

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:

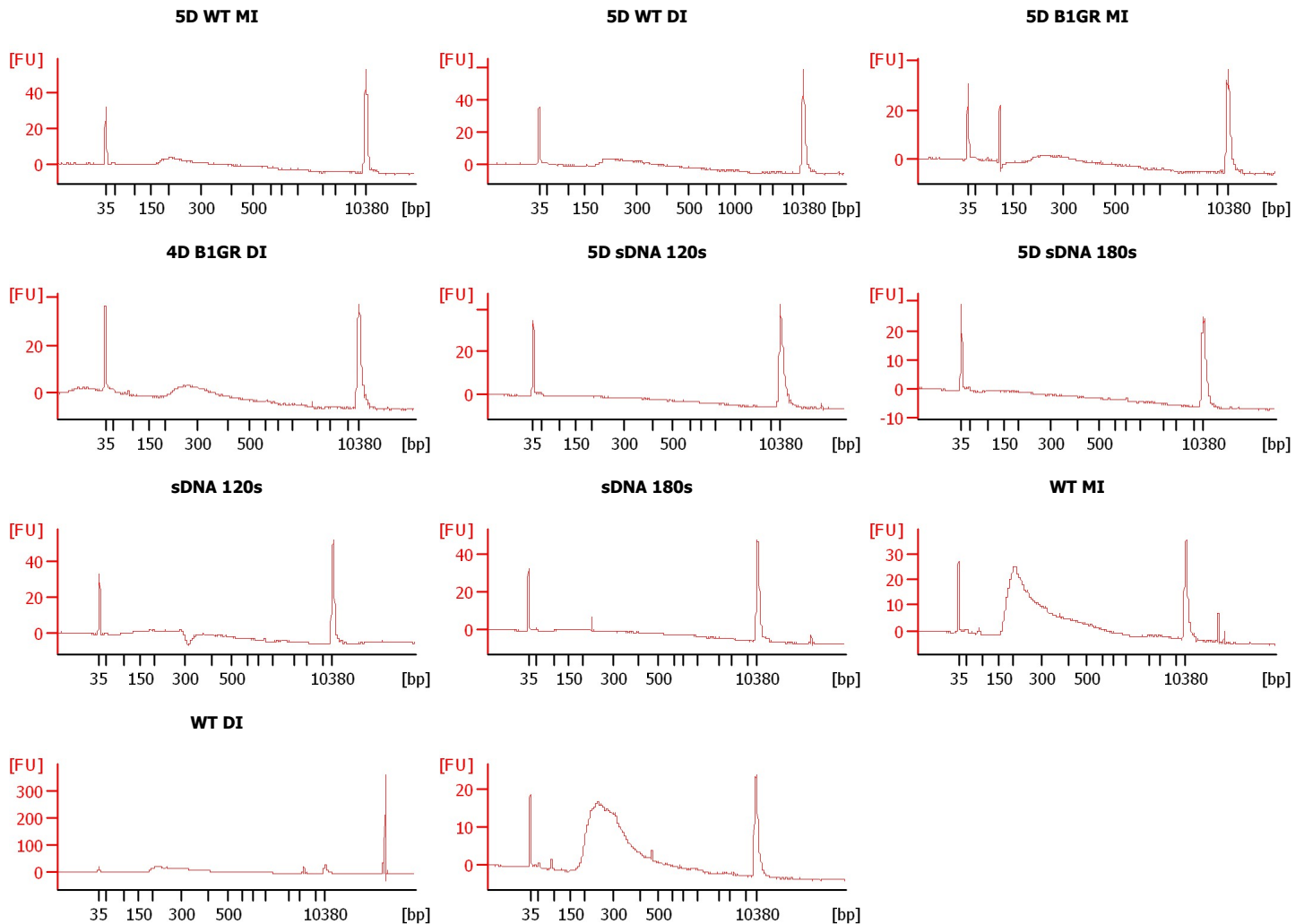
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



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**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
5D WT MI		<input type="checkbox"/>	✓			
5D WT DI		<input type="checkbox"/>	✓			
5D B1GR MI		<input type="checkbox"/>	✓			
4D B1GR DI		<input type="checkbox"/>	✓			
5D sDNA 120s		<input type="checkbox"/>	✓			
5D sDNA 180s		<input type="checkbox"/>	✓			
sDNA 120s		<input type="checkbox"/>	✓			
sDNA 180s		<input type="checkbox"/>	✓			
WT MI		<input type="checkbox"/>	✓			
WT DI		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

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**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

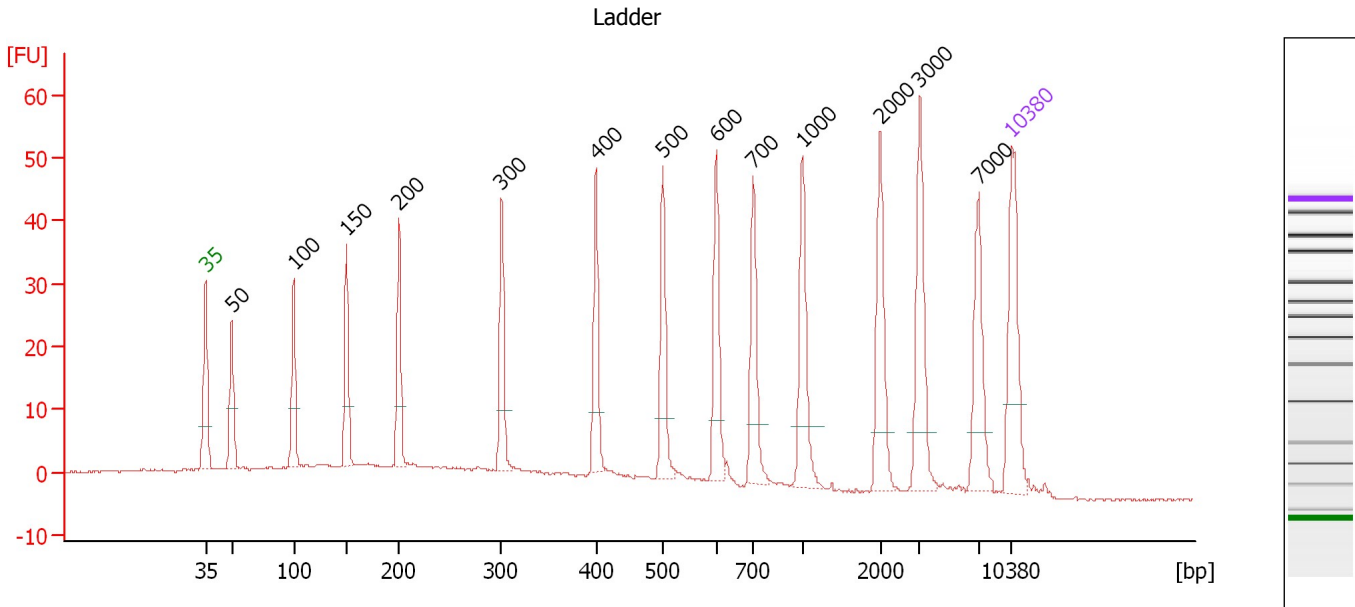
**Ladder**

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

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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

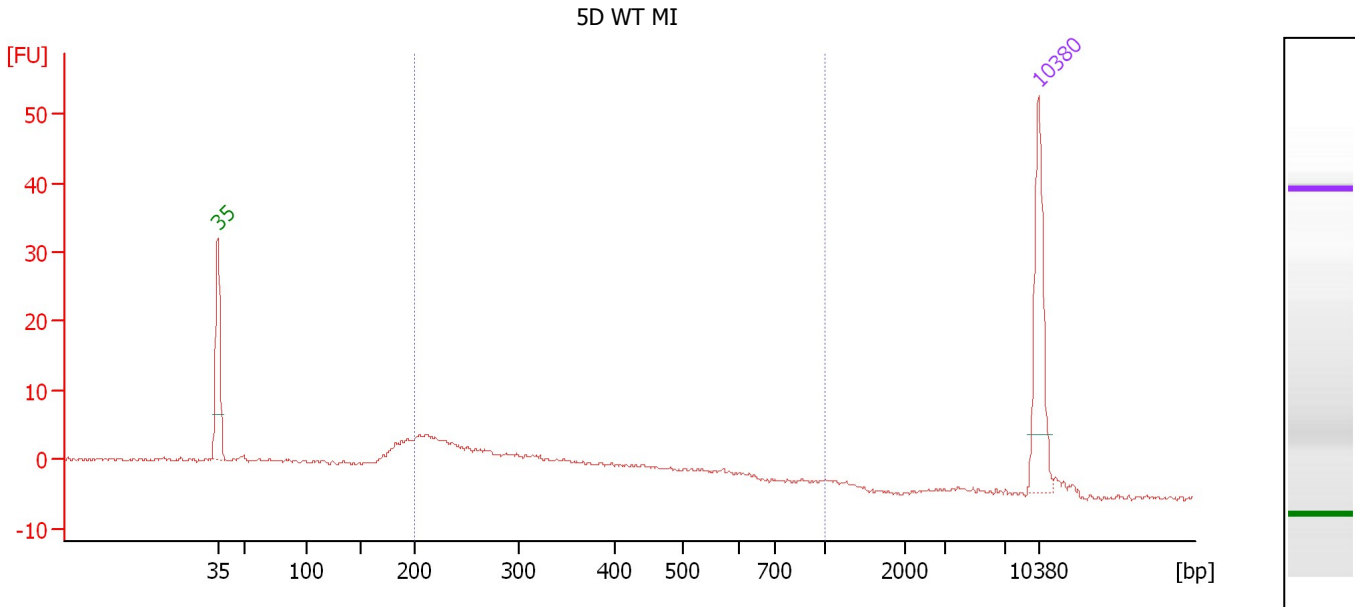
**Peak table for Ladder**

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

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**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

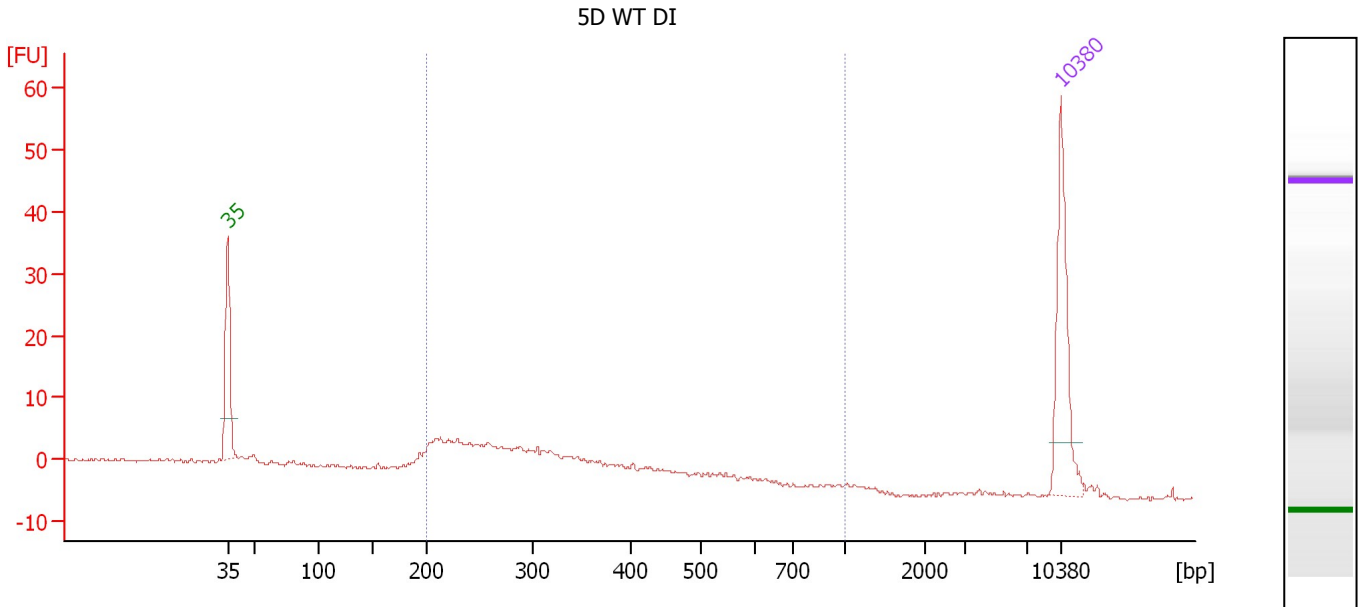
**Region table for sample 1 : 5D WT MI**

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

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**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

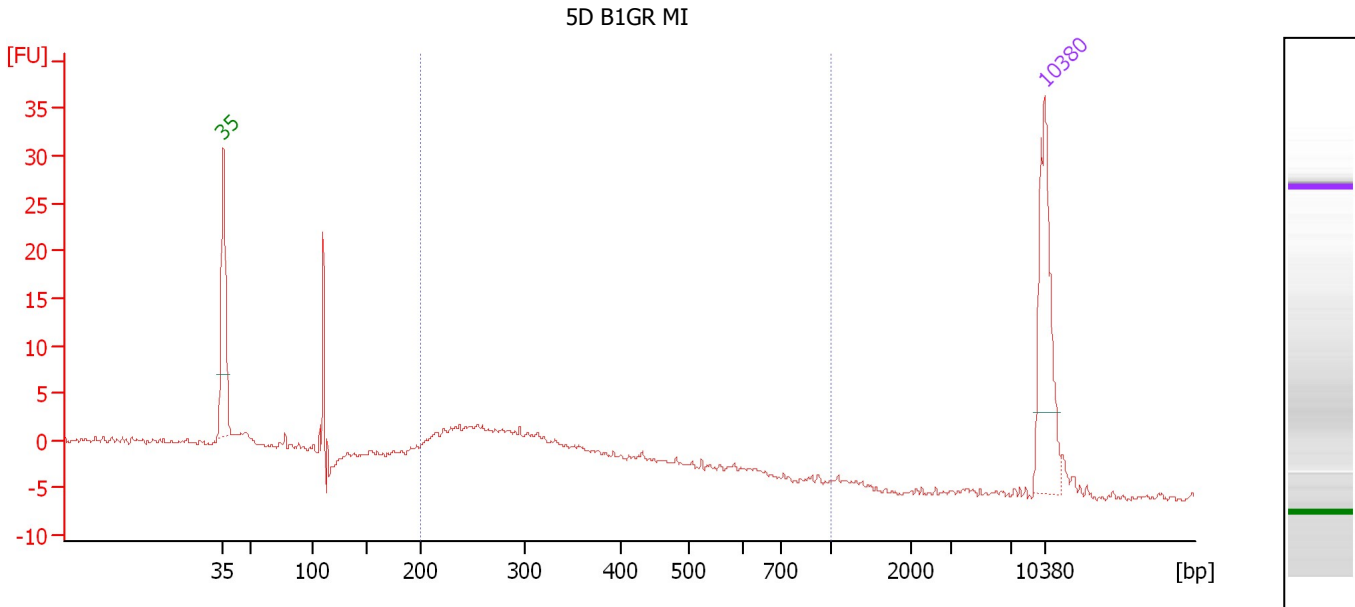
**Region table for sample 2 : 5D WT DI**

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  
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**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**

Pea k	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

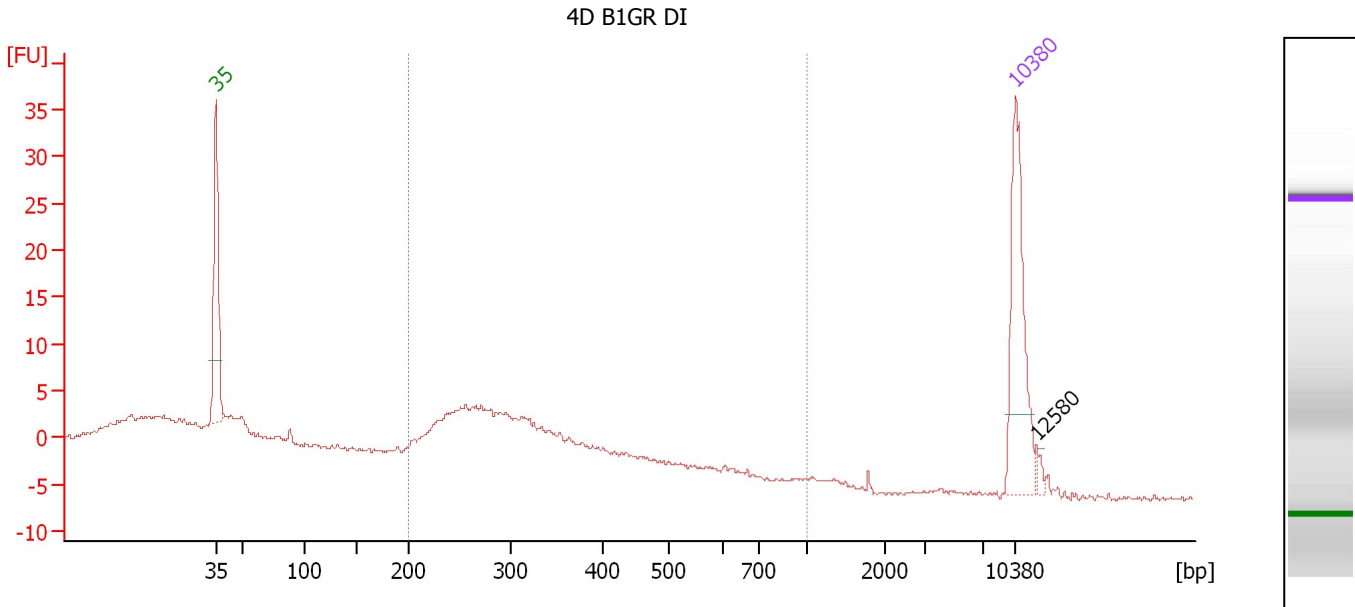
**Region table for sample 3 : 5D B1GR MI**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [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

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**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**

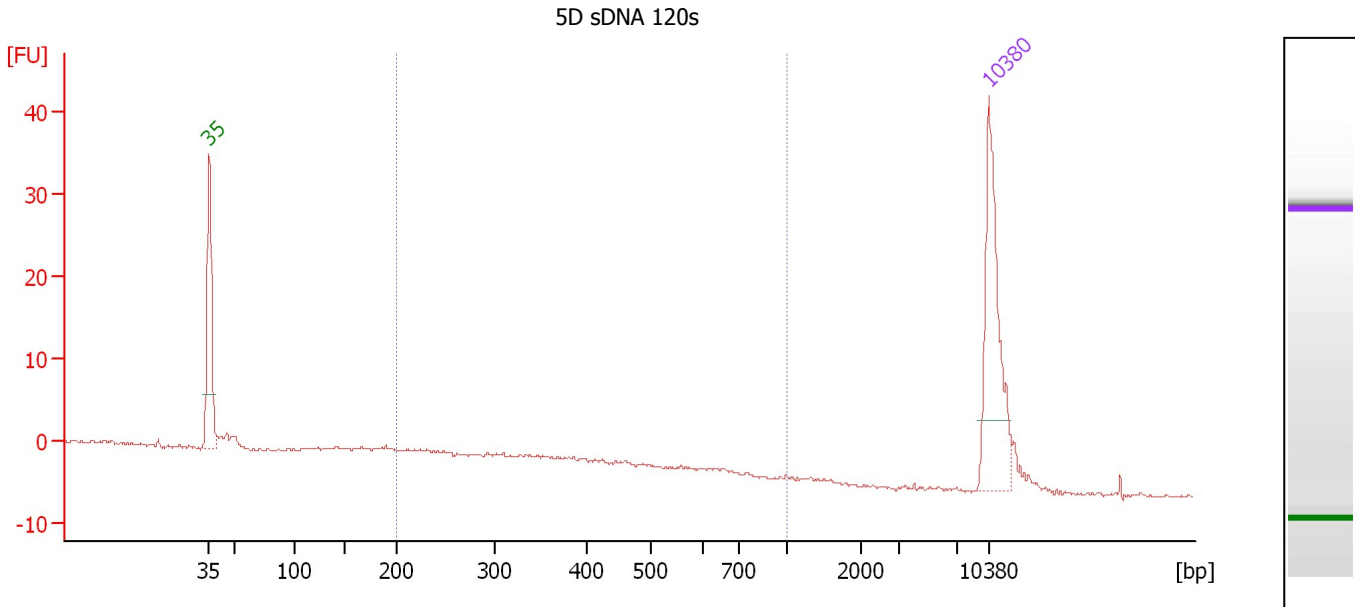
From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	317	106.4	1,341.0	260.45	53	25.9



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

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**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

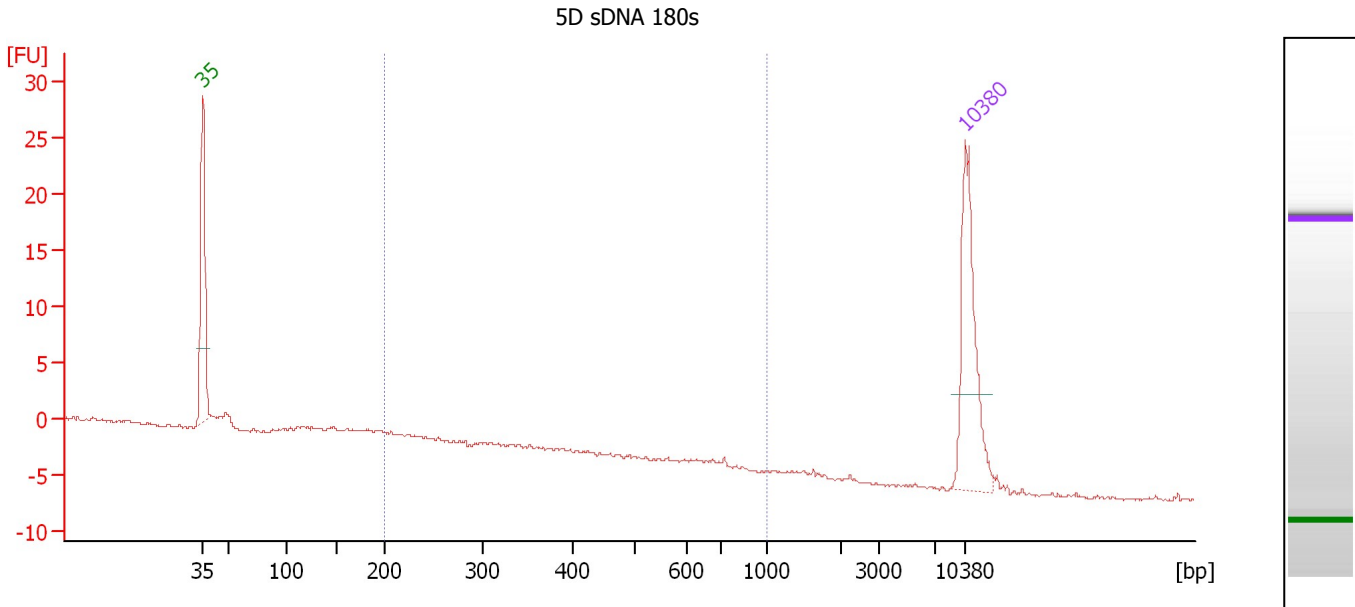
**Region table for sample 5 : 5D sDNA 120s**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [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

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**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

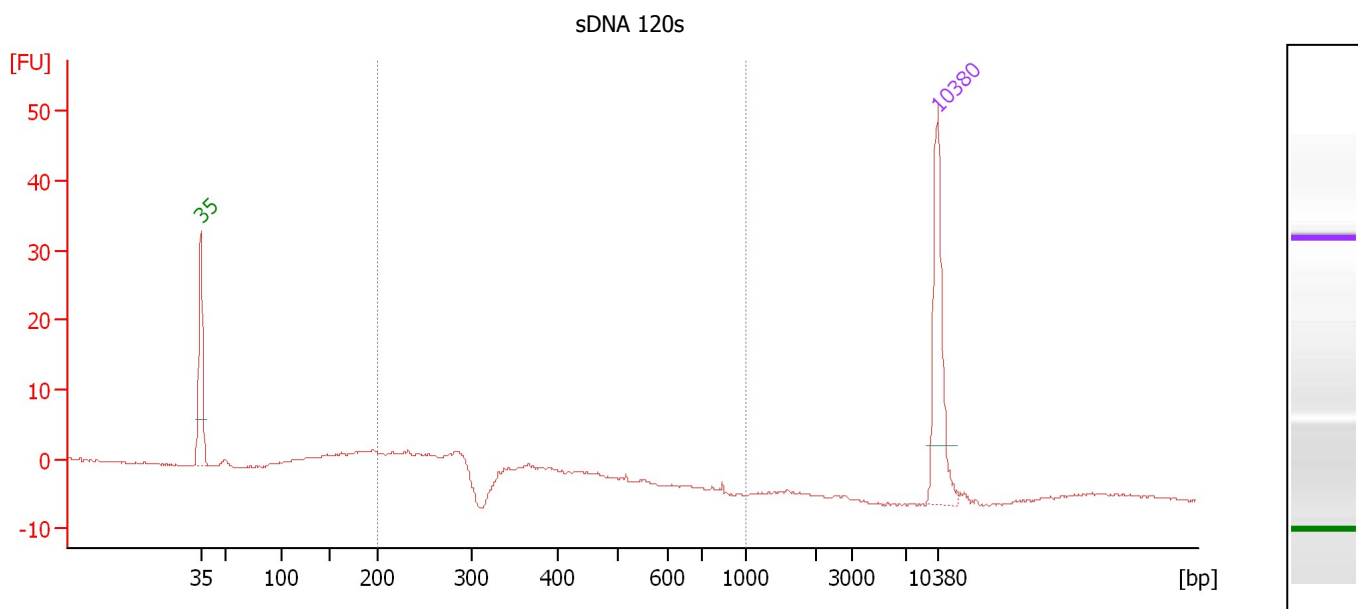
**Region table for sample 6 : 5D sDNA 180s**

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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### 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/ $\mu$ l]	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

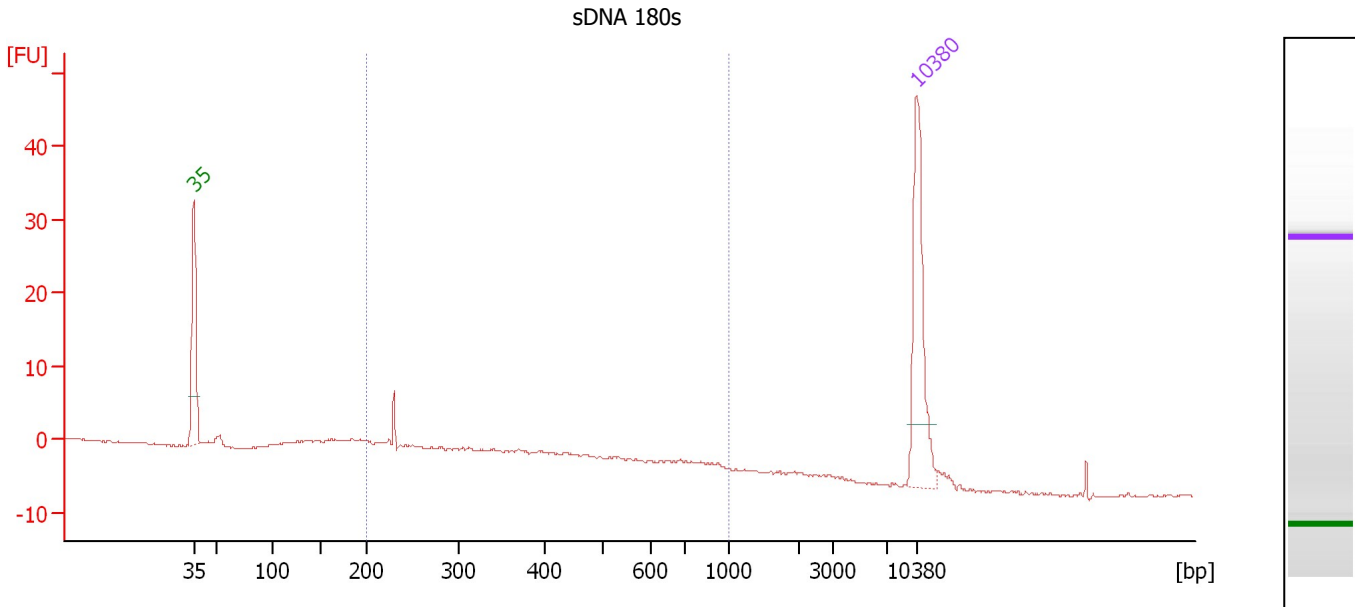
### Region table for sample 7 : sDNA 120s

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/ $\mu$ l]	% 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

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**Electropherogram Summary Continued ...**



**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**

Pea k	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

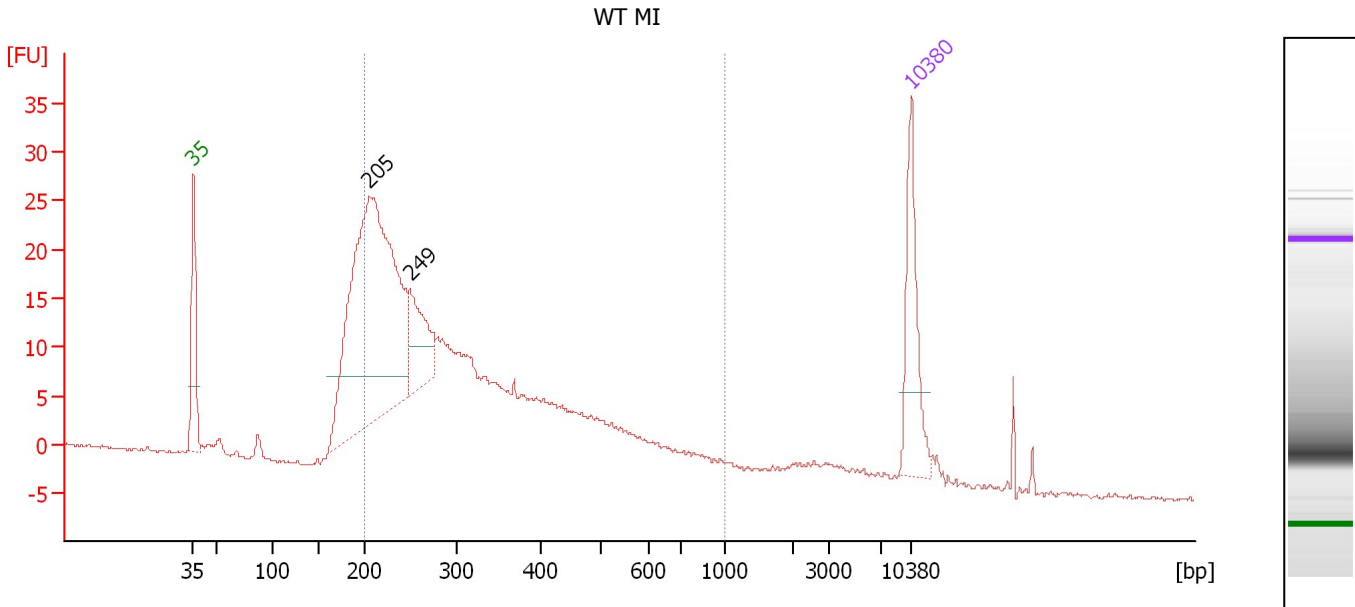
**Region table for sample 8 : sDNA 180s**

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

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**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

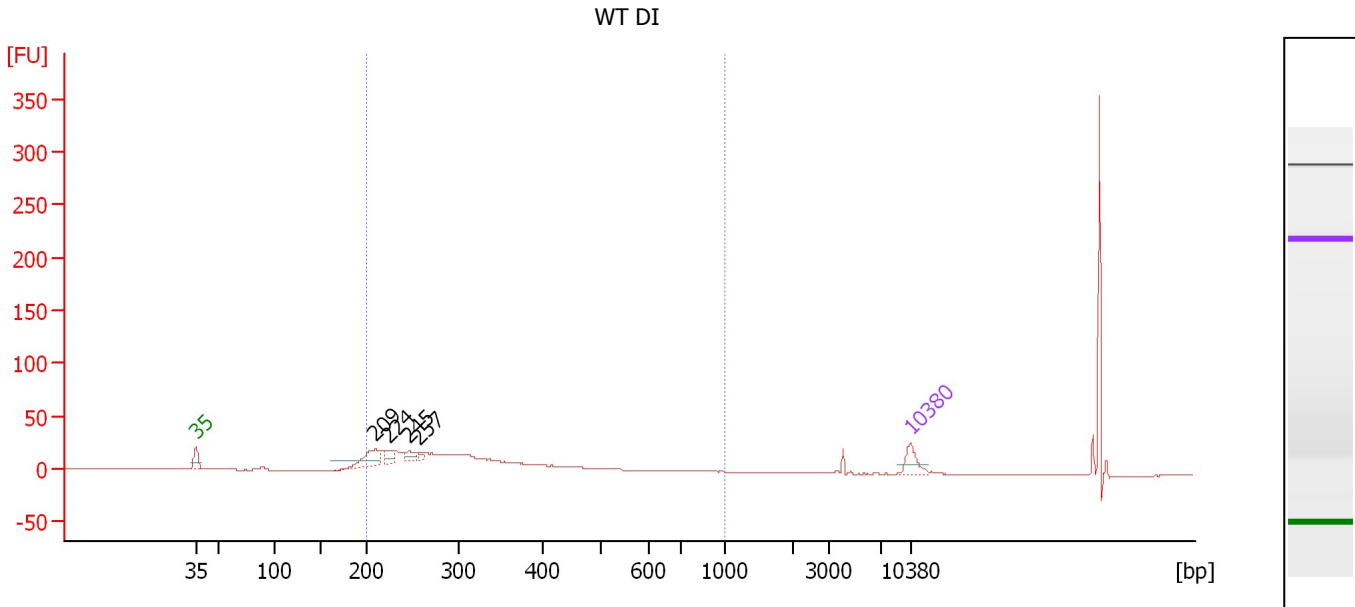
**Region table for sample 9 : WT MI**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [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

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**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

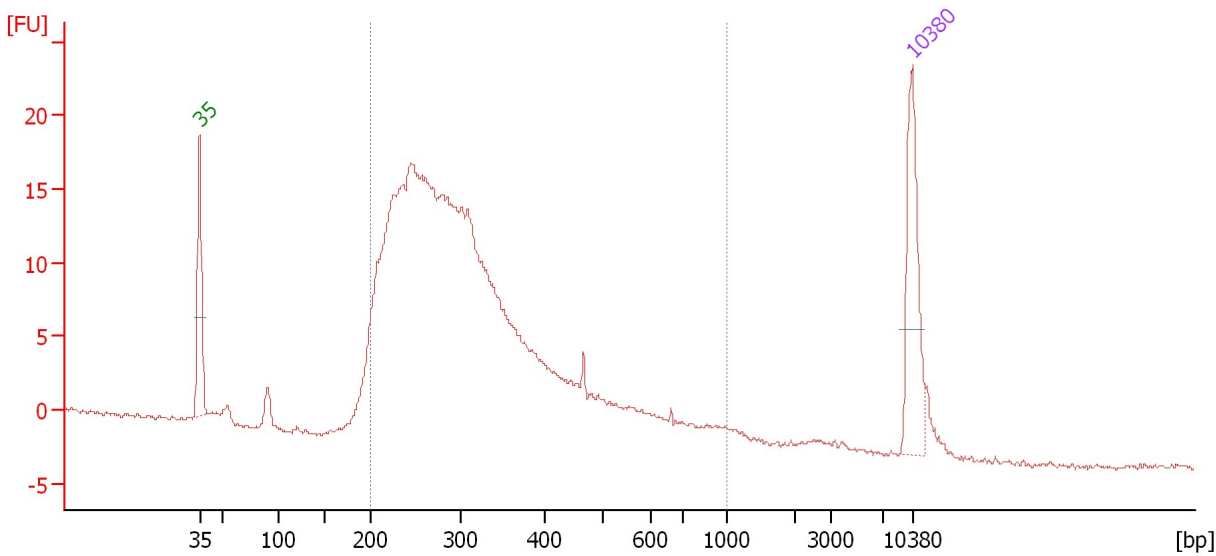
**Region table for sample 10 : WT DI**

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

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**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]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	1,000	325	343.2	7,495.9	1,432.20	94	36.9

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**Gel Image**

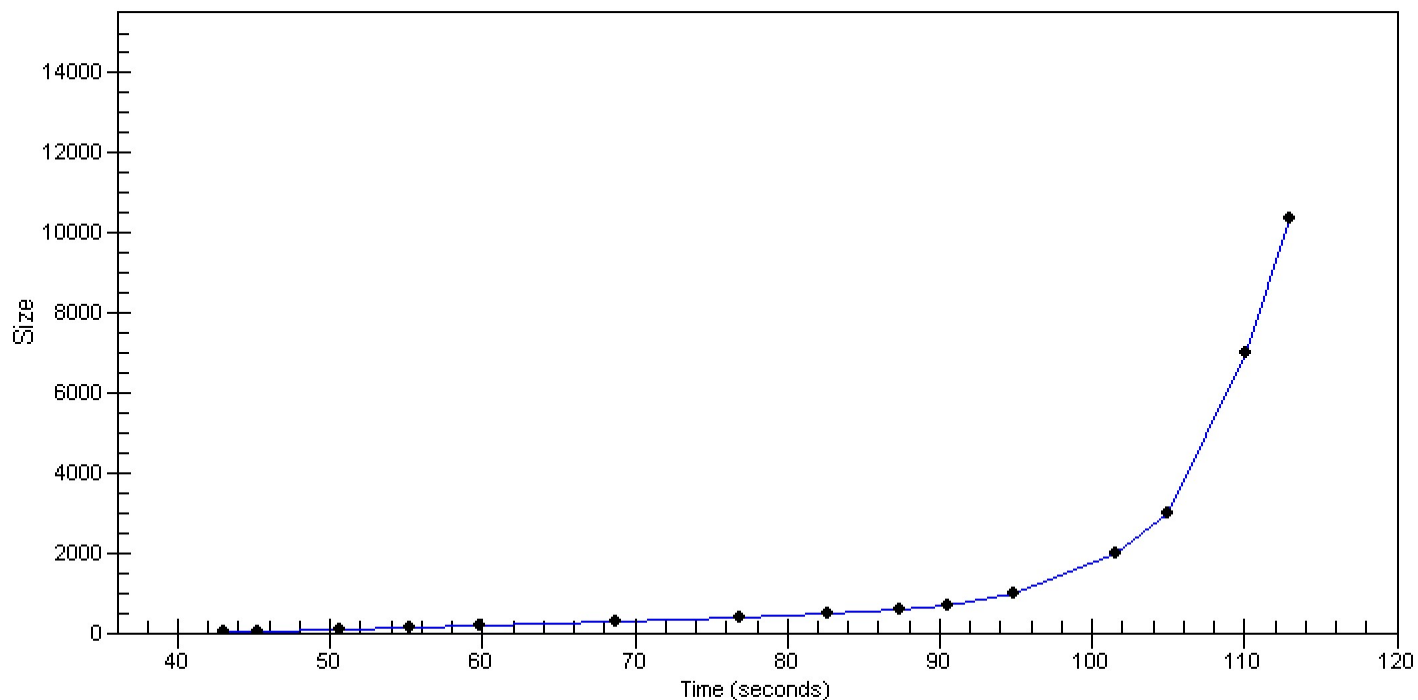


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-06-24\2016-06-24\_004.xad

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**Curves**

**Standard Curve**



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**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