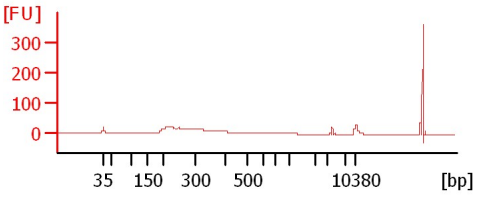
sDNA 180s

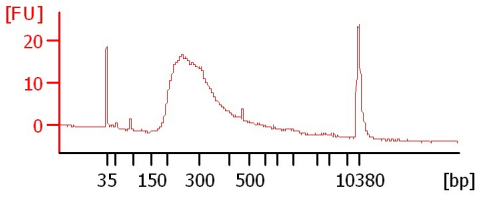


WT MI



WT DI





Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
5D WT MI		☐	✔			
5D WT DI		☐	✔			
5D B1GR MI		☐	✔			
4D B1GR DI		☐	✔			
5D sDNA 120s		☐	✔			
5D sDNA 180s		☐	✔			
sDNA 120s		☐	✔			
sDNA 180s		☐	✔			
WT MI		☐	✔			
WT DI		☐	✔			
		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 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

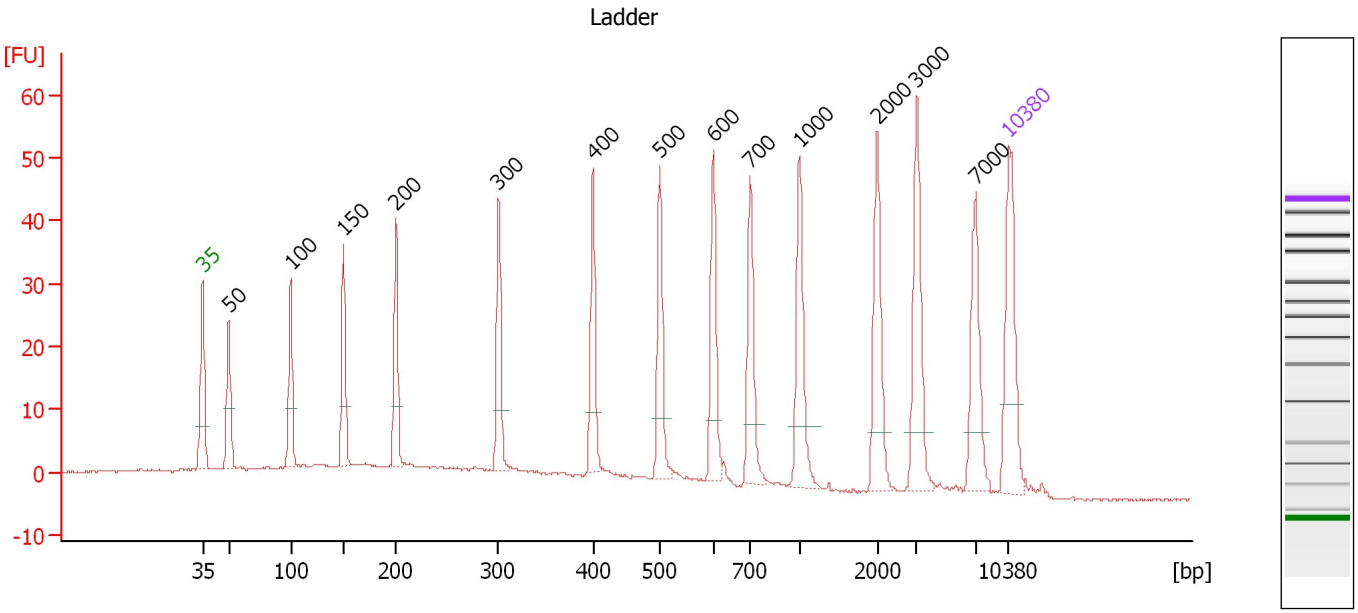
Ladder

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\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

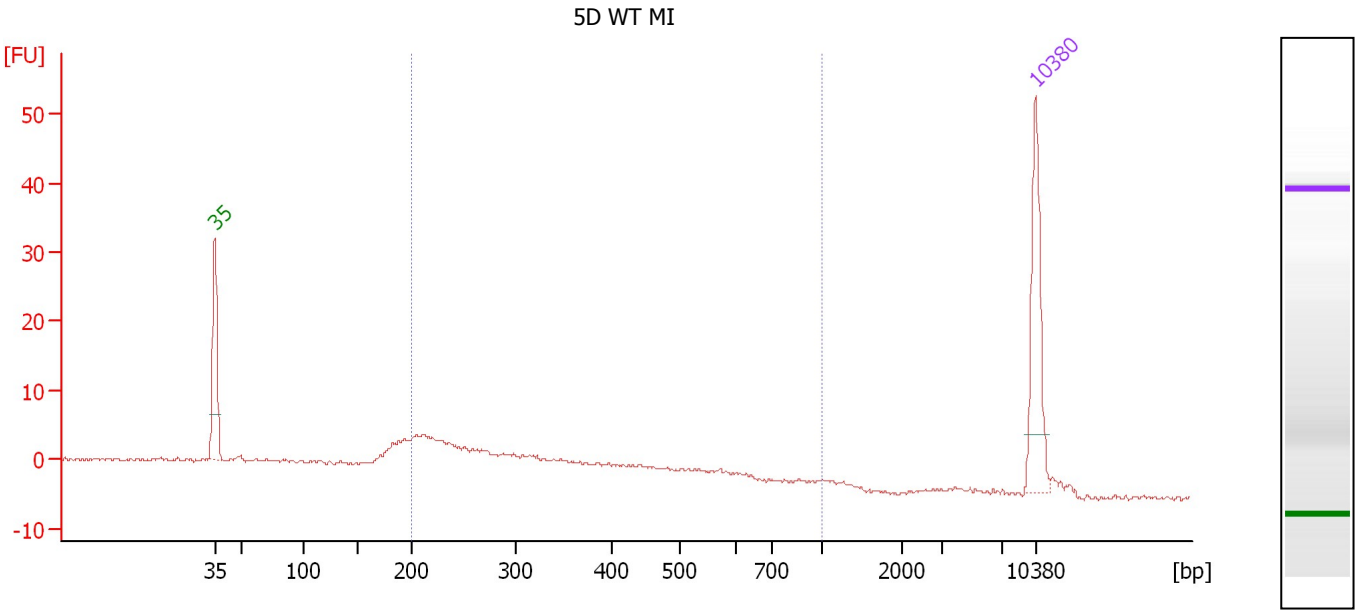
Peak table for Ladder

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	45.27
3		100	150.00	2,272.7	Ladder Peak	50.64
4		150	150.00	1,515.2	Ladder Peak	55.22
5		200	150.00	1,136.4	Ladder Peak	59.76
6		300	150.00	757.6	Ladder Peak	68.69
7		400	150.00	568.2	Ladder Peak	76.89
8		500	150.00	454.5	Ladder Peak	82.68
9		600	150.00	378.8	Ladder Peak	87.35
10		700	150.00	324.7	Ladder Peak	90.55
11		1,000	150.00	227.3	Ladder Peak	94.81
12		2,000	150.00	113.6	Ladder Peak	101.56
13		3,000	150.00	75.8	Ladder Peak	104.99
14		7,000	150.00	32.5	Ladder Peak	110.13
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : 5D WT MI

Number of peaks found:	0	Corr. Area 1:	107.8
Noise:	0.2		

Peak table for sample 1 : 5D WT MI

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

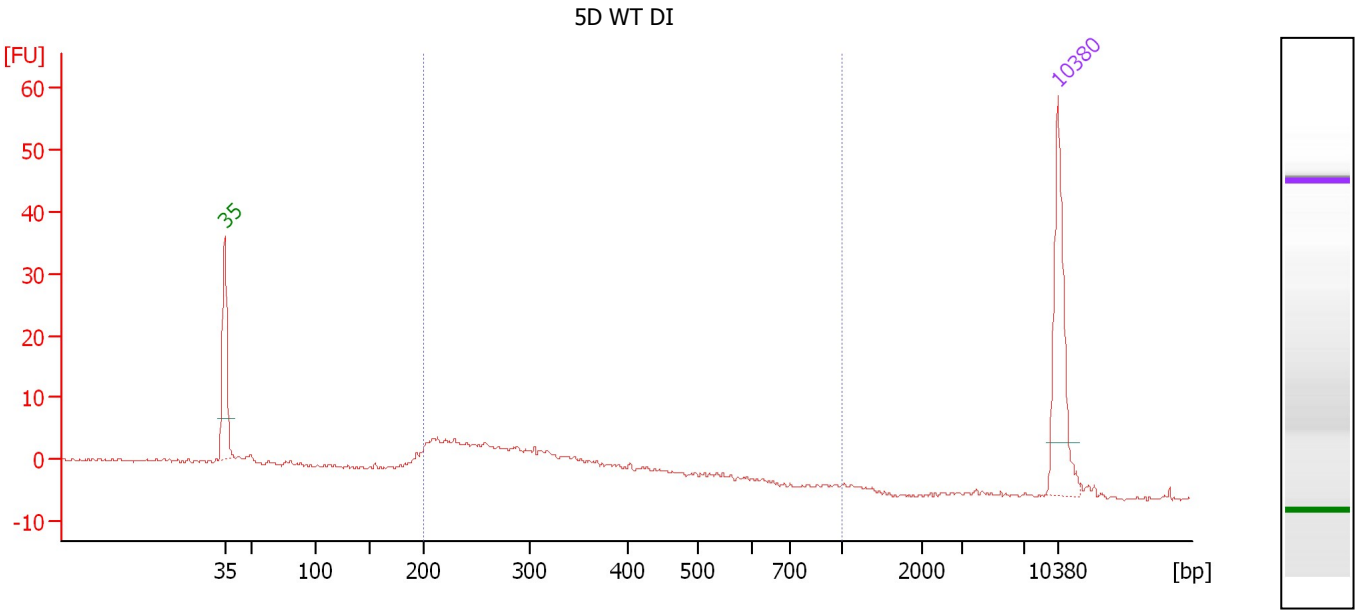
Region table for sample 1 : 5D WT MI

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	358	107.8	1,425.2	280.47	66	41.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : 5D WT DI

Number of peaks found:	0	Corr. Area 1:	119.1
Noise:	0.3		

Peak table for sample 2 : 5D WT DI

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

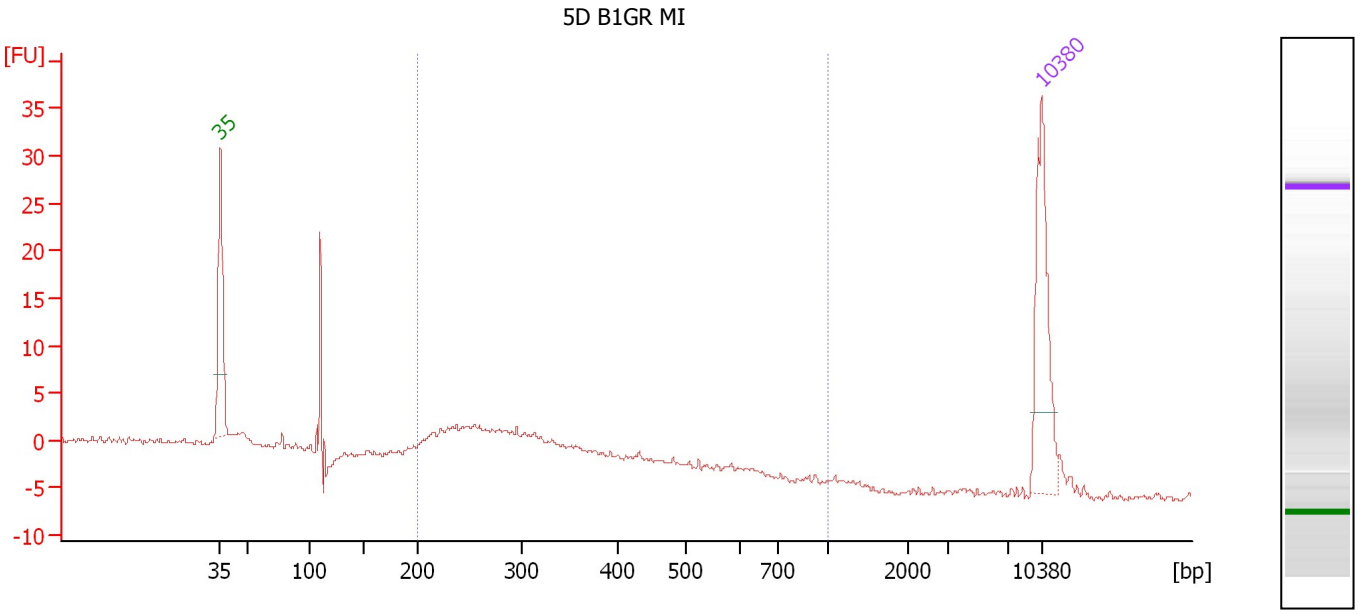
Region table for sample 2 : 5D WT DI

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	324	119.1	1,357.1	258.99	76	33.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : 5D B1GR MI

Number of peaks found:	0	Corr. Area 1:	82.7
Noise:	0.3		

Peak table for sample 3 : 5D B1GR MI

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

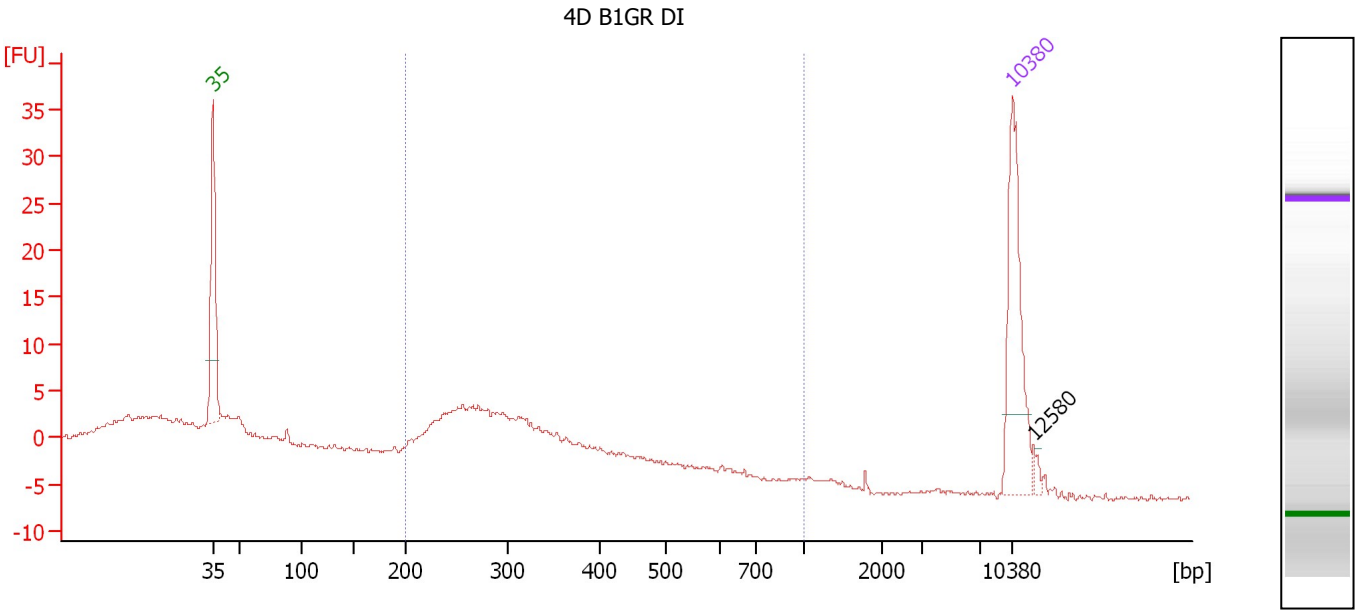
Region table for sample 3 : 5D B1GR MI

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	332	82.7	1,165.8	228.41	67	32.2

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : 4D B1GR DI

Number of peaks found:	1	Corr. Area 1:	106.4
Noise:	0.2		

Peak table for sample 4 : 4D B1GR DI

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
3	12,580	0.00	0.0		114.87

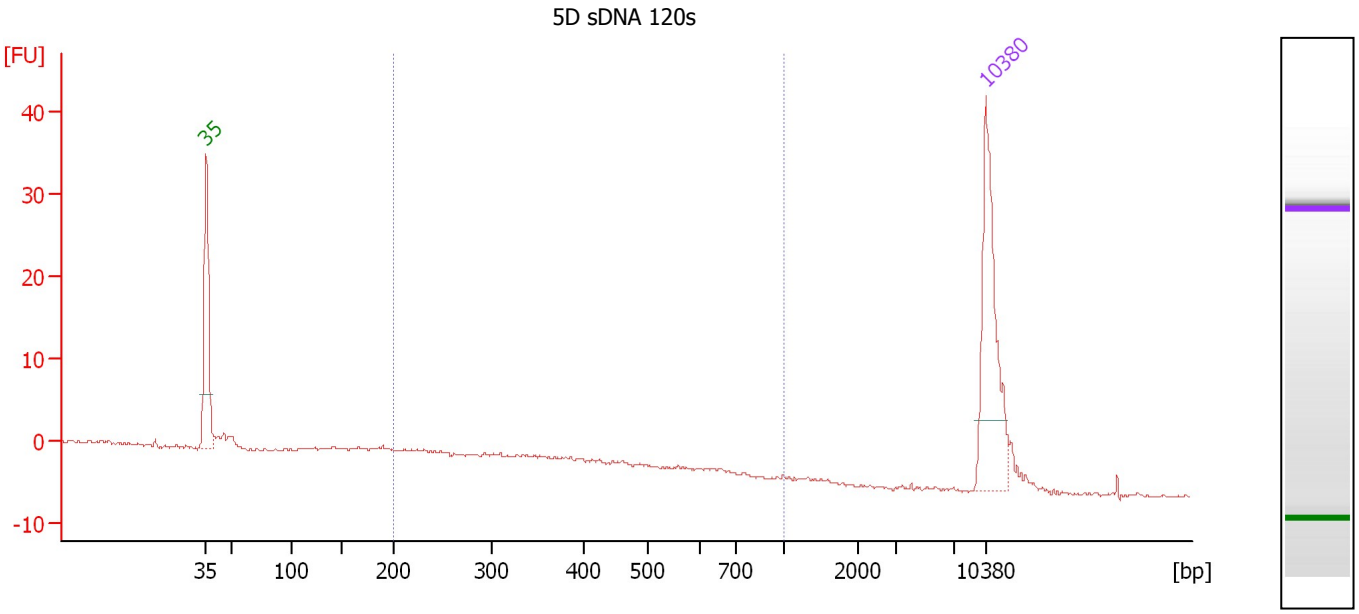
Region table for sample 4 : 4D B1GR DI

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	317	106.4	1,341.0	260.45	53	25.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 5D sDNA 120s

Number of peaks found:	0	Corr. Area 1:	28.4
Noise:	0.2		

Peak table for sample 5 : 5D sDNA 120s

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

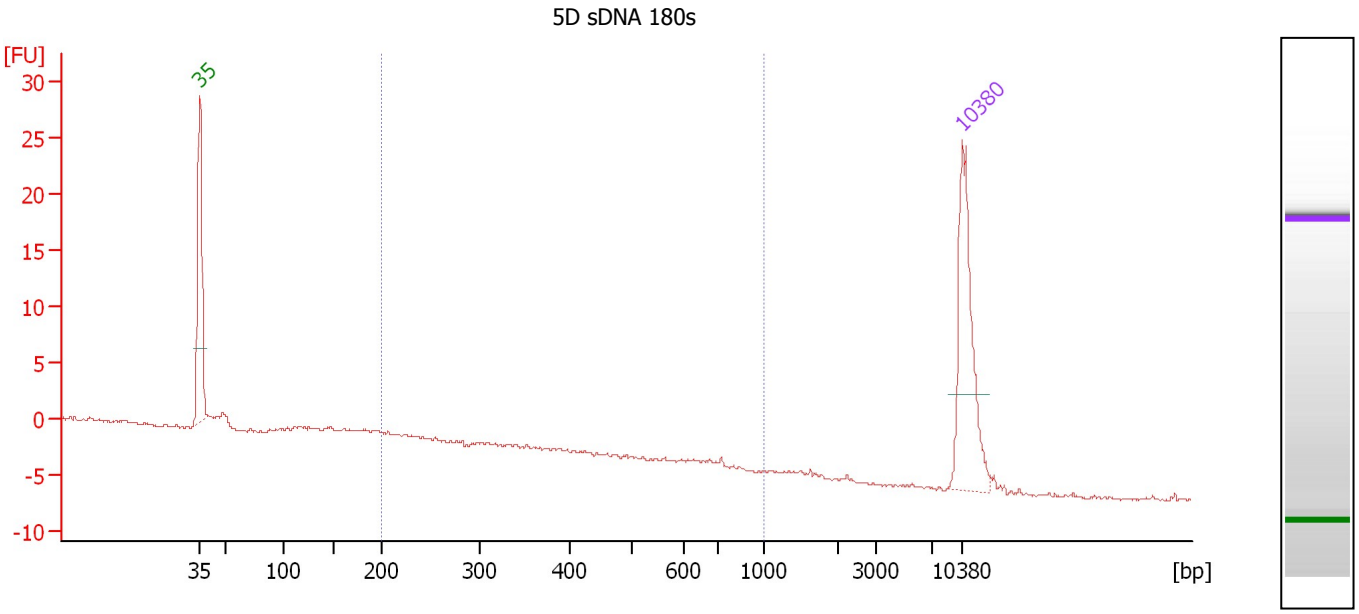
Region table for sample 5 : 5D sDNA 120s

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	364	28.4	279.5	58.36	53	32.7

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 5D sDNA 180s

Number of peaks found:	0	Corr. Area 1:	9.9
Noise:	0.1		

Peak table for sample 6 : 5D sDNA 180s

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 : 5D sDNA 180s

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	342	9.9	157.3	30.12	41	39.3

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

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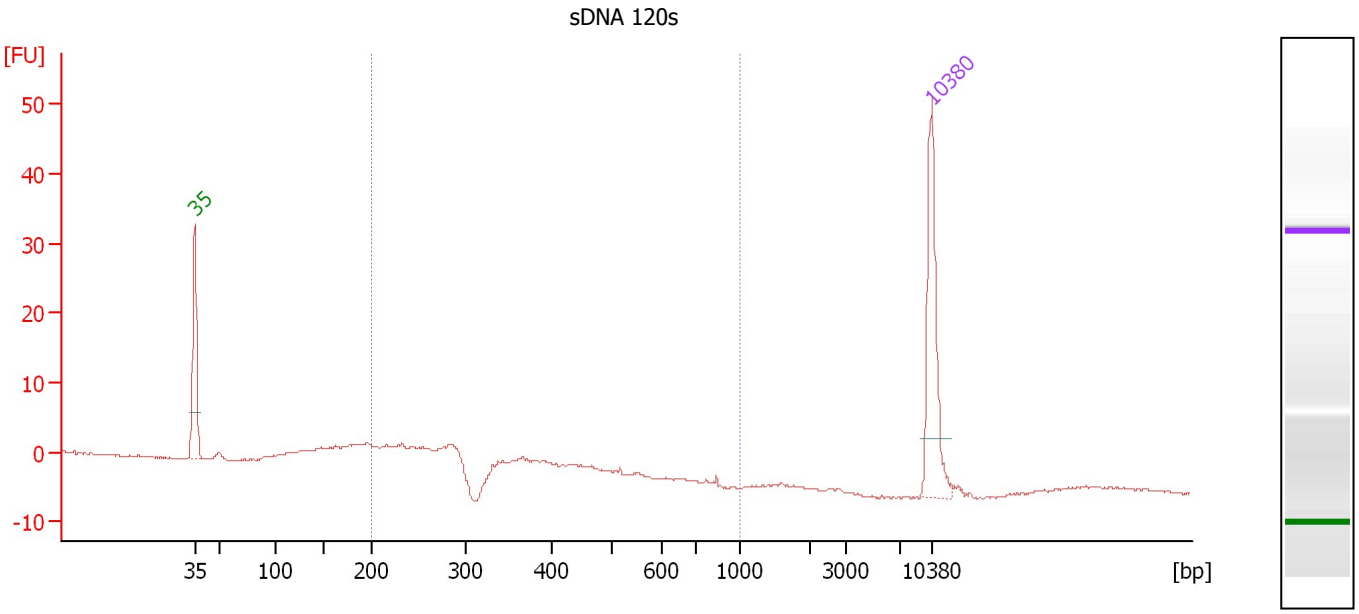
Modified: 6/24/2016 3:59:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : sDNA 120s

Number of peaks found:	0	Corr. Area 1:	46.9
Noise:	0.1		

Peak table for sample 7 : sDNA 120s

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 7 : sDNA 120s

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	297	46.9	644.8	116.69	57	26.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

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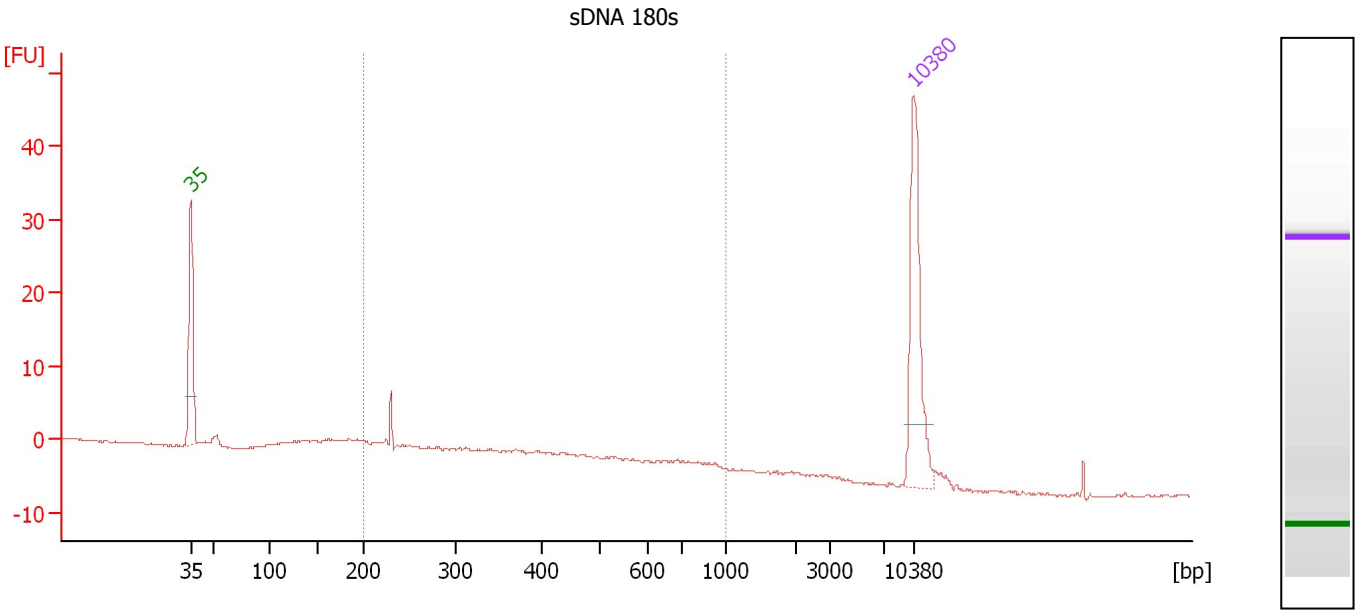


Overall Results for sample 8 : sDNA 180s

Number of peaks found:	0	Corr. Area 1:	55.8
Noise:	0.2		

Peak table for sample 8 : sDNA 180s

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

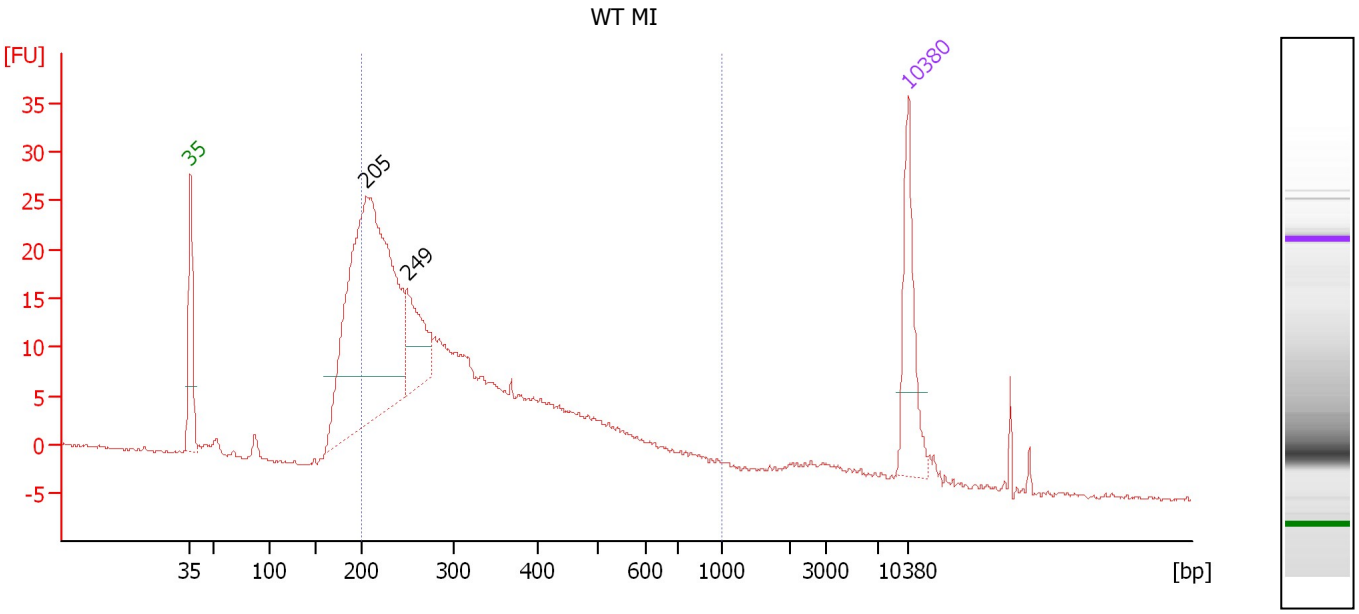
Region table for sample 8 : sDNA 180s

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	418	55.8	554.1	121.10	66	43.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : WT MI

Number of peaks found:	2	Corr. Area 1:	419.6
Noise:	0.2		

Peak table for sample 9 : WT MI

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	205	624.87	4,629.5		60.16
3	249	94.29	574.3		64.11
4	10,380	75.00	10.9	Upper Marker	113.00

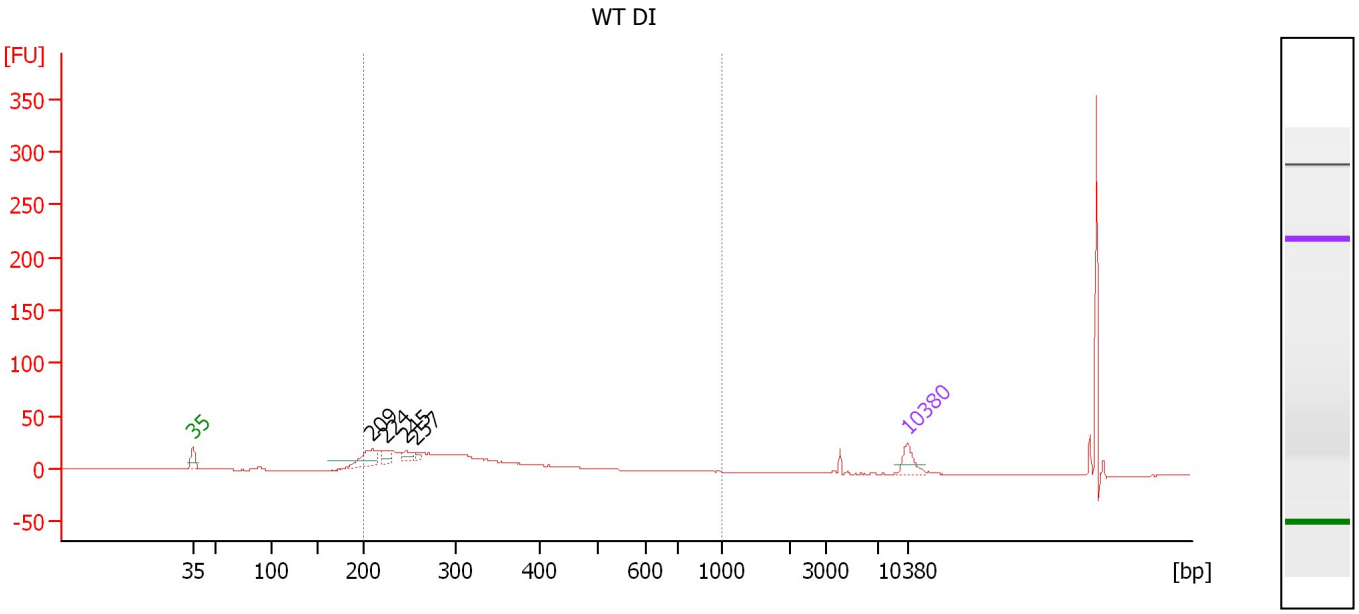
Region table for sample 9 : WT MI

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color Conc. [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	337	419.6	6,756.1	1,272.15	79	41.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : WT DI

Number of peaks found:	4	Corr. Area 1:	384.1
Noise:	0.2		

Peak table for sample 10 : WT DI

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	209	195.06	1,414.9		60.55
3	224	77.78	526.0		61.91
4	245	61.30	378.9		63.79
5	257	25.70	151.6		64.84
6	10,380	75.00	10.9	Upper Marker	113.00

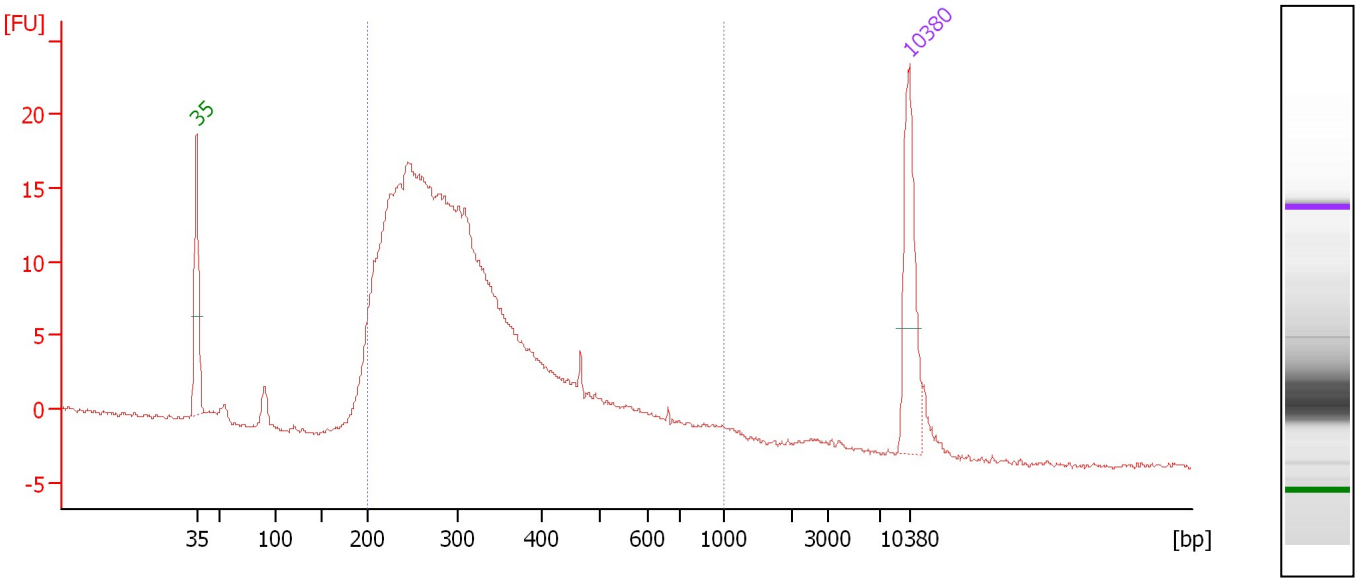
Region table for sample 10 : WT DI

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color Conc. [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	315	384.1	7,989.8	1,494.92	77	34.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 :

Number of peaks found:	0	Corr. Area 1:	343.2
Noise:	0.2		

Peak table for sample 11 :

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 :

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	325	343.2	7,495.9	1,432.20	94	36.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

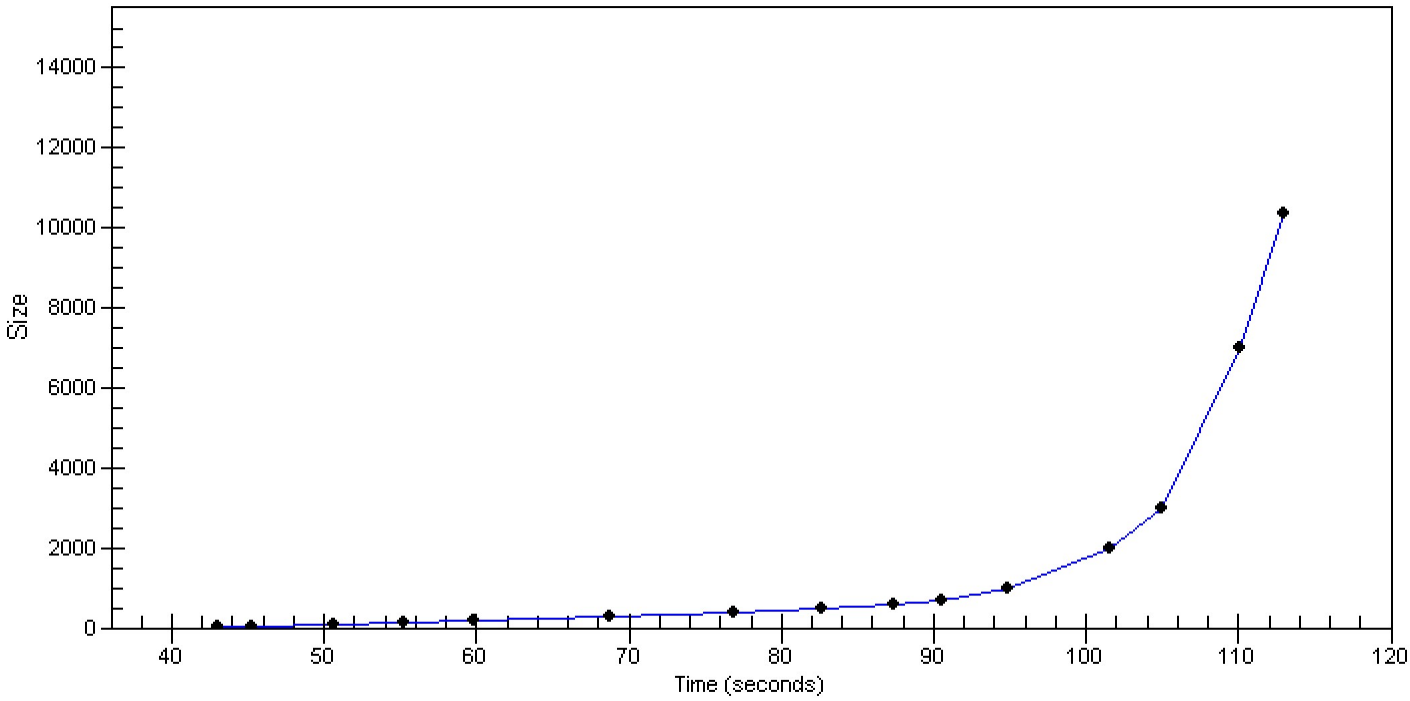
Gel Image

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24_004.xad

Created: 6/24/2016 3:18:38 PM
Modified: 6/24/2016 3:59:59 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		6/24/2016 3:59:57 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\2016-06-24\2016-06-24_004.xad)		Instrument	Run		6/24/2016 3:18:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		6/24/2016 3:18:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		6/24/2016 3:18:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		6/24/2016 3:18:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		6/24/2016 3:18:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		6/24/2016 3:18:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		6/24/2016 3:18:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1