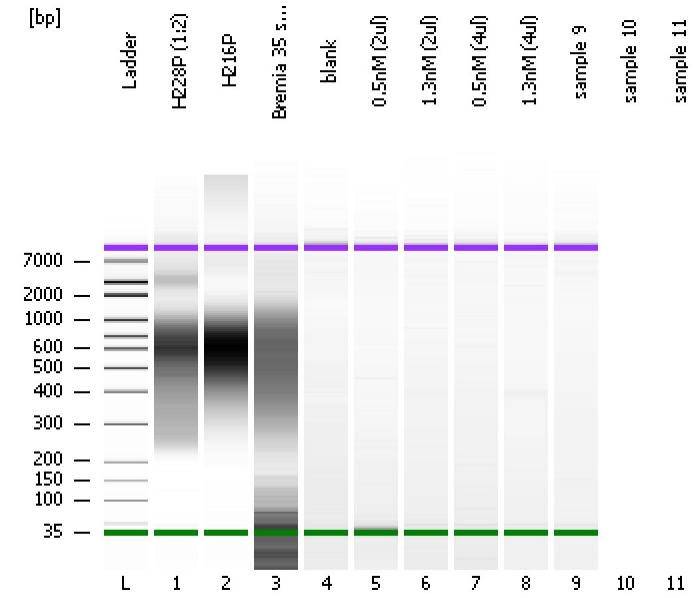
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electrophoresis File Run Summary



Instrument Information:

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

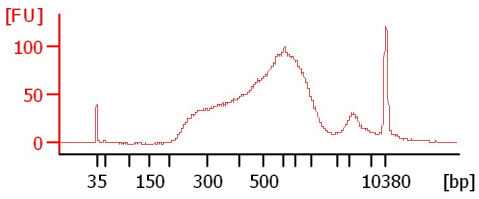
Assay Information:

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

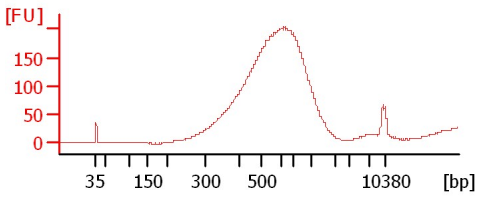
Chip Information:

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

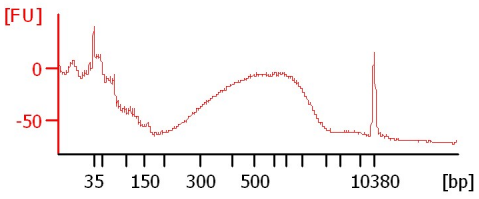
H228P (1:2)



H216P



Bremia 35 samples 1:20



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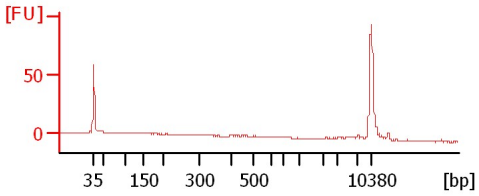
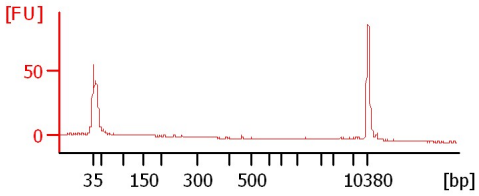
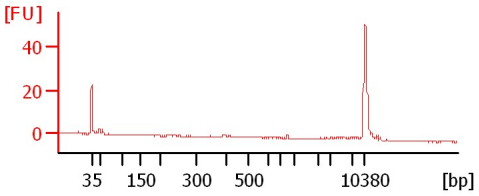


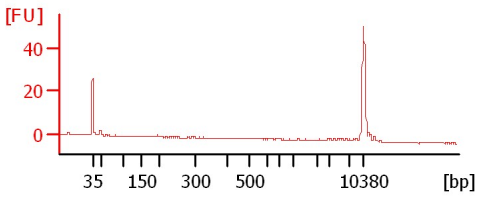
0.5nM (2ul)



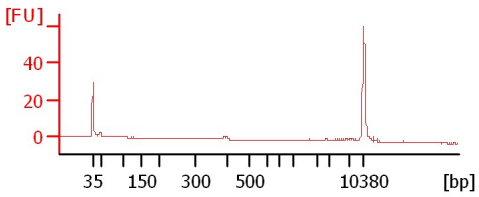
1.3nM (2ul)



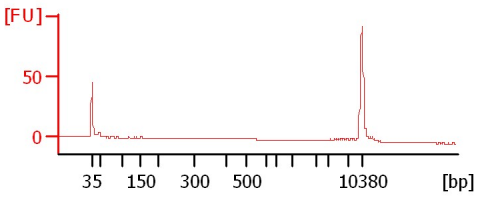
0.5nM (4ul)



1.3nM (4ul)



sample 9



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
H228P (1:2)		☐	✔			
H216P		☐	✔			
Bremia 35 samples 1:20		☐	✔			
blank		☐	✔			
0.5nM (2ul)		☐	✔			
1.3nM (2ul)		☐	✔			
0.5nM (4ul)		☐	✔			
1.3nM (4ul)		☐	✔			
sample 9		☐	✔			
sample 10		☐				
sample 11		☐				
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 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

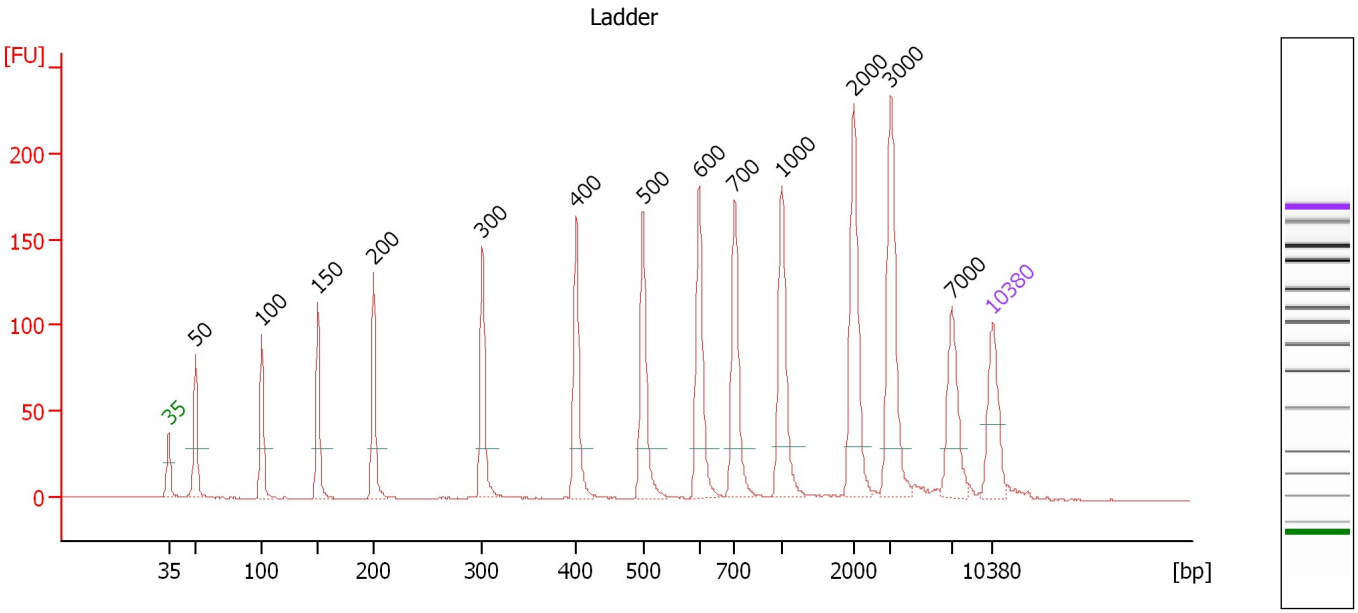
Ladder

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\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

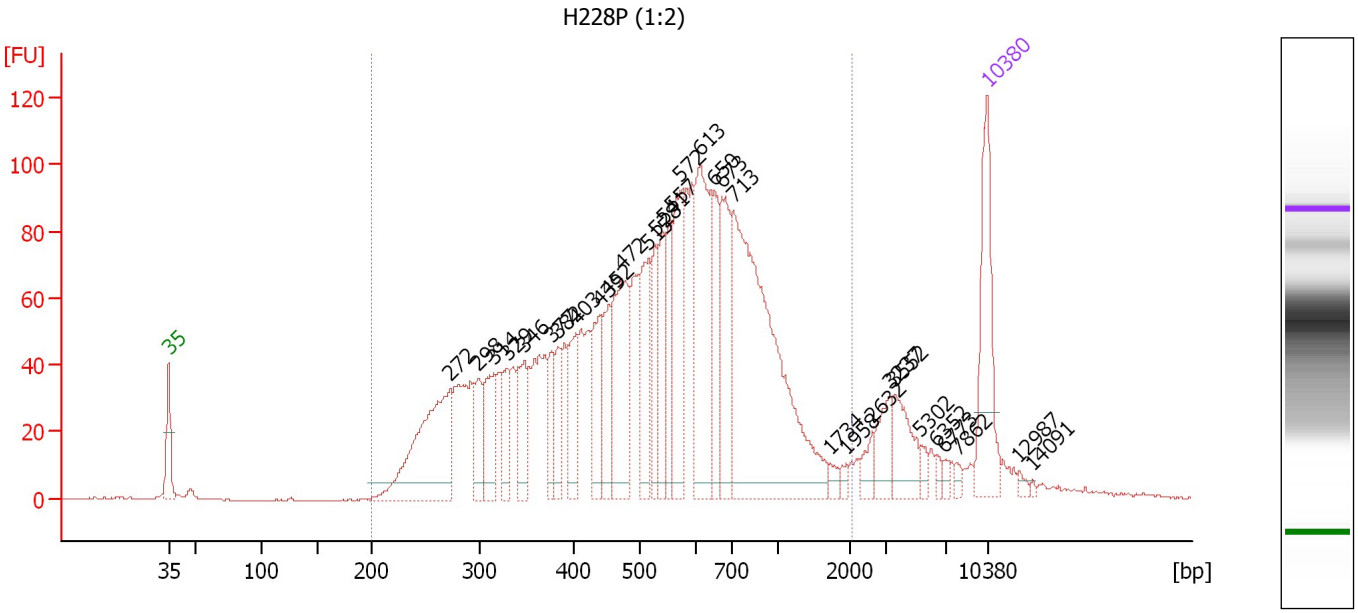
Peak table for Ladder

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	45.31
3		100	150.00	2,272.7	Ladder Peak	50.92
4		150	150.00	1,515.2	Ladder Peak	55.68
5		200	150.00	1,136.4	Ladder Peak	60.43
6		300	150.00	757.6	Ladder Peak	69.67
7		400	150.00	568.2	Ladder Peak	77.64
8		500	150.00	454.5	Ladder Peak	83.30
9		600	150.00	378.8	Ladder Peak	88.05
10		700	150.00	324.7	Ladder Peak	91.09
11		1,000	150.00	227.3	Ladder Peak	95.07
12		2,000	150.00	113.6	Ladder Peak	101.18
13		3,000	150.00	75.8	Ladder Peak	104.31
14		7,000	150.00	32.5	Ladder Peak	109.51
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : H228P (1:2)

Number of peaks found:	31	Corr. Area 1:	2,436.3
Noise:	0.2		

Peak table for sample 1 : H228P (1:2)

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	272	179.67	999.8		67.11
3	298	42.57	216.5		69.48
4	314	62.24	300.2		70.80
5	329	37.97	174.8		71.98
6	346	47.90	209.6		73.35
7	377	33.33	134.1		75.77
8	382	33.85	134.2		76.22
9	403	47.79	179.6		77.82
10	439	57.22	197.3		79.87
11	452	51.43	172.3		80.60
12	472	109.09	349.9		81.74
13	515	70.00	205.9		84.02
14	528	47.39	136.1		84.61
15	541	52.67	147.5		85.25
16	557	49.65	135.0		86.02
17	572	86.11	228.2		86.70
18	613	130.39	322.5		88.44
19	650	60.25	140.4		89.58
20	673	82.15	185.0		90.26
21	713	357.11	758.6		91.26
22	1,734	6.34	5.5		99.56
23	1,958	5.09	3.9		100.92
24	2,632	12.87	7.4		103.16
25	3,237	26.56	12.4		104.61

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary Continued ...

... Peak table for sample 1 : H228P (1:2)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	3,552	37.41	16.0		105.02
27	5,302	6.61	1.9		107.30
28	6,352	4.62	1.1		108.67
29	6,773	4.25	1.0		109.22
30	7,862	3.90	0.8		110.40
31	10,380	75.00	10.9	Upper Marker	113.00
32	12,987	0.00	0.0		115.69
33	14,091	0.00	0.0		116.83

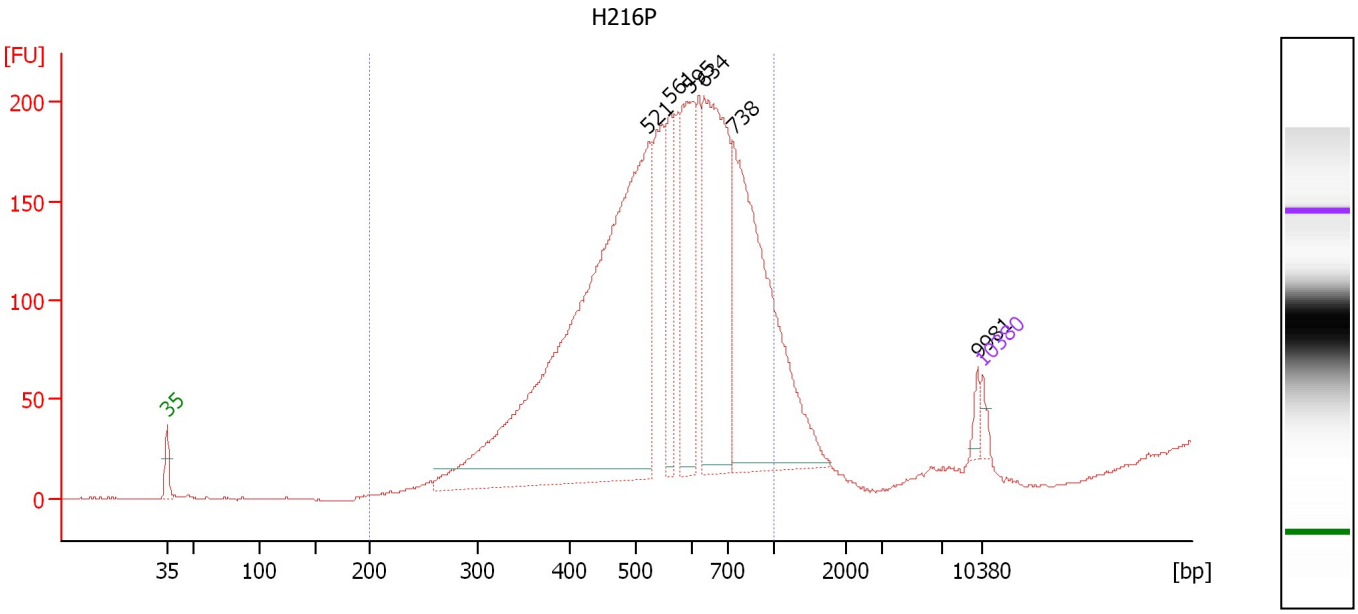
Region table for sample 1 : H228P (1:2)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Color	% of Total	Size distribution in CV [%]	Conc. [pg/µl]
200	577	2,047	2,436.3	7,226.7		92	47.7	2,139.09

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : H216P

Number of peaks found:	6	Corr. Area 1:	3,591.2
Noise:	0.4		

Peak table for sample 2 : H216P

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	521	7,433.19	21,601.4		84.31
3	561	771.81	2,085.1		86.19
4	595	1,343.36	3,423.6		87.79
5	634	2,377.05	5,684.1		89.07
6	738	3,262.94	6,700.2		91.59
7	9,981	88.69	13.5		112.59
8	10,380	75.00	10.9	Upper Marker	113.00

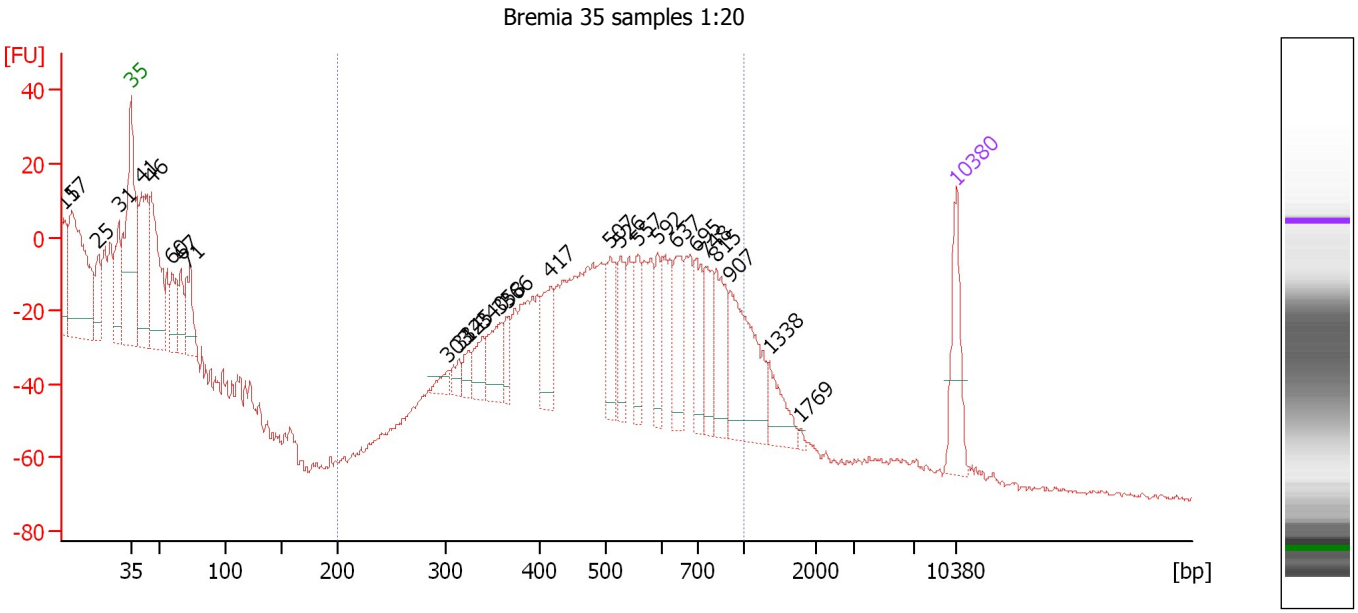
Region table for sample 2 : H216P

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/µl]
200	575	1,000	3,591.2	47,848.4	95	26.9	16,445.36

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Bremia 35 samples 1:20

Number of peaks found:	27	Corr. Area 1:	687.3
Noise:	0.7		

Peak table for sample 3 : Bremia 35 samples 1:20

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	15	0.00	0.0		37.21
2	17	0.00	0.0		37.96
3	25	0.00	0.0		40.18
4	31	0.00	0.0		41.92
5	35	125.00	5,411.3	Lower Marker	43.00
6	41	247.34	9,252.5		43.85
7	46	259.81	8,555.9		44.69
8	60	71.03	1,792.5		46.44
9	67	67.26	1,526.7		47.19
10	71	90.84	1,928.8		47.71
11	303	20.53	102.6		69.93
12	314	22.53	108.6		70.82
13	325	25.69	120.0		71.62
14	340	47.62	212.3		72.85
15	358	72.81	308.0		74.30
16	366	37.78	156.2		74.96
17	417	83.49	303.5		78.59
18	507	77.22	230.8		83.63
19	526	63.28	182.4		84.52
20	557	57.63	156.6		86.03
21	592	52.08	133.3		87.67
22	637	81.06	192.8		89.18
23	695	71.99	157.0		90.92
24	748	68.63	139.0		91.72
25	815	89.50	166.3		92.62

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary Continued ...

... Peak table for sample 3 : Bremia 35 samples 1:20

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	907	169.14	282.4		93.84
27	1,338	52.59	59.6		97.14
28	1,769	3.74	3.2		99.77
29	10,380	75.00	10.9	Upper Marker	113.00

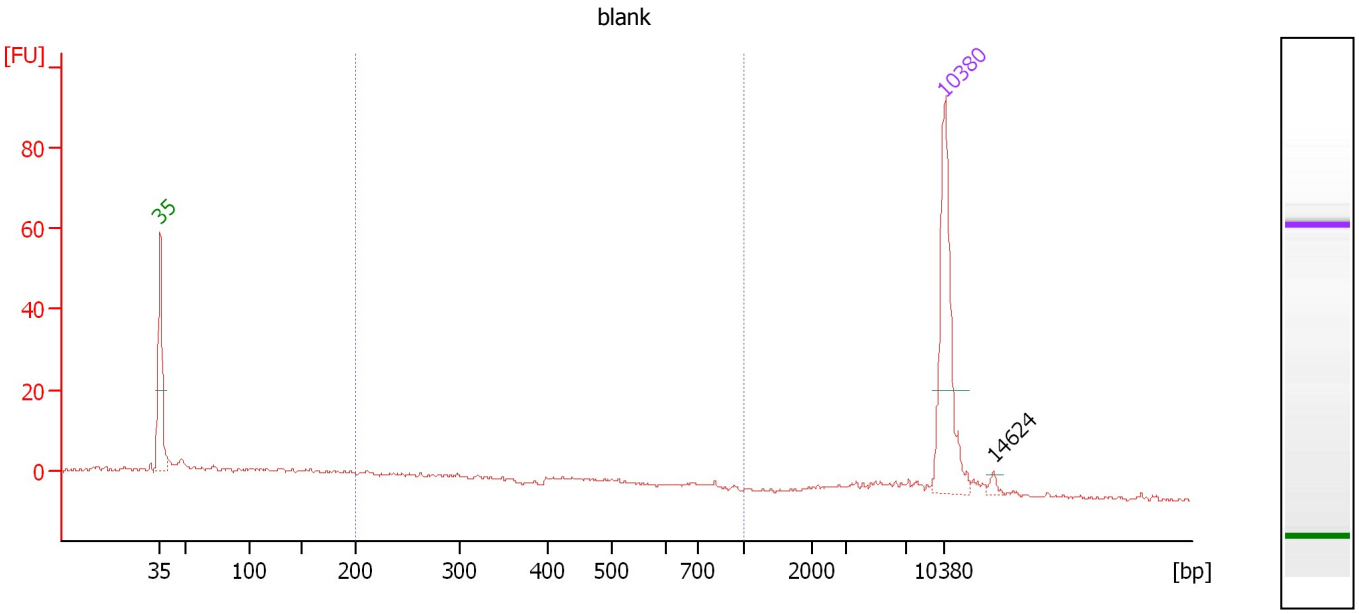
Region table for sample 3 : Bremia 35 samples 1:20

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Color	% of Total	Size distribution in CV [%]	Conc. [pg/µl]
200	594	1,000	687.3	3,096.7		75	26.5	1,110.89

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : blank

Number of peaks found:	1	Corr. Area 1:	34.4
Noise:	0.5		

Peak table for sample 4 : blank

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	14,624	0.00	0.0		117.38

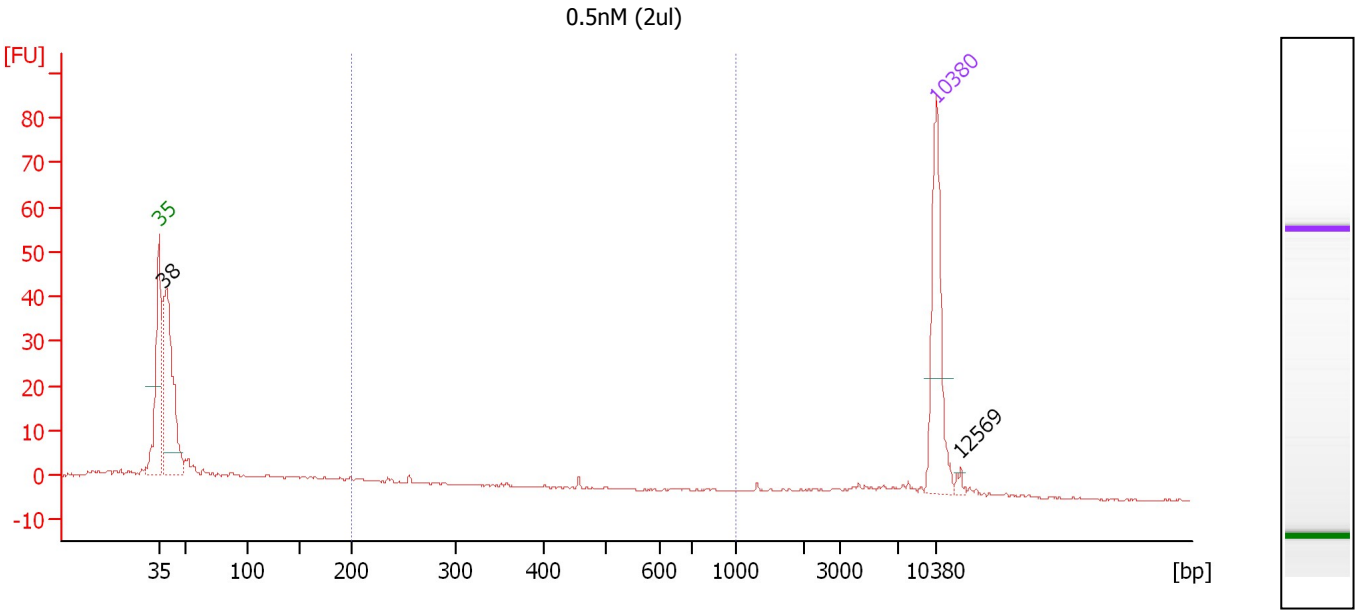
Region table for sample 4 : blank

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Color % of Total	Size distribution in CV [%]	Conc. [pg/µl]
200	392	1,000	34.4	179.2	30	39.6	38.05

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : 0.5nM (2ul)

Number of peaks found:	2	Corr. Area 1:	2.5
Noise:	0.2		

Peak table for sample 5 : 0.5nM (2ul)

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	38	221.09	8,860.0		43.43
3	10,380	75.00	10.9	Upper Marker	113.00
4	12,569	0.00	0.0		115.26

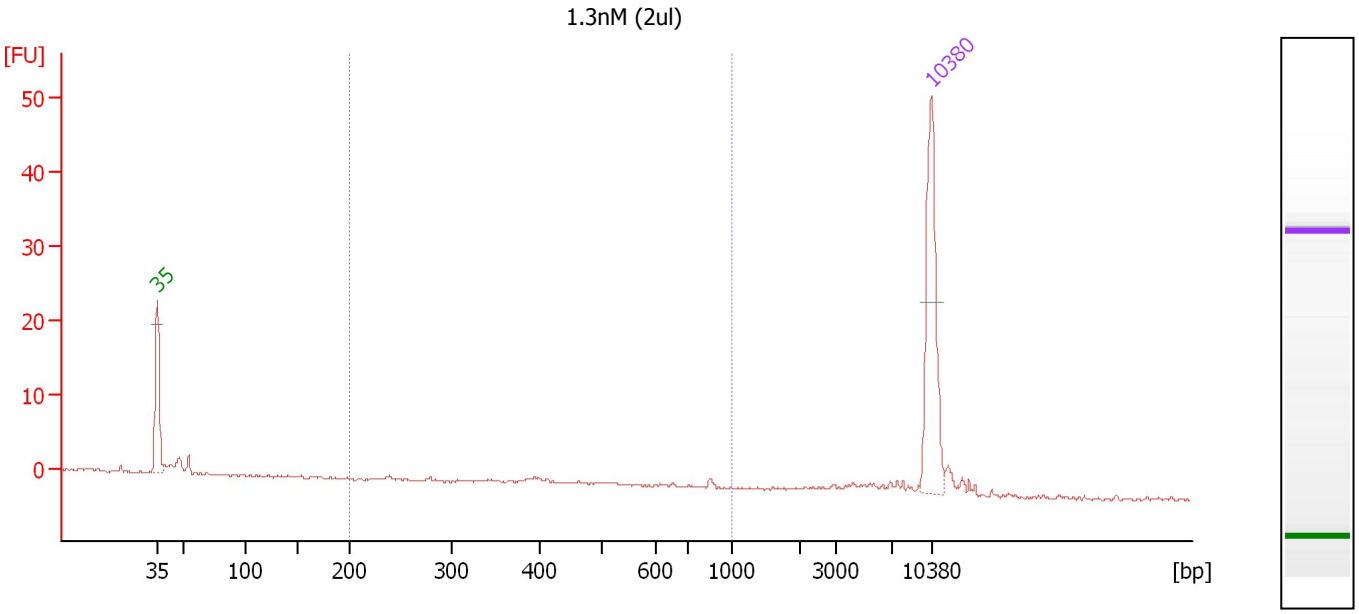
Region table for sample 5 : 0.5nM (2ul)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Color % of Total	Size distribution in CV [%]	Conc. [pg/µl]
200	329	1,000	2.5	21.6	2	41.3	3.88

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : 1.3nM (2ul)

Number of peaks found:	0	Corr. Area 1:	3.4
Noise:	0.2		

Peak table for sample 6 : 1.3nM (2ul)

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 : 1.3nM (2ul)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/µl]
200	513	1,000	3.4	25.1	16	35.9	7.28

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

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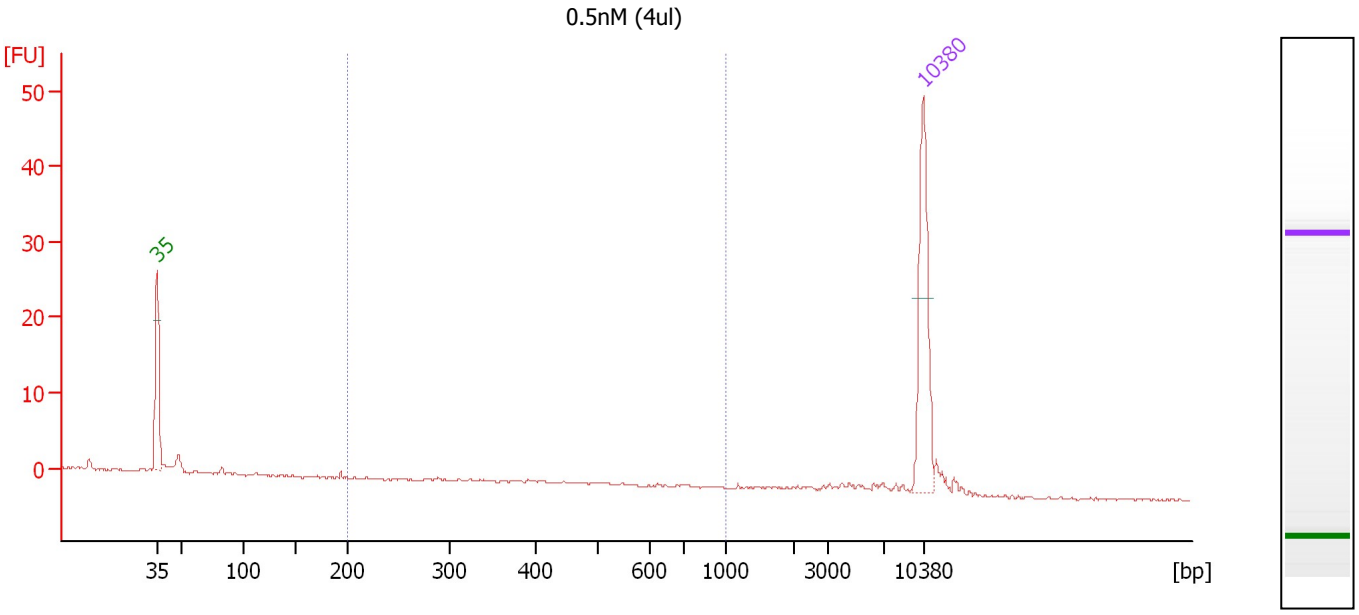
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : 0.5nM (4ul)

Number of peaks found:	0	Corr. Area 1:	2.0
Noise:	0.1		

Peak table for sample 7 : 0.5nM (4ul)

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

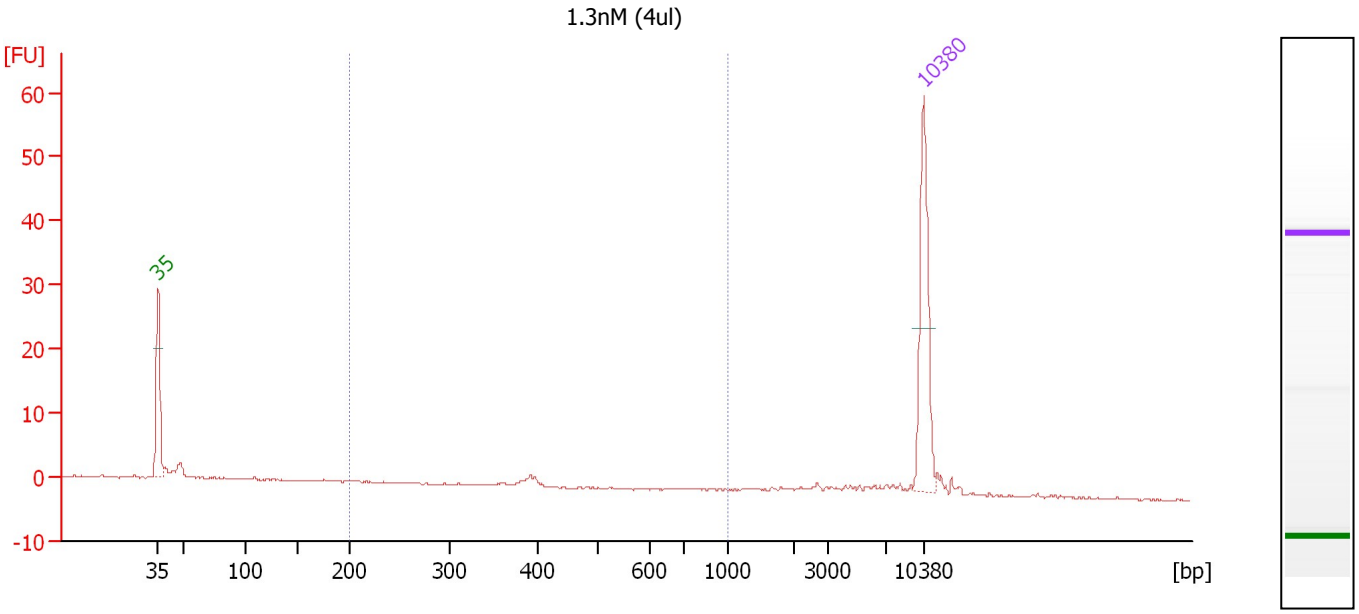
Region table for sample 7 : 0.5nM (4ul)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/µl]
200	484	1,000	2.0	16.8	9	31.3	4.78

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : 1.3nM (4ul)

Number of peaks found:	0	Corr. Area 1:	9.0
Noise:	0.1		

Peak table for sample 8 : 1.3nM (4ul)

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

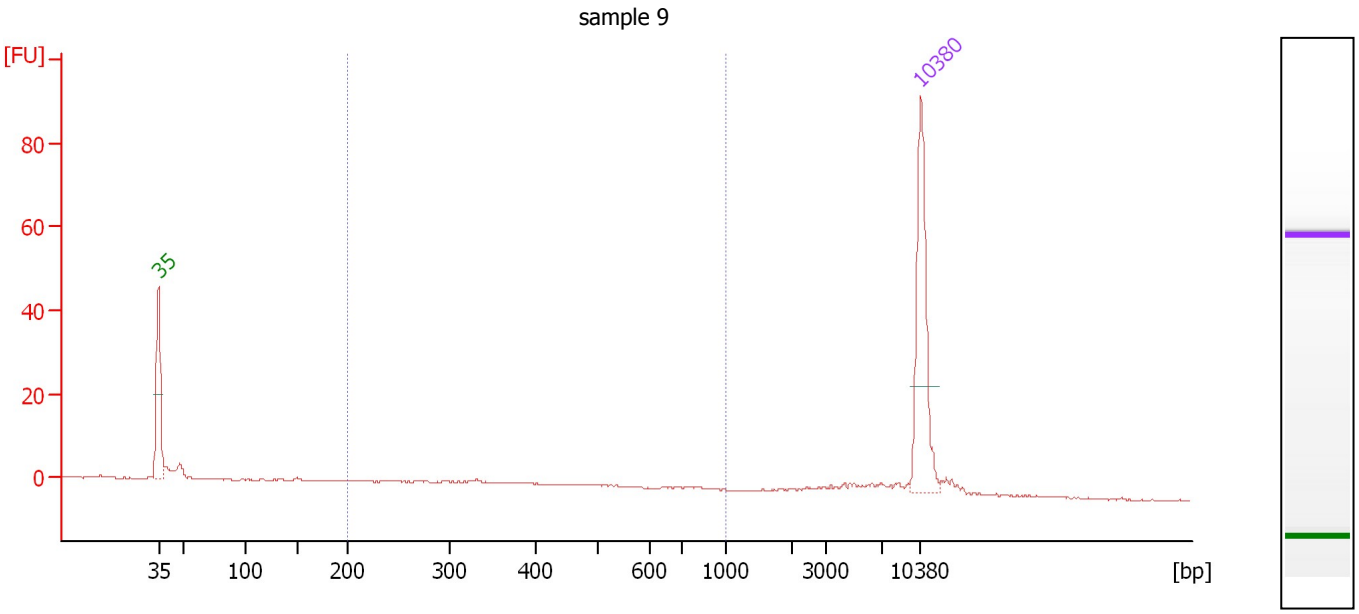
Region table for sample 8 : 1.3nM (4ul)

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/µl]
200	433	1,000	9.0	88.9	20	44.6	20.34

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : sample 9

Number of peaks found:	0	Corr. Area 1:	32.5
Noise:	0.1		

Peak table for sample 9 : sample 9

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 9 : sample 9

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	Co % of lor Total	Size distribution in CV [%]	Conc. [pg/µl]
200	431	1,000	32.5	177.4	38	40.3	41.37

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

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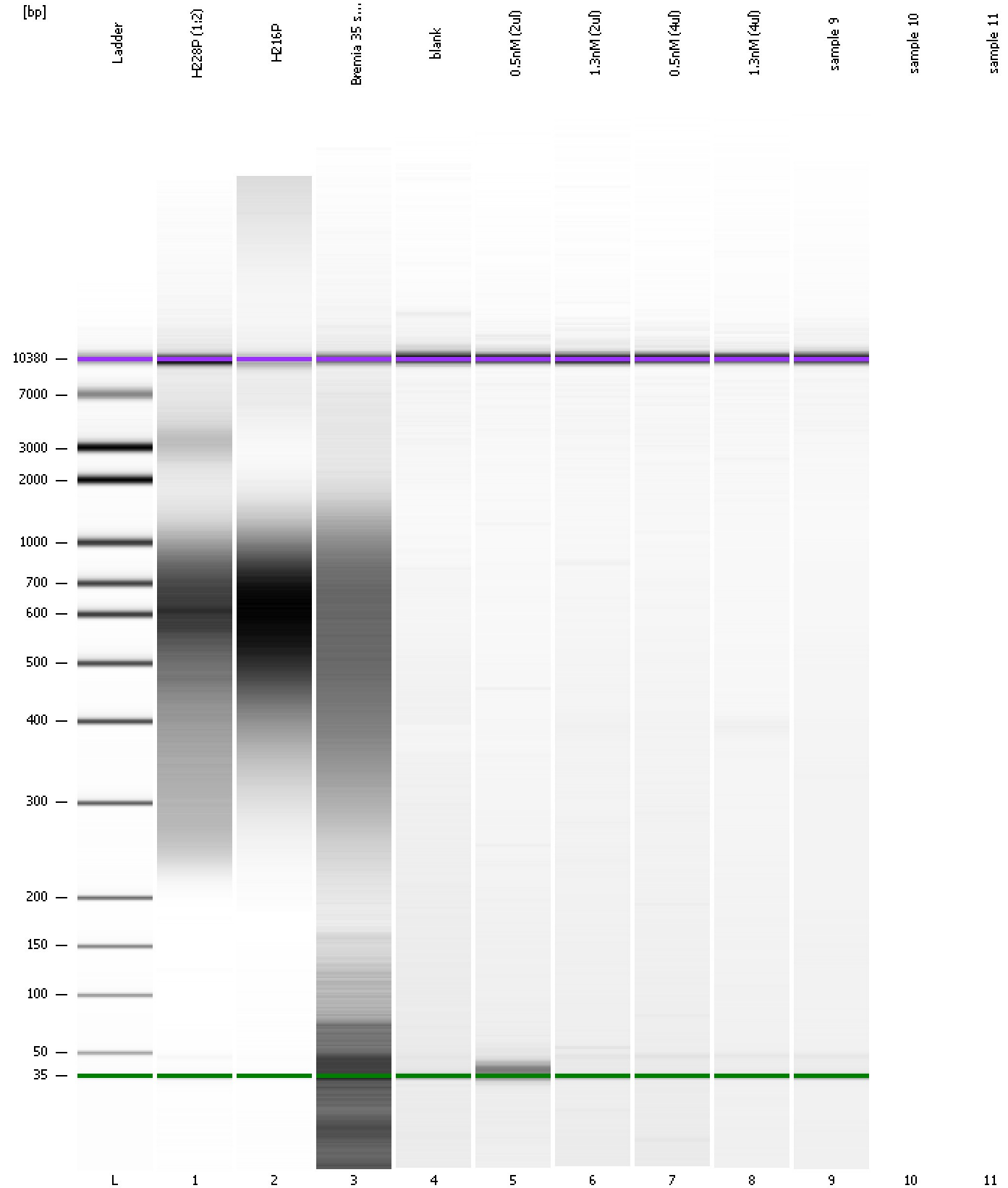
Gel Image

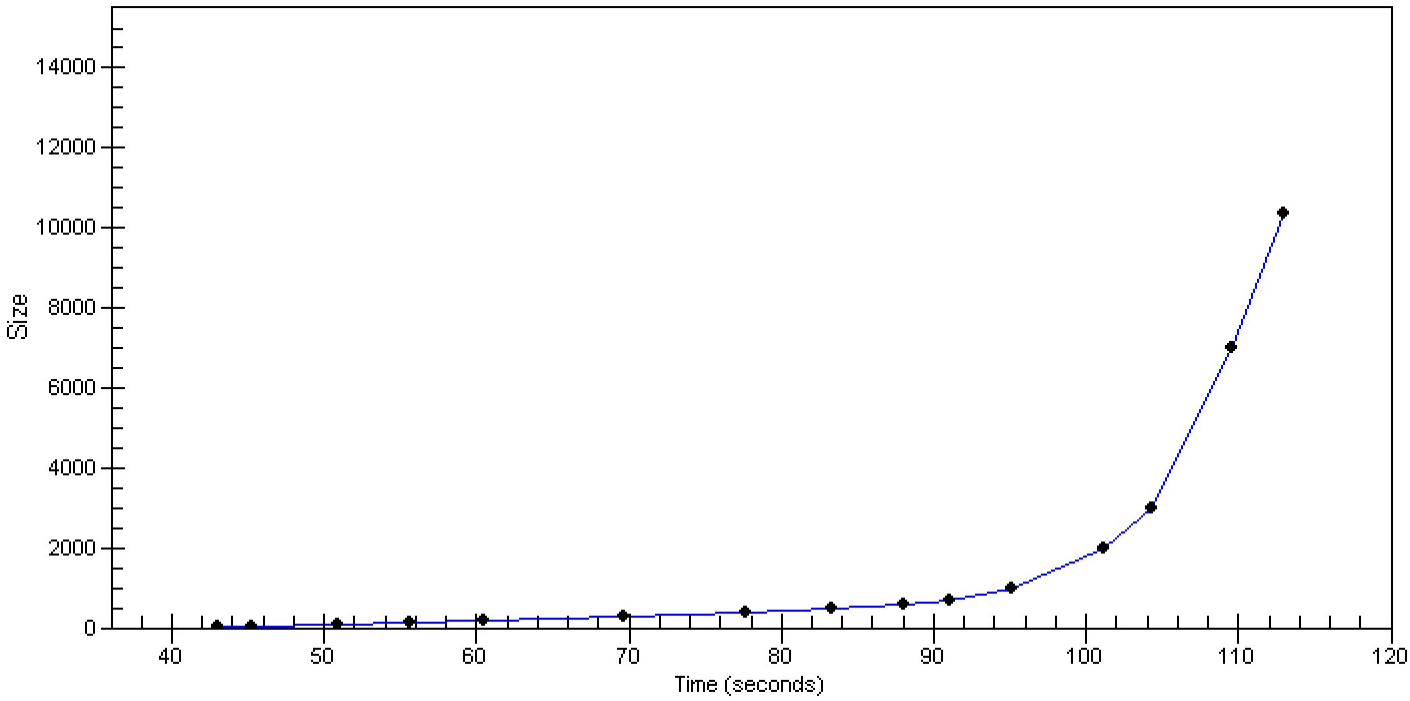


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Invalid Samples

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad

Created: 9/30/2015 2:07:35 PM
Modified: 9/30/2015 4:27:41 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		9/30/2015 2:43:11 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-09-30\2015-09-30_001.xad)		Instrument	Run		9/30/2015 2:07:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/30/2015 2:07:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/30/2015 2:07:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/30/2015 2:07:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/30/2015 2:07:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/30/2015 2:07:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/30/2015 2:07:41 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1