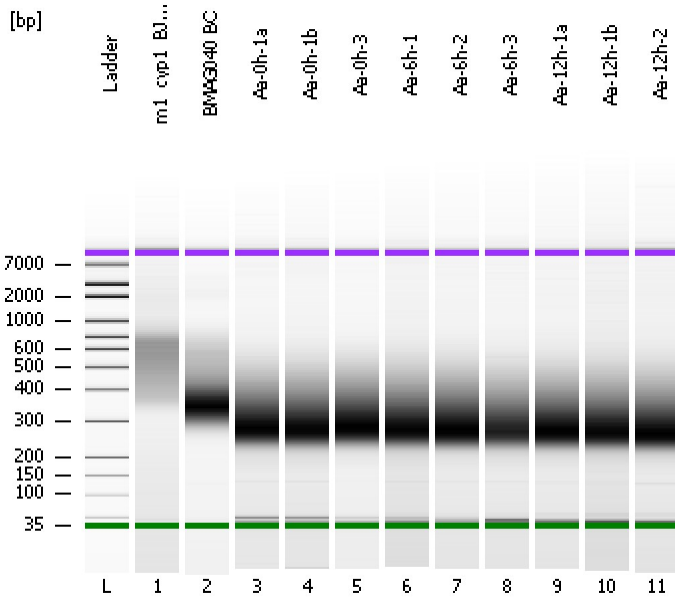


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
Modified: 1/22/2016 1:09:50 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

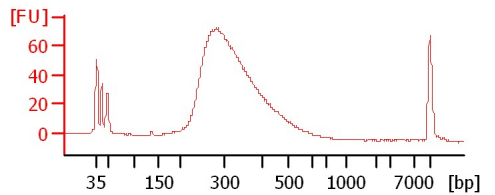
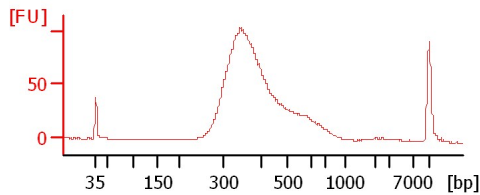
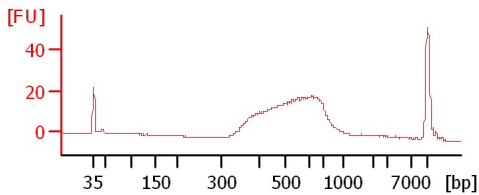
Chip Information:

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

m1_cyp1_BJM BP

BMAG040 BC

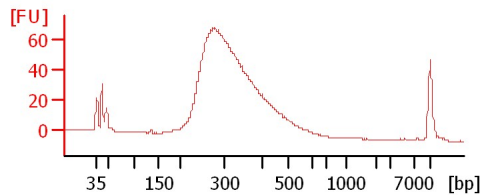
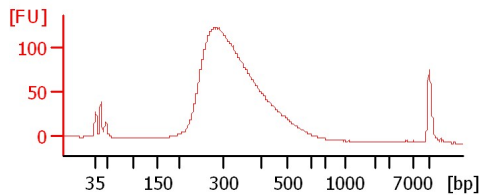
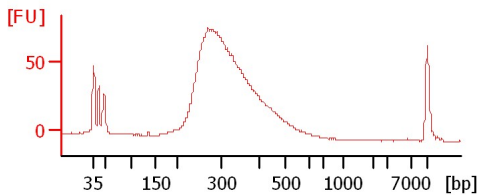
Aa-0h-1a



Aa-0h-1b

Aa-0h-3

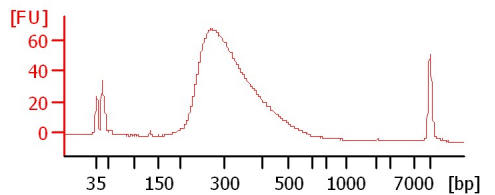
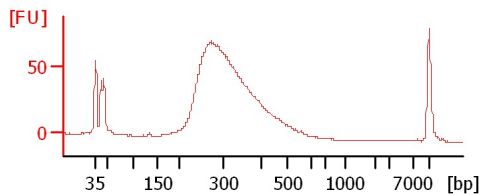
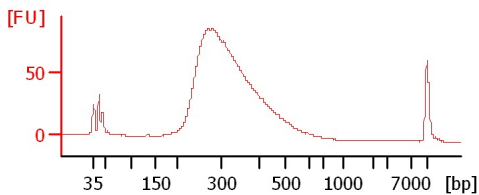
Aa-6h-1



Aa-6h-2

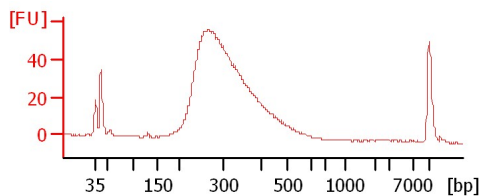
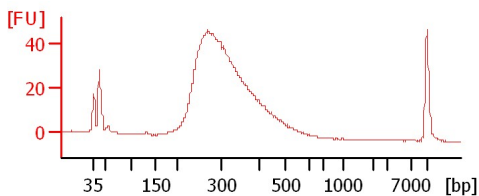
Aa-6h-3

Aa-12h-1a



Aa-12h-1b

Aa-12h-2



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
m1_cyp1_BJM BP		<input type="checkbox"/>	✓			
BMAG040 BC		<input type="checkbox"/>	✓			
Aa-0h-1a		<input type="checkbox"/>	✓			
Aa-0h-1b		<input type="checkbox"/>	✓			
Aa-0h-3		<input type="checkbox"/>	✓			
Aa-6h-1		<input type="checkbox"/>	✓			
Aa-6h-2		<input type="checkbox"/>	✓			
Aa-6h-3		<input type="checkbox"/>	✓			
Aa-12h-1a		<input type="checkbox"/>	✓			
Aa-12h-1b		<input type="checkbox"/>	✓			
Aa-12h-2		<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\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
Modified: 1/22/2016 1:09:50 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

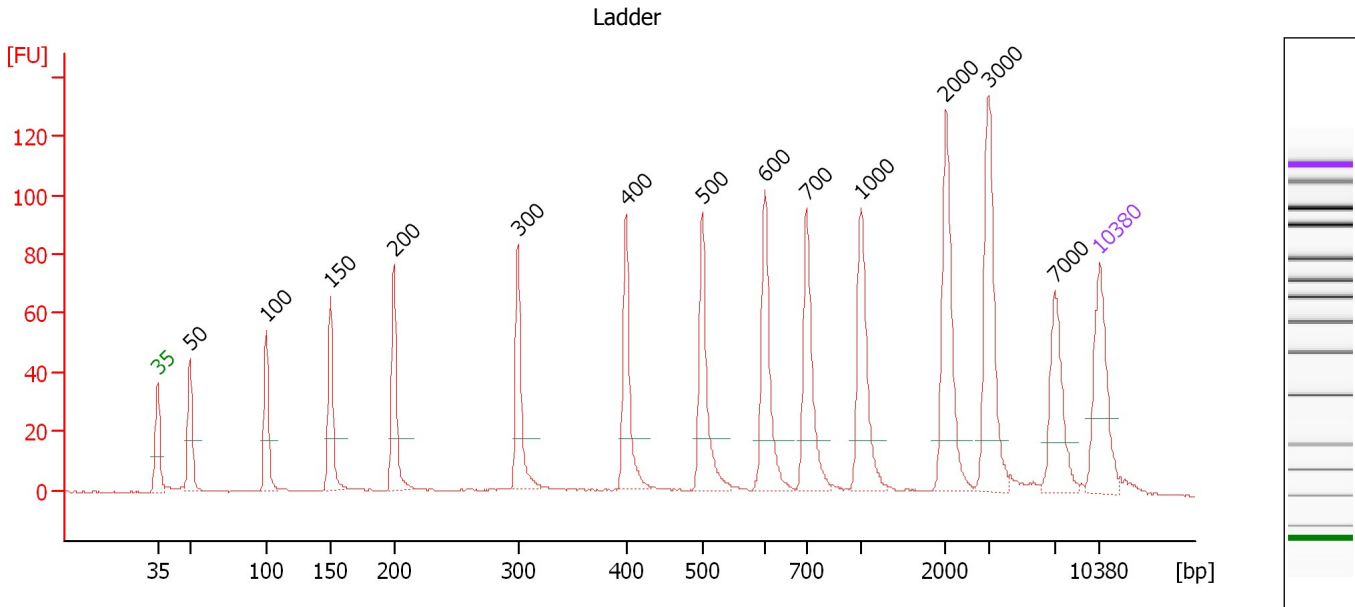
Ladder

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\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

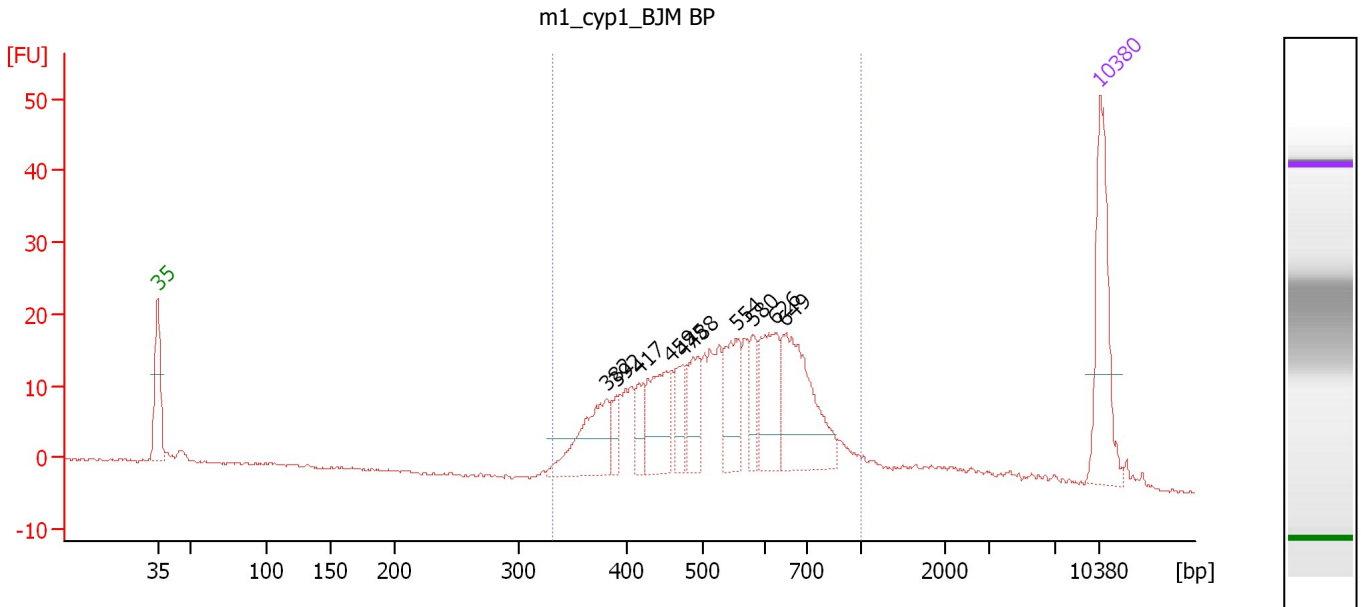
Peak table for Ladder

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	45.40
3	100	150.00	2,272.7	Ladder Peak	51.10
4	150	150.00	1,515.2	Ladder Peak	55.85
5	200	150.00	1,136.4	Ladder Peak	60.56
6	300	150.00	757.6	Ladder Peak	69.79
7	400	150.00	568.2	Ladder Peak	77.79
8	500	150.00	454.5	Ladder Peak	83.44
9	600	150.00	378.8	Ladder Peak	88.10
10	700	150.00	324.7	Ladder Peak	91.20
11	1,000	150.00	227.3	Ladder Peak	95.25
12	2,000	150.00	113.6	Ladder Peak	101.56
13	3,000	150.00	75.8	Ladder Peak	104.71
14	7,000	150.00	32.5	Ladder Peak	109.61
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : m1_cyp1_BJM BP

Number of peaks found: 10 Corr. Area 1: 366.7
 Noise: 0.2

Peak table for sample 1 : m1_cyp1_BJM BP

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	382	78.41	311.3		76.31
3	392	18.07	69.9		77.12
4	417	20.32	73.9		78.74
5	459	68.03	224.6		81.11
6	475	30.44	97.1		82.02
7	488	41.24	128.0		82.78
8	554	54.73	149.6		85.96
9	580	27.35	71.5		87.15
10	626	65.62	158.8		88.91
11	649	110.94	259.0		89.62
12	10,380	75.00	10.9	Upper Marker	113.00

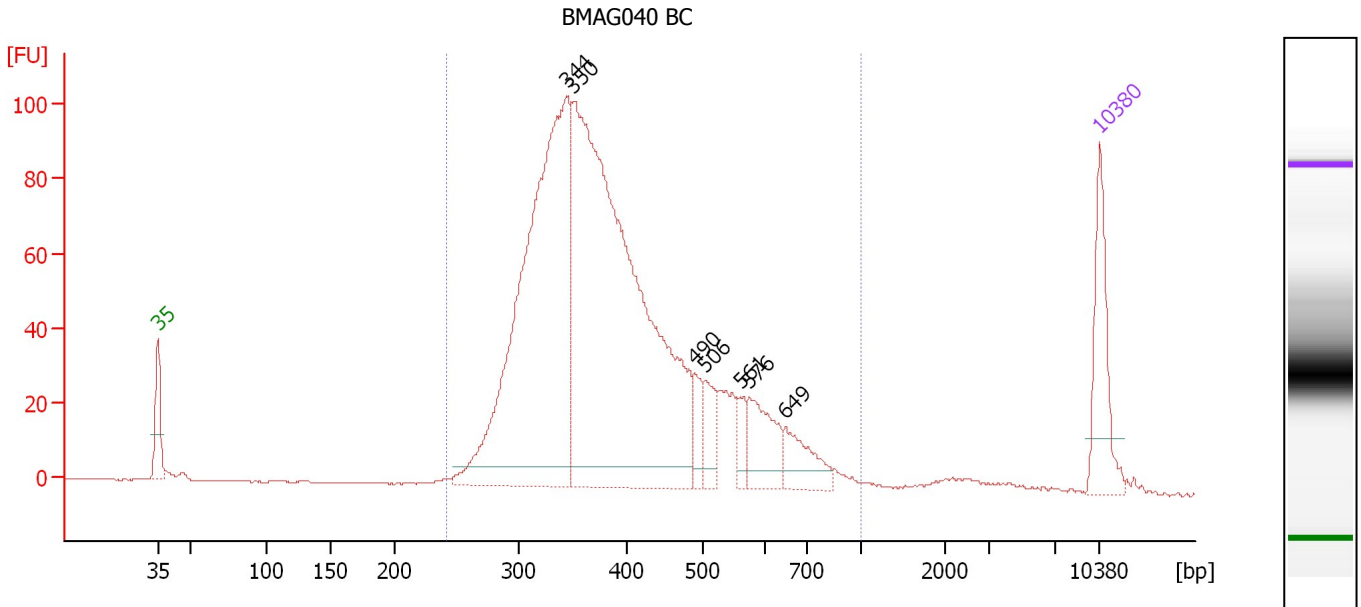
Region table for sample 1 : m1_cyp1_BJM BP

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
331	1,000	548	366.7	2,186.9	735.11	84	24.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : BMAG040 BC

Number of peaks found: 7 Corr. Area 1: 1,585.4
 Noise: 0.2

Peak table for sample 2 : BMAG040 BC

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	344	737.86	3,246.2		73.34
3	350	989.93	4,281.6		73.81
4	490	30.78	95.3		82.85
5	506	39.38	118.0		83.70
6	561	22.84	61.7		86.26
7	576	70.79	186.3		86.97
8	649	52.29	122.1		89.62
9	10,380	75.00	10.9	Upper Marker	113.00

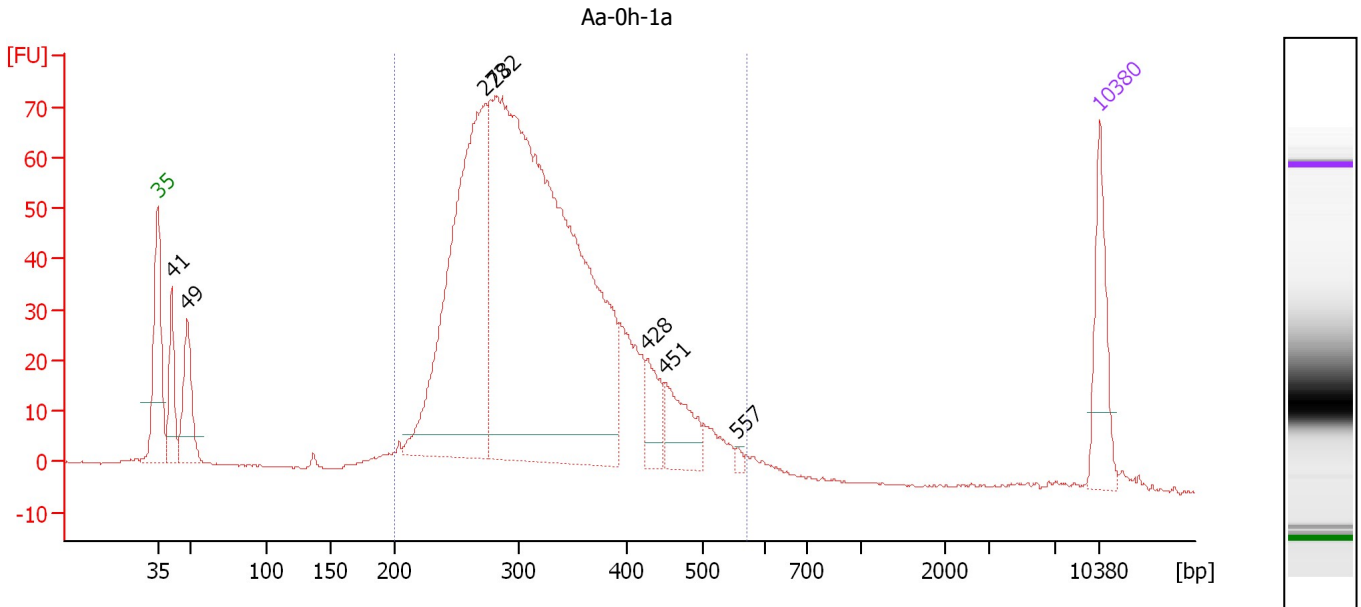
Region table for sample 2 : BMAG040 BC

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
242	1,000	406	1,585.4	8,025.7	1,994.50	96	26.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Aa-0h-1a

Number of peaks found: 7 Corr. Area 1: 1,354.5
 Noise: 0.1

Peak table for sample 3 : Aa-0h-1a

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	98.10	3,584.2		44.04
3	49	120.04	3,725.1		45.21
4	273	660.10	3,664.1		67.29
5	282	1,485.36	7,991.1		68.09
6	428	54.40	192.4		79.39
7	451	78.30	263.1		80.66
8	557	5.72	15.6		86.07
9	10,380	75.00	10.9	Upper Marker	113.00

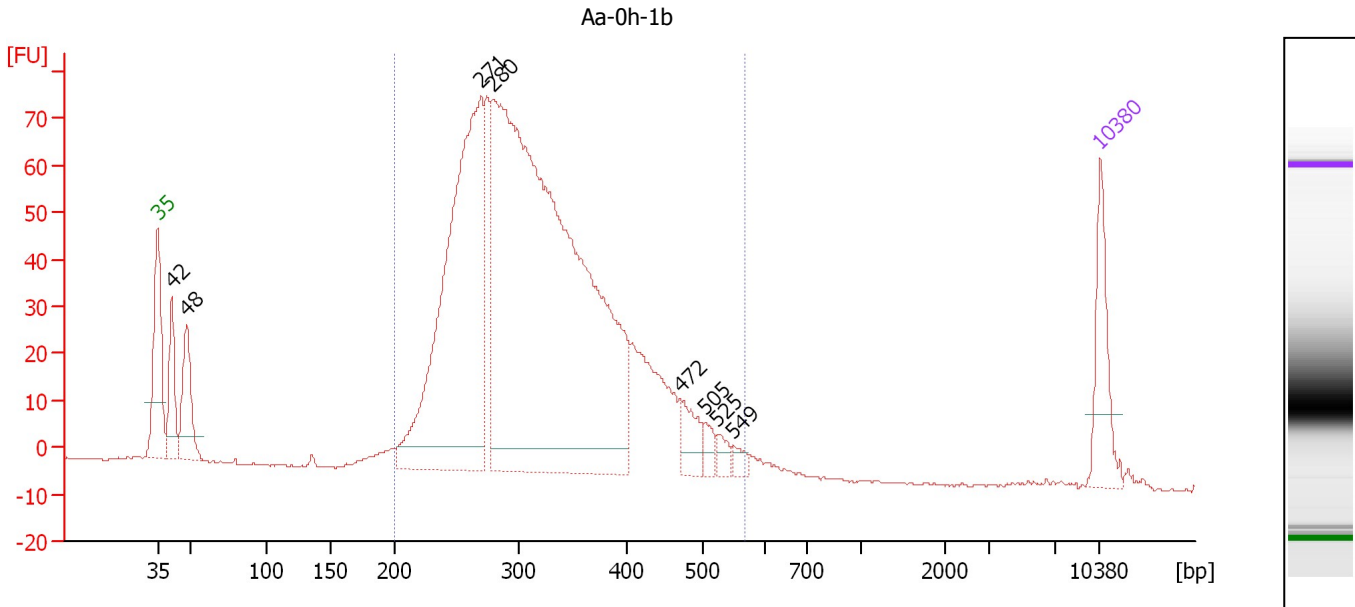
Region table for sample 3 : Aa-0h-1a

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
200	571	327	1,354.5	12,366.7	2,516.57	88	21.9

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Aa-0h-1b

Number of peaks found: 8 Corr. Area 1: 1,444.4
 Noise: 0.2

Peak table for sample 4 : Aa-0h-1b

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	102.03	3,718.1		44.05
3	48	127.19	3,977.4		45.15
4	271	816.98	4,575.5		67.07
5	280	1,709.62	9,255.5		67.93
6	472	48.62	156.1		81.85
7	505	21.37	64.1		83.67
8	525	17.98	51.9		84.58
9	549	14.09	38.9		85.73
10	10,380	75.00	10.9	Upper Marker	113.00

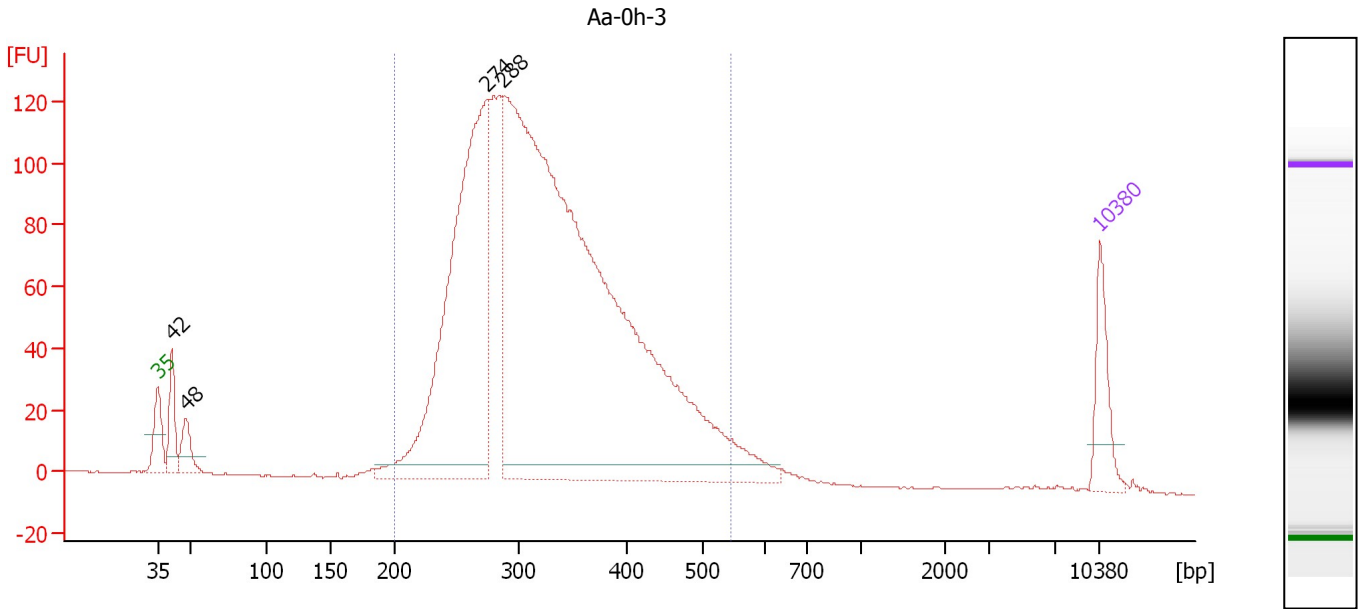
Region table for sample 4 : Aa-0h-1b

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	569	325	1,444.4	13,945.3	2,816.87	90	22.1

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Aa-0h-3

Number of peaks found: 4 Corr. Area 1: 2,309.1
 Noise: 0.2

Peak table for sample 5 : Aa-0h-3

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	96.37	3,504.5		44.07
3	48	70.71	2,230.8		45.08
4	274	1,048.00	5,795.8		67.38
5	288	2,749.52	14,483.7		68.64
6	10,380	75.00	10.9	Upper Marker	113.00

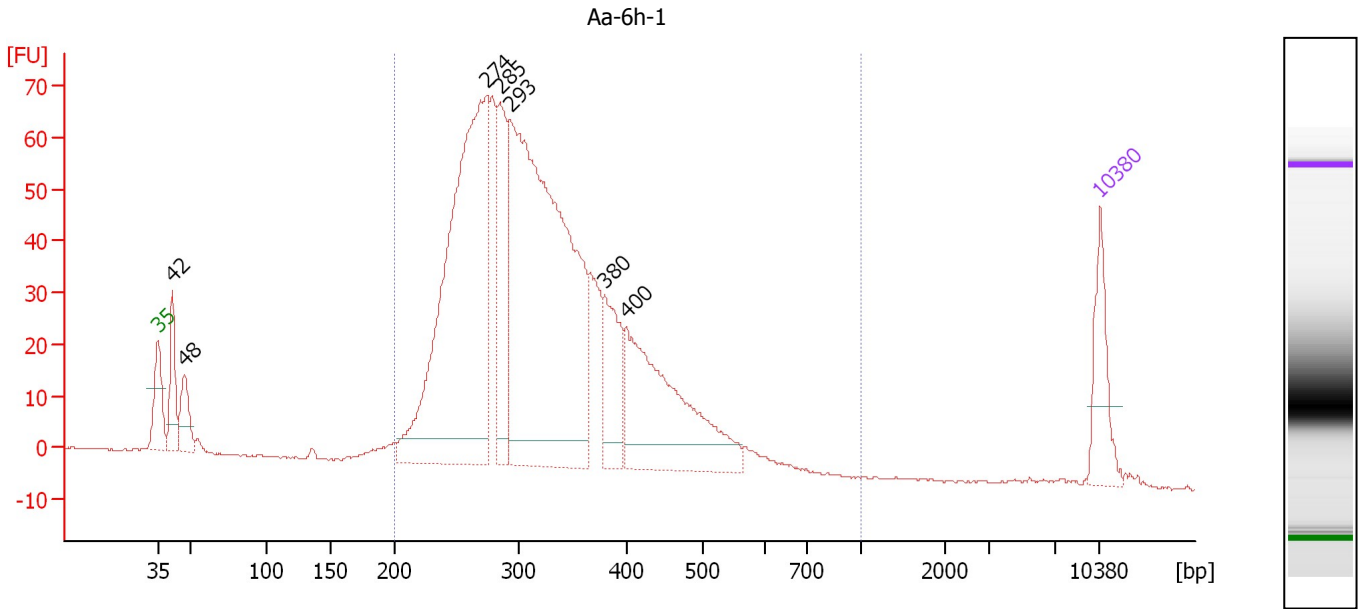
Region table for sample 5 : Aa-0h-3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	547	329	2,309.1	18,124.0	3,724.45	92	21.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Aa-6h-1

Number of peaks found: 7 Corr. Area 1: 1,293.1
 Noise: 0.2

Peak table for sample 6 : Aa-6h-1

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	110.71	3,991.2		44.13
3	48	78.74	2,510.1		45.01
4	274	953.22	5,266.3		67.41
5	285	208.78	1,108.5		68.44
6	293	1,122.23	5,796.6		69.17
7	380	135.36	540.1		76.17
8	400	364.13	1,379.6		77.78
9	10,380	75.00	10.9	Upper Marker	113.00

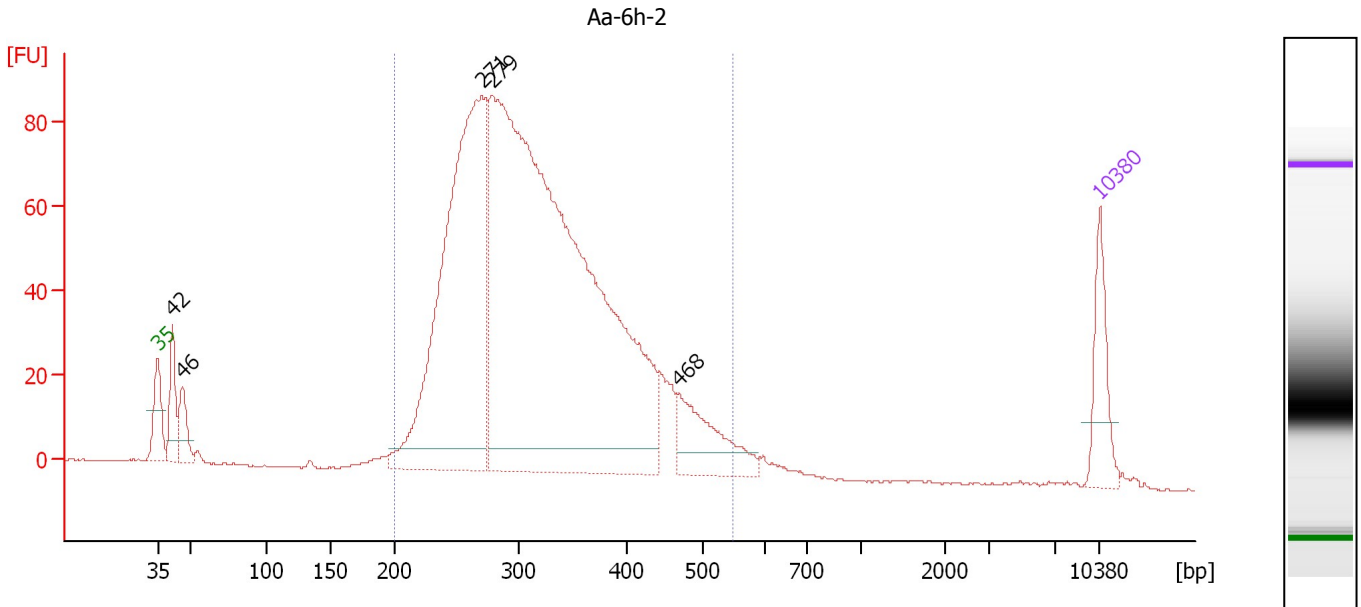
Region table for sample 6 : Aa-6h-1

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	331	1,293.1	15,038.2	3,063.37	92	25.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Aa-6h-2

Number of peaks found: 5 Corr. Area 1: 1,629.5
 Noise: 0.2

Peak table for sample 7 : Aa-6h-2

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	93.66	3,392.7		44.09
3	46	70.88	2,310.2		44.84
4	271	981.86	5,492.8		67.10
5	279	2,112.35	11,452.7		67.89
6	468	140.72	455.2		81.65
7	10,380	75.00	10.9	Upper Marker	113.00

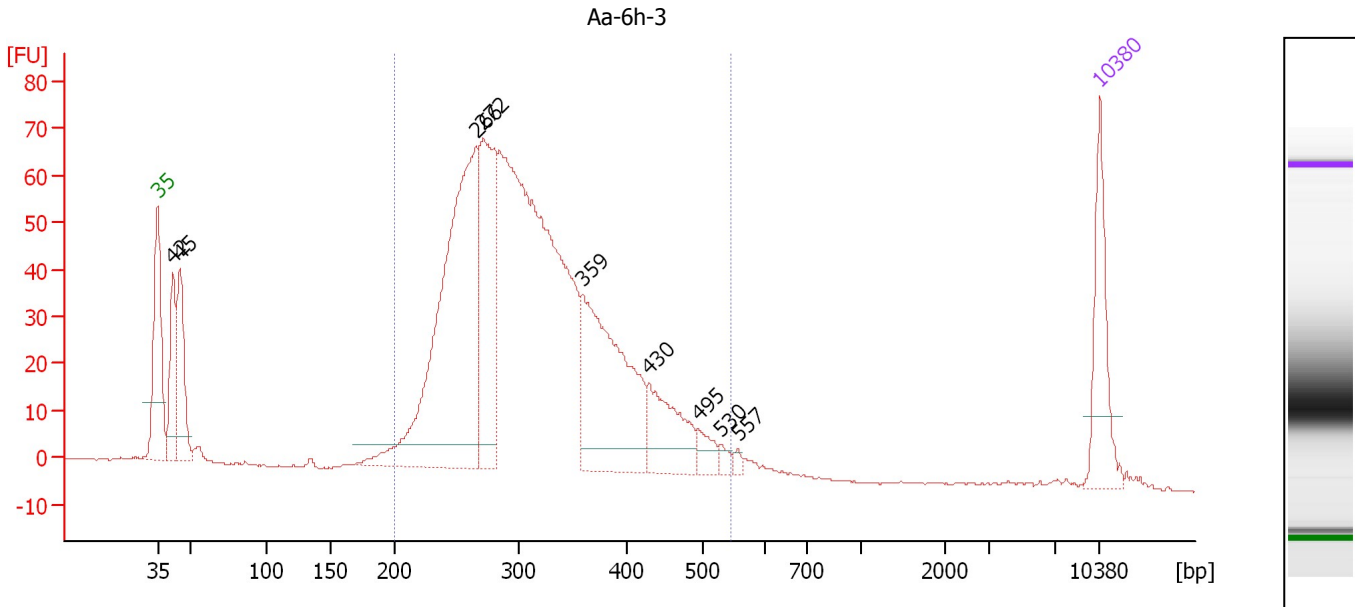
Region table for sample 7 : Aa-6h-2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	548	323	1,629.5	15,642.1	3,147.27	92	21.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Aa-6h-3

Number of peaks found: 9 Corr. Area 1: 1,223.8
 Noise: 0.1

Peak table for sample 8 : Aa-6h-3

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	102.42	3,676.4		44.15
3	45	125.33	4,187.7		44.66
4	266	571.21	3,255.5		66.63
5	272	237.86	1,325.8		67.19
6	359	282.37	1,191.5		74.51
7	430	95.86	337.8		79.48
8	495	21.83	66.8		83.14
9	530	9.68	27.7		84.85
10	557	5.31	14.4		86.10
11	10,380	75.00	10.9	Upper Marker	113.00

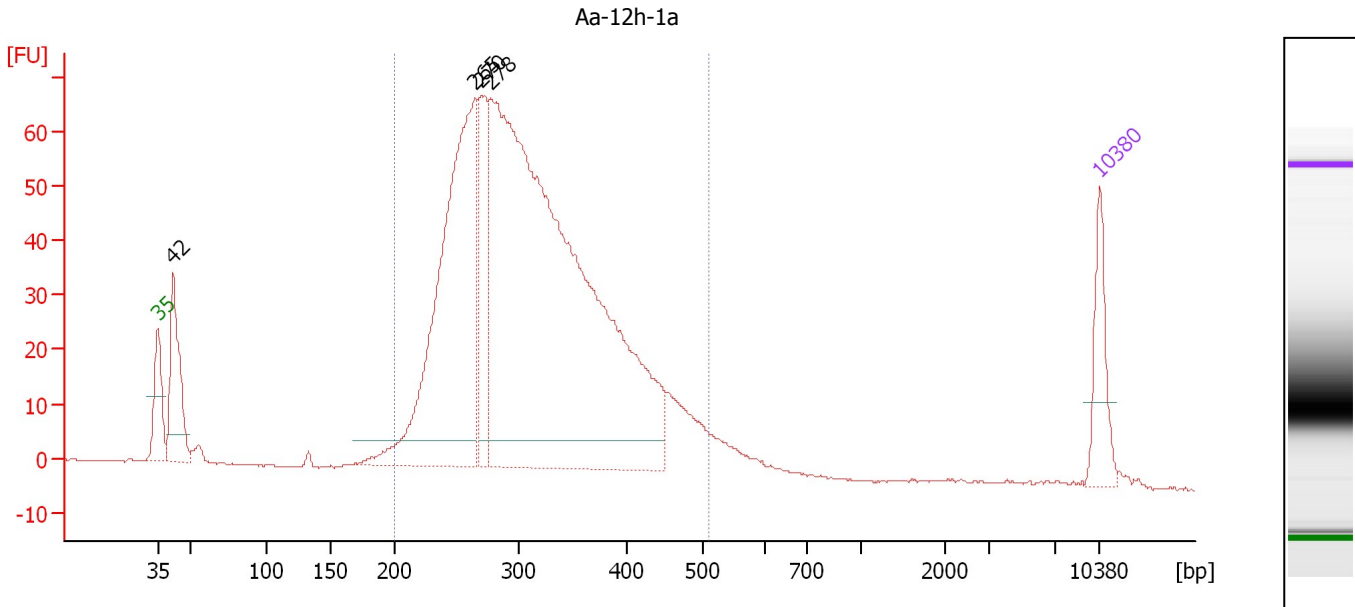
Region table for sample 8 : Aa-6h-3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	547	319	1,223.8	10,086.5	2,011.05	88	21.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Aa-12h-1a

Number of peaks found: 4 Corr. Area 1: 1,189.8
 Noise: 0.1

Peak table for sample 9 : Aa-12h-1a

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	212.81	7,630.4		44.16
3	265	831.91	4,750.7		66.59
4	270	199.91	1,123.0		66.99
5	278	1,969.66	10,738.4		67.75
6	10,380	75.00	10.9	Upper Marker	113.00

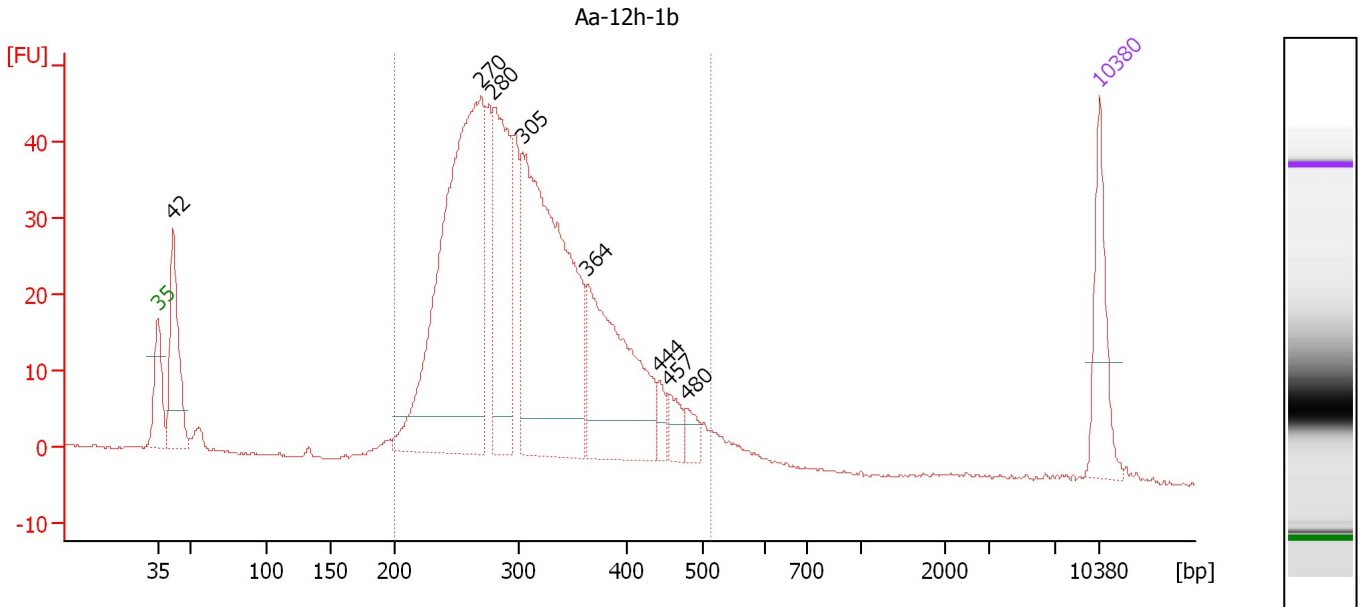
Region table for sample 9 : Aa-12h-1a

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	510	316	1,189.8	15,049.8	2,982.21	89	20.4

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Aa-12h-1b

Number of peaks found: 8 Corr. Area 1: 814.6
 Noise: 0.2

Peak table for sample 10 : Aa-12h-1b

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	176.18	6,313.0		44.17
3	270	727.47	4,080.9		67.03
4	280	258.83	1,400.7		67.94
5	305	588.55	2,925.8		70.17
6	364	288.58	1,200.1		74.93
7	444	19.57	66.8		80.26
8	457	28.04	92.9		81.02
9	480	20.84	65.7		82.33
10	10,380	75.00	10.9	Upper Marker	113.00

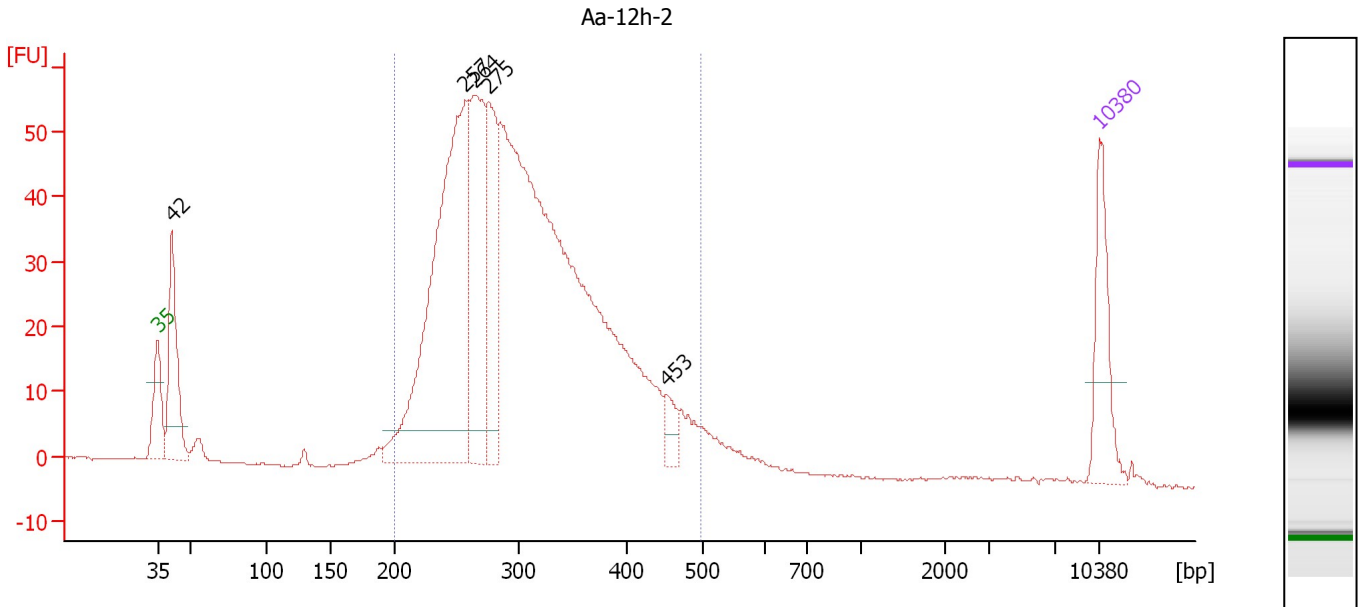
Region table for sample 10 : Aa-12h-1b

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	515	315	814.6	11,469.0	2,262.88	87	20.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Aa-12h-2

Number of peaks found: 5 Corr. Area 1: 980.2
 Noise: 0.2

Peak table for sample 11 : Aa-12h-2

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	172.46	6,267.9		44.07
3	257	614.82	3,621.2		65.84
4	264	251.96	1,443.7		66.50
5	275	187.75	1,032.6		67.52
6	453	27.13	90.8		80.78
7	10,380	75.00	10.9	Upper Marker	113.00

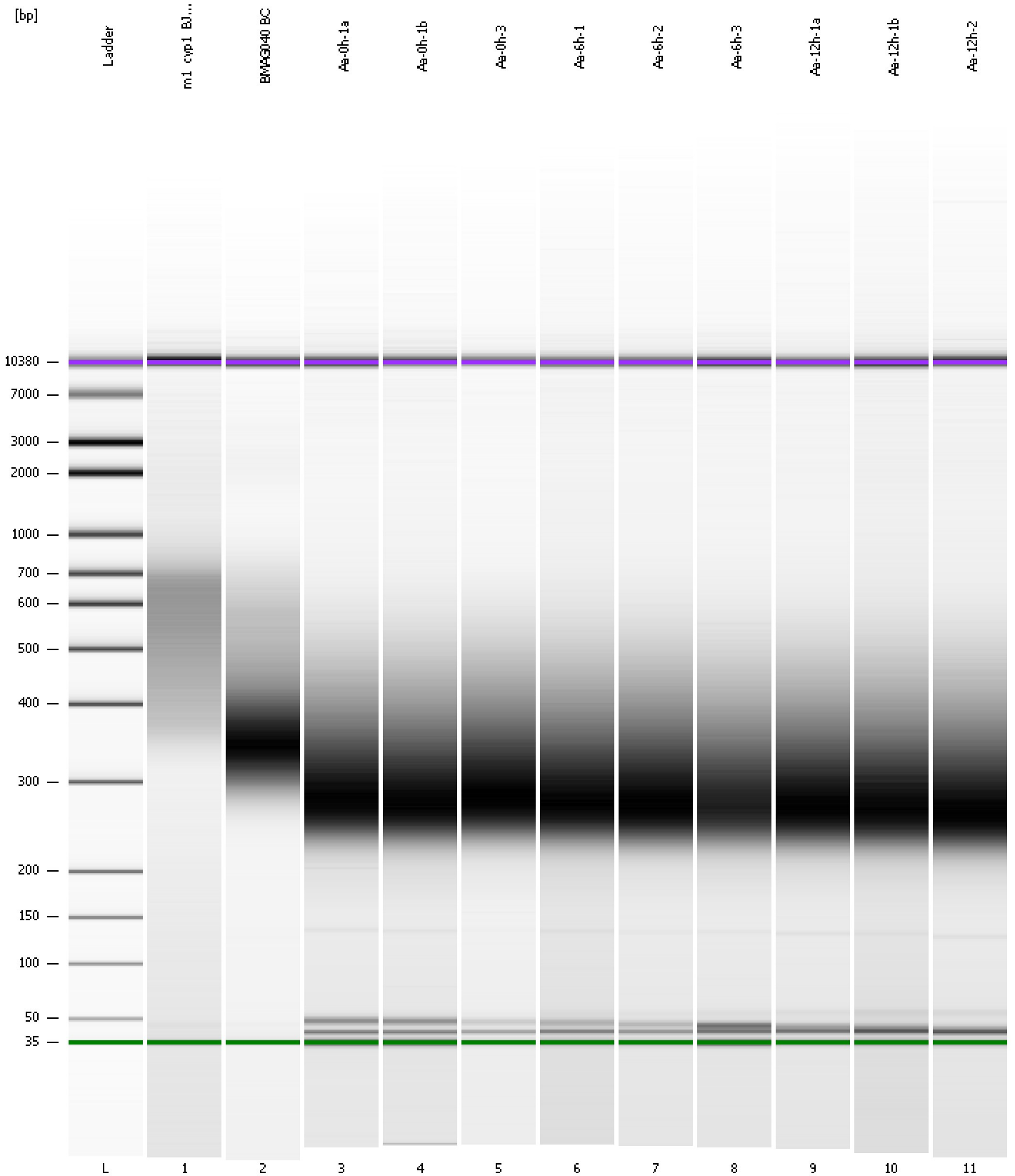
Region table for sample 11 : Aa-12h-2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
200	498	310	980.2	12,013.8	2,335.84	88	20.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
Modified: 1/22/2016 1:09:50 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad

Created: 1/22/2016 12:25:42 PM
 Modified: 1/22/2016 1:09:50 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		1/22/2016 1:07:00 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2016-01-22\2016-01-22_001.xad)		Instrument	Run		1/22/2016 12:25:47 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		1/22/2016 12:25:47 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		1/22/2016 12:25:47 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		1/22/2016 12:25:47 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		1/22/2016 12:25:47 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		1/22/2016 12:25:47 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		1/22/2016 12:25:47 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1