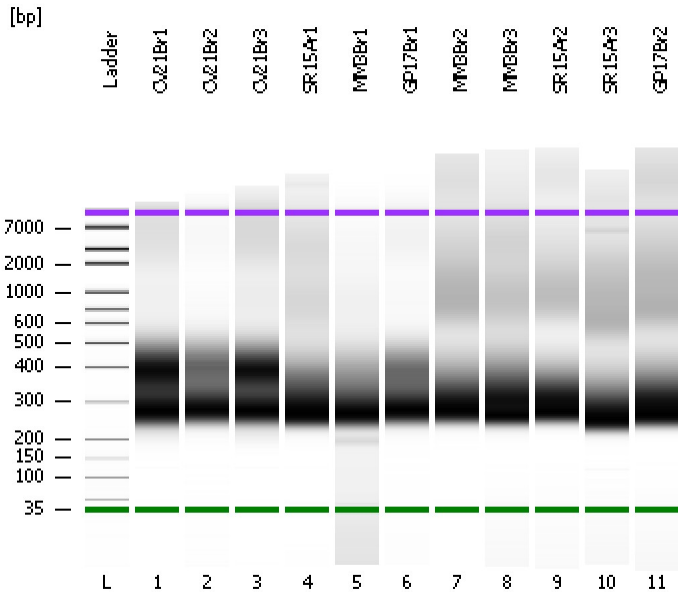


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
Modified: 3/21/2012 12:57:58 PM

Electrophoresis File Run Summary



Instrument Information:

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

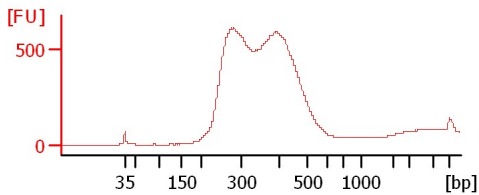
Assay Information:

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

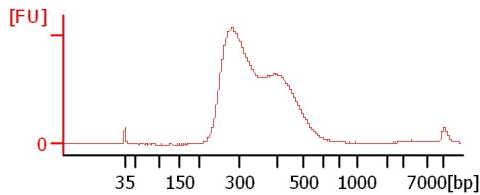
Chip Information:

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

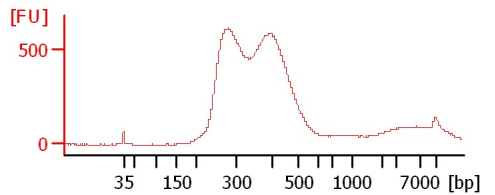
CV21Br1



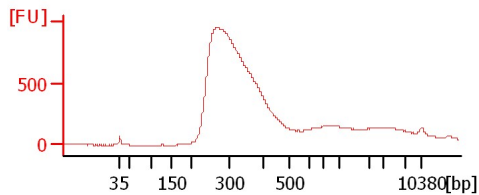
CV21Br2



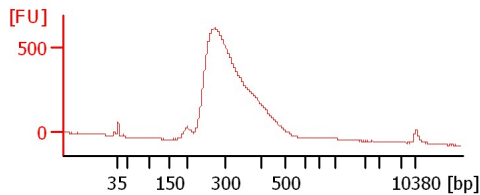
CV21Br3



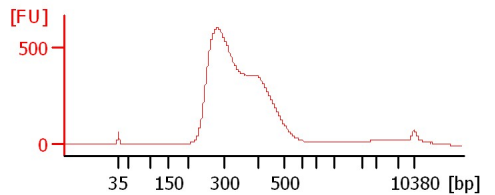
SR15Ar1



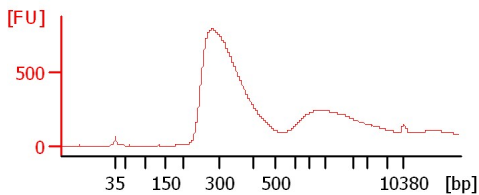
MM3Br1



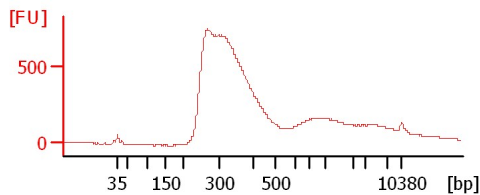
GP17Br1



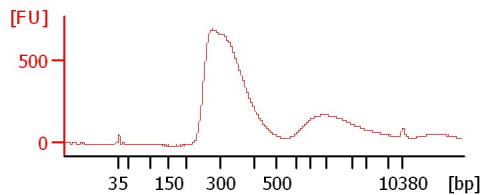
MM3Br2



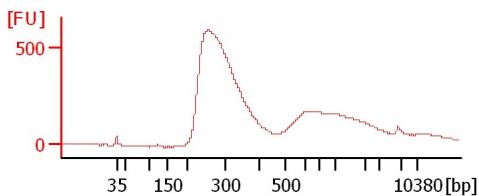
MM3Br3



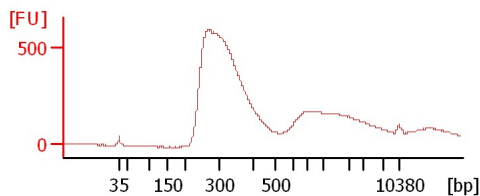
SR15Ar2



SR15Ar3



GP17Br2



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CV21Br1		<input type="checkbox"/>	✓			
CV21Br2		<input type="checkbox"/>	✓			
CV21Br3		<input type="checkbox"/>	✓			
SR15Ar1		<input type="checkbox"/>	✓			
MM3Br1		<input type="checkbox"/>	✓			
GP17Br1		<input type="checkbox"/>	✓			
MM3Br2		<input type="checkbox"/>	✓			
MM3Br3		<input type="checkbox"/>	✓			
SR15Ar2		<input type="checkbox"/>	✓			
SR15Ar3		<input type="checkbox"/>	✓			
GP17Br2		<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\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
Modified: 3/21/2012 12:57:58 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

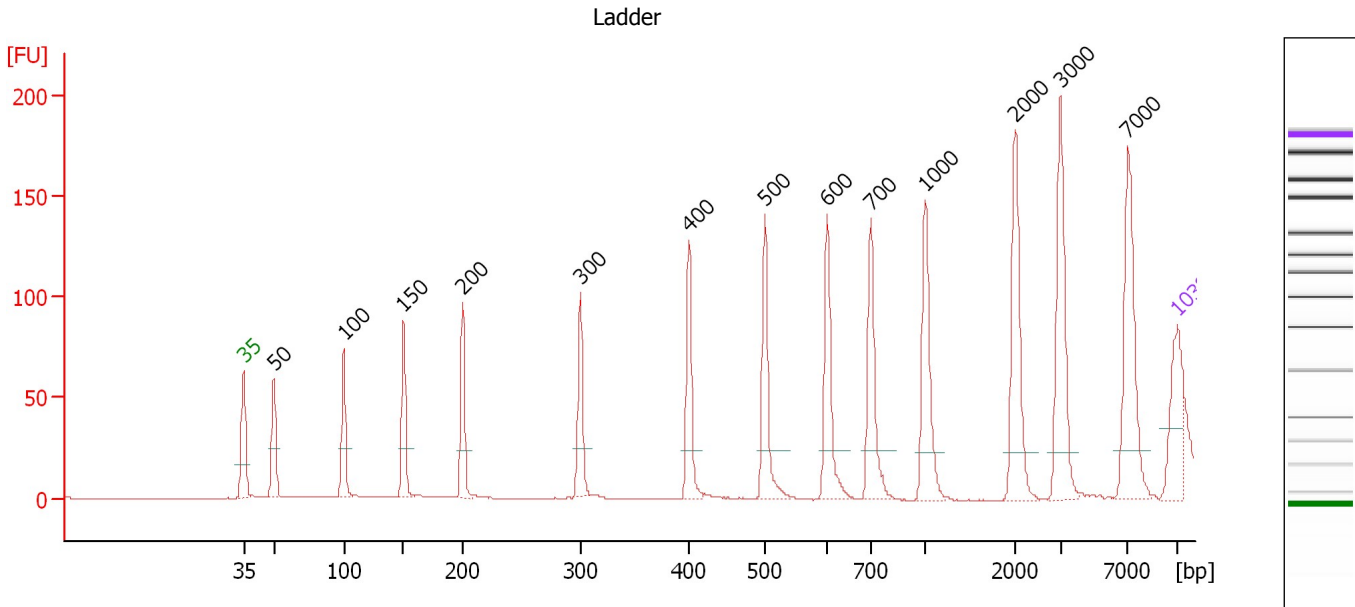
Ladder

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\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
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Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

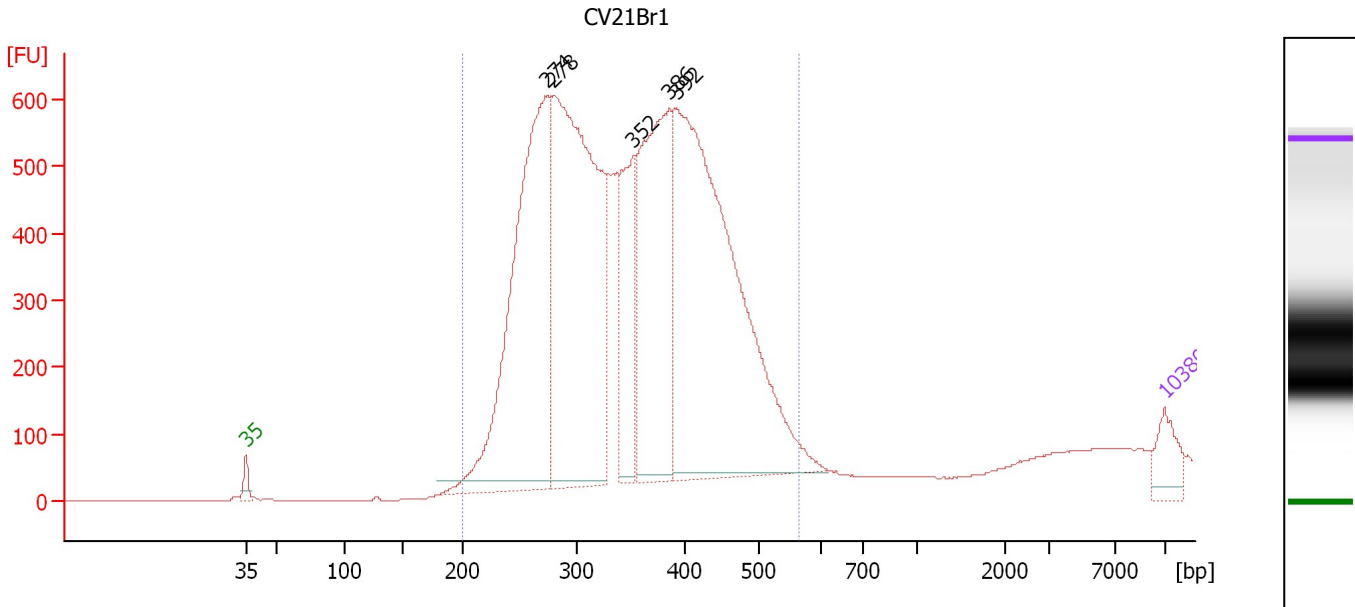
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : CV21Br1

Height Threshold [FU] : 10

Overall Results for sample 1 : CV21Br1

Number of peaks found: 5 Corr. Area 1: 13,834.7
 Noise: 0.4

Peak table for sample 1 : CV21Br1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	274	1,693.99	9,383.5	
3	278	1,899.16	10,345.9	
4	352	429.53	1,847.2	
5	386	966.76	3,791.0	
6	392	2,000.03	7,722.6	
7	10,380	75.00	10.9	Upper Marker

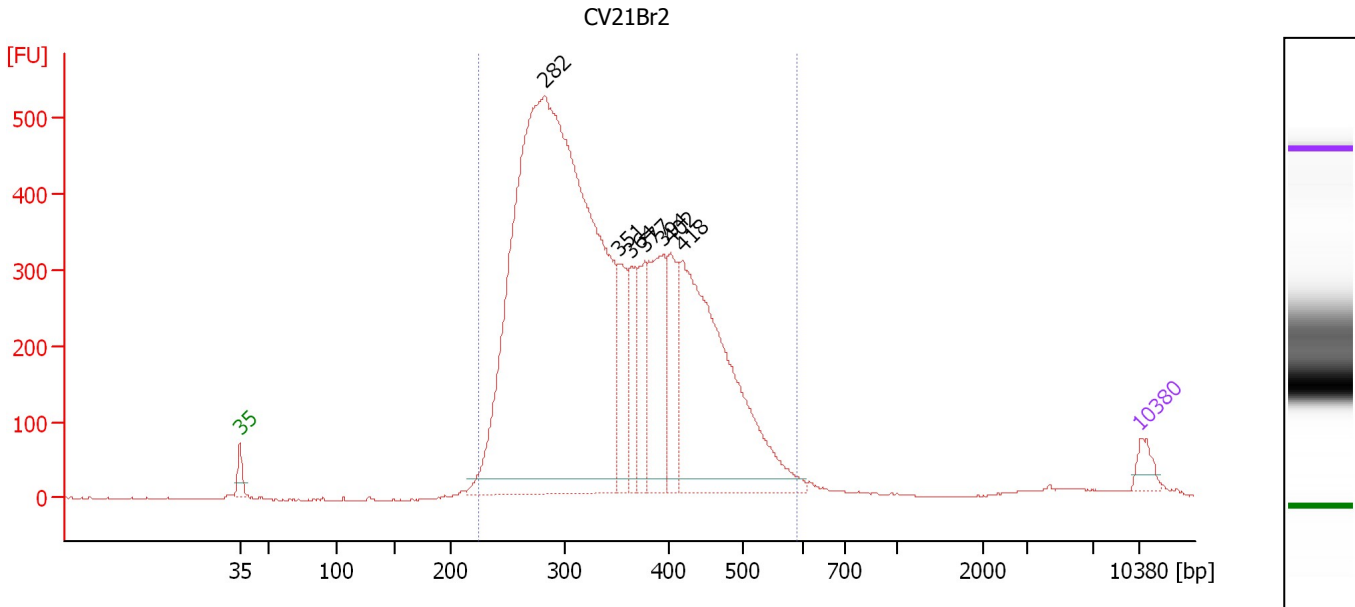
Region table for sample 1 : CV21Br1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	32,550.6	352	7,068.58	566	13,834.7	99	21.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : CV21Br2

Height Threshold [FU] : 20

Overall Results for sample 2 : CV21Br2

Number of peaks found: 7 Corr. Area 1: 10,003.5
 Noise: 0.8

Peak table for sample 2 : CV21Br2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	282	8,737.68	46,939.6	
3	351	469.90	2,025.6	
4	364	385.36	1,605.2	
5	377	423.12	1,700.4	
6	394	790.60	3,037.2	
7	402	476.47	1,794.9	
8	418	2,333.67	8,455.6	
9	10,380	75.00	10.9	Upper Marker

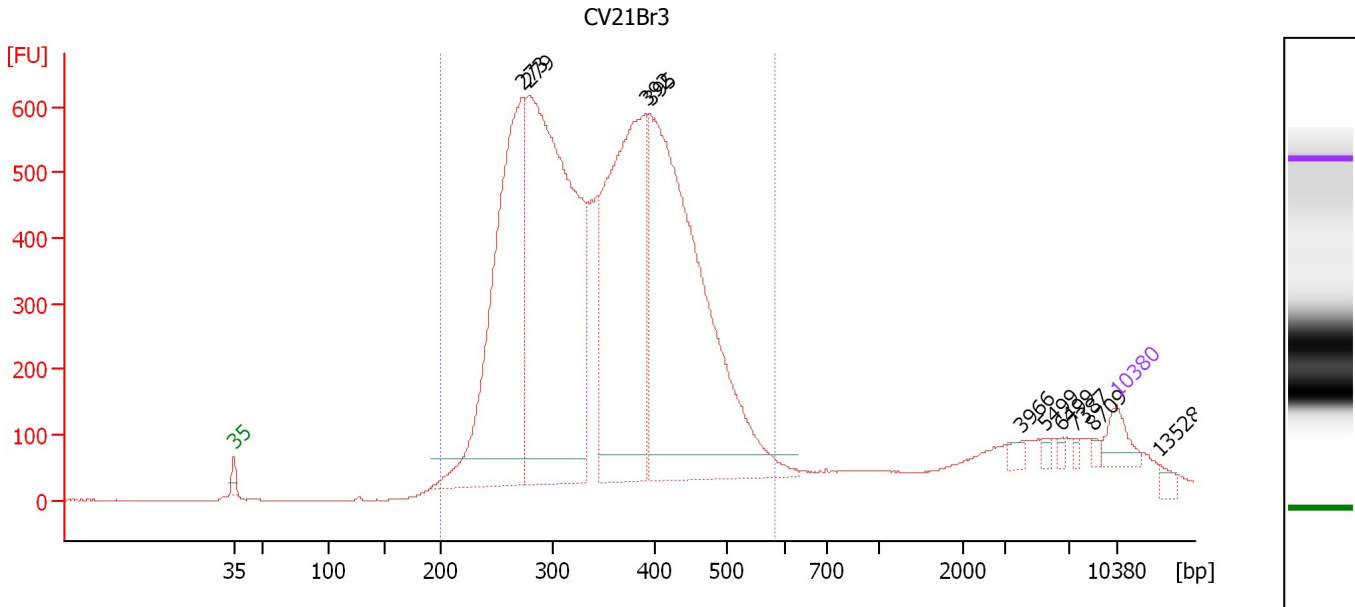
Region table for sample 2 : CV21Br2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
225	62,930.3	348	13,539.63	591	10,003.5	98	22.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : CV21Br3

Height Threshold [FU] : 40

Overall Results for sample 3 : CV21Br3

Number of peaks found: 10 Corr. Area 1: 13,950.6
 Noise: 0.6

Peak table for sample 3 : CV21Br3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	273	2,050.23	11,397.8	
3	279	2,892.77	15,722.7	
4	392	1,794.46	6,943.9	
5	395	2,480.12	9,508.6	
6	3,966	27.91	10.7	
7	5,499	19.08	5.3	
8	6,499	13.69	3.2	
9	7,387	12.39	2.5	
10	8,709	15.21	2.6	
11	10,380	75.00	10.9	Upper Marker
12	13,528	0.00	0.0	

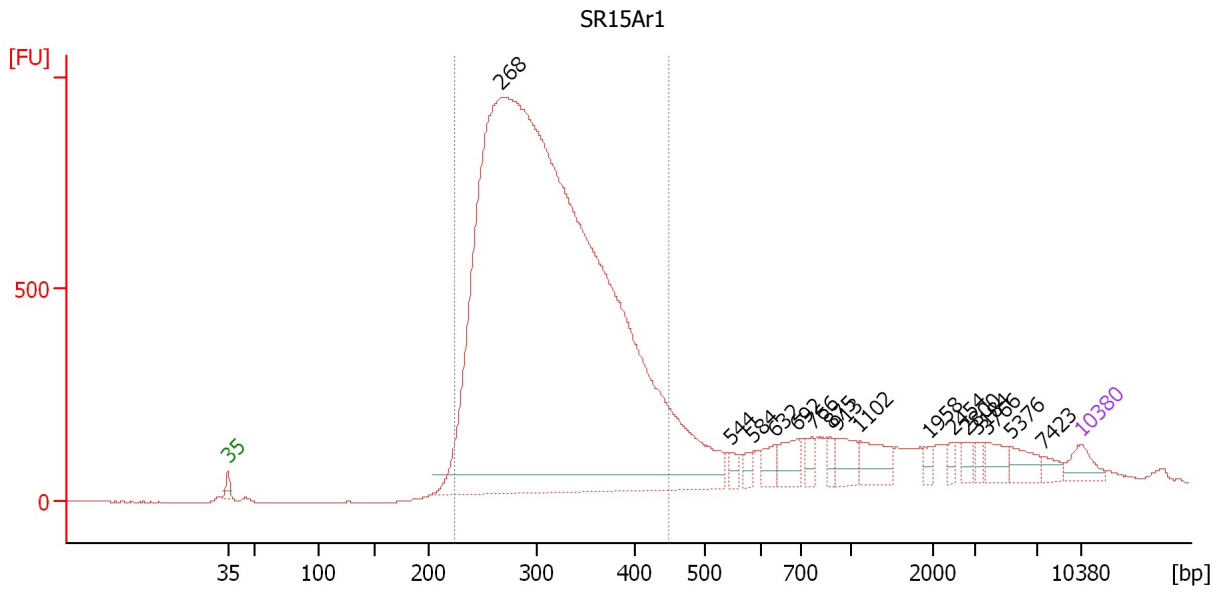
Region table for sample 3 : CV21Br3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
199	45,182.4	353	9,850.22	583	13,950.6	93	21.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : SR15Ar1

Height Threshold [FU] : 40

Overall Results for sample 4 : SR15Ar1

Number of peaks found: 16 Corr. Area 1: 15,882.2
 Noise: 0.7

Peak table for sample 4 : SR15Ar1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	268	12,693.41	71,773.7	
3	544	47.97	133.5	
4	584	46.22	119.8	
5	632	80.93	193.9	
6	692	137.95	302.2	
7	766	60.11	118.9	
8	875	41.68	72.2	
9	913	122.33	202.9	
10	1,102	149.62	205.6	
11	1,958	35.23	27.3	
12	2,454	29.82	18.4	
13	2,800	41.39	22.4	
14	3,184	33.45	15.9	
15	3,766	78.68	31.7	
16	5,376	83.03	23.4	
17	7,423	43.65	8.9	
18	10,380	75.00	10.9	Upper Marker

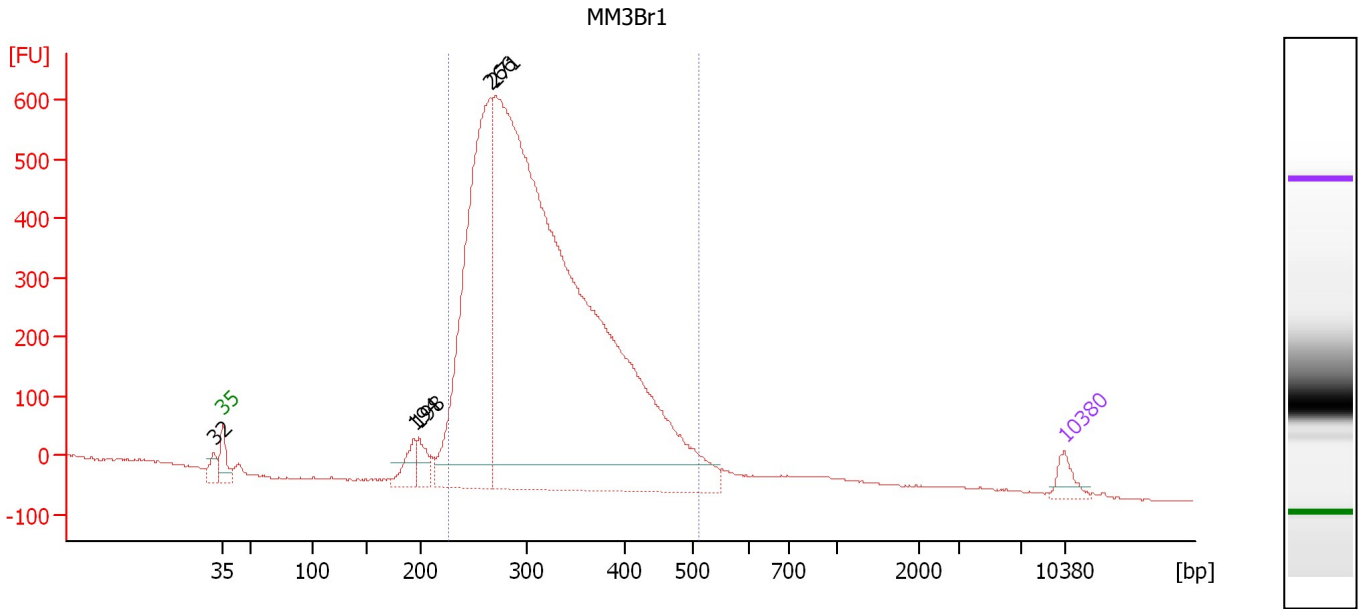
Region table for sample 4 : SR15Ar1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
224	54,498.0	314	10,885.16	449	15,882.2	81	16.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : MM3Br1

Height Threshold [FU] : 40

Overall Results for sample 5 : MM3Br1

Number of peaks found: 5 Corr. Area 1: 10,022.5
 Noise: 1.5

Peak table for sample 5 : MM3Br1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	32	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	194	180.20	1,407.6	
4	198	151.77	1,158.7	
5	266	2,913.41	16,588.6	
6	271	9,533.44	53,377.4	
7	10,380	75.00	10.9	Upper Marker

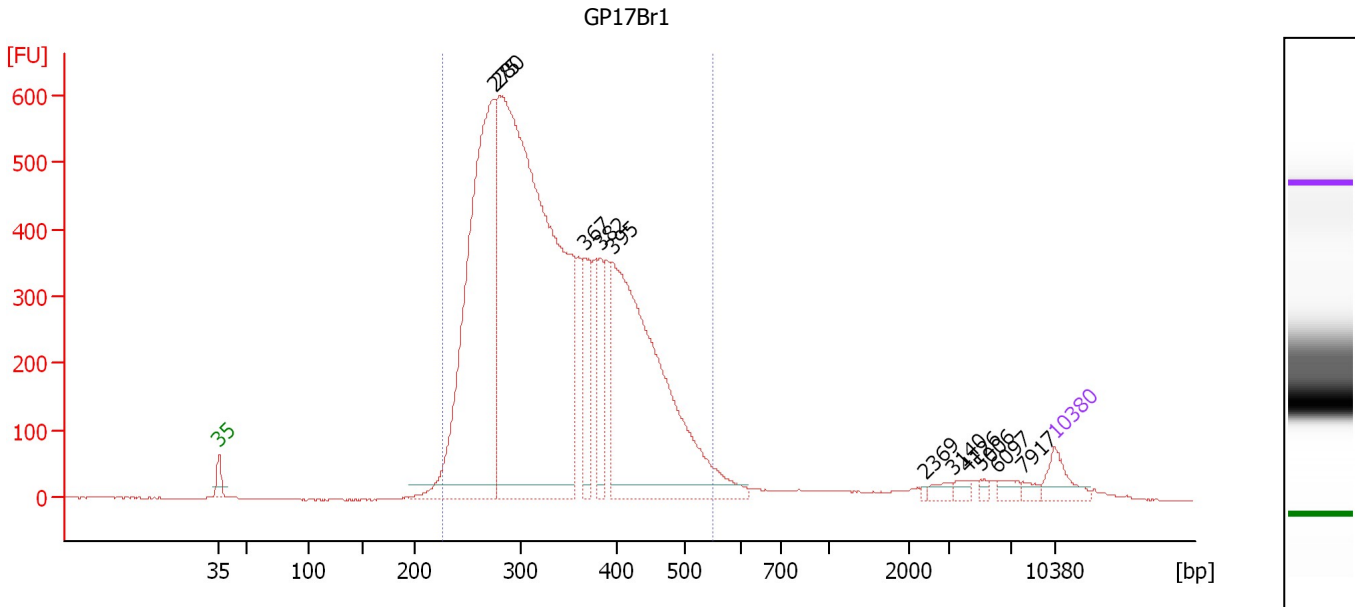
Region table for sample 5 : MM3Br1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
226	51,468.0	318	10,307.62	510	10,022.5	94	19.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : GP17Br1

Height Threshold [FU] : 20

Overall Results for sample 6 : GP17Br1

Number of peaks found: 11 Corr. Area 1: 10,821.0
 Noise: 0.7

Peak table for sample 6 : GP17Br1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	275	2,116.81	11,665.9	
3	280	3,976.78	21,520.6	
4	367	279.38	1,153.9	
5	382	206.09	816.9	
6	395	1,728.05	6,630.1	
7	2,369	6.02	3.8	
8	3,140	27.54	13.3	
9	4,126	22.16	8.1	
10	5,006	15.25	4.6	
11	6,097	29.64	7.4	
12	7,917	20.95	4.0	
13	10,380	75.00	10.9	Upper Marker

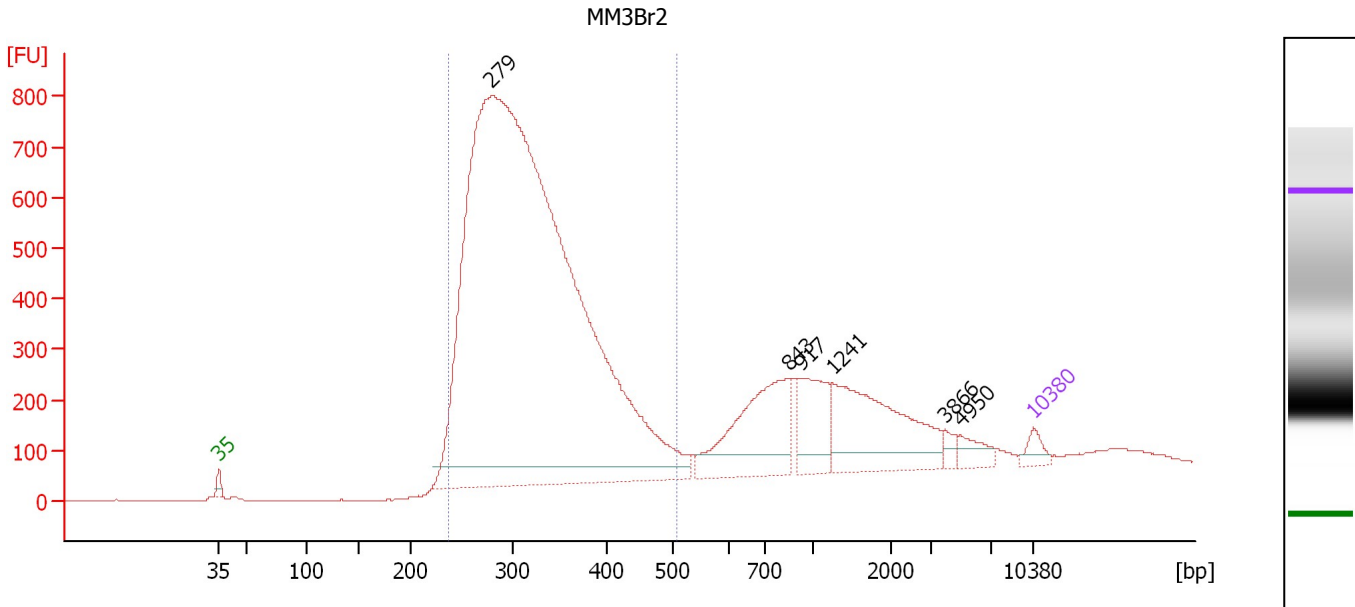
Region table for sample 6 : GP17Br1

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
226	39,932.4	339	8,445.29	549	10,821.0	94	20.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : MM3Br2

Height Threshold [FU] : 40

Overall Results for sample 7 : MM3Br2

Number of peaks found: 6 Corr. Area 1: 11,763.6
 Noise: 0.5

Peak table for sample 7 : MM3Br2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	279	14,416.67	78,244.9	
3	843	979.65	1,760.5	
4	917	480.67	793.9	
5	1,241	1,024.67	1,251.2	
6	3,866	69.43	27.2	
7	4,950	116.87	35.8	
8	10,380	75.00	10.9	Upper Marker

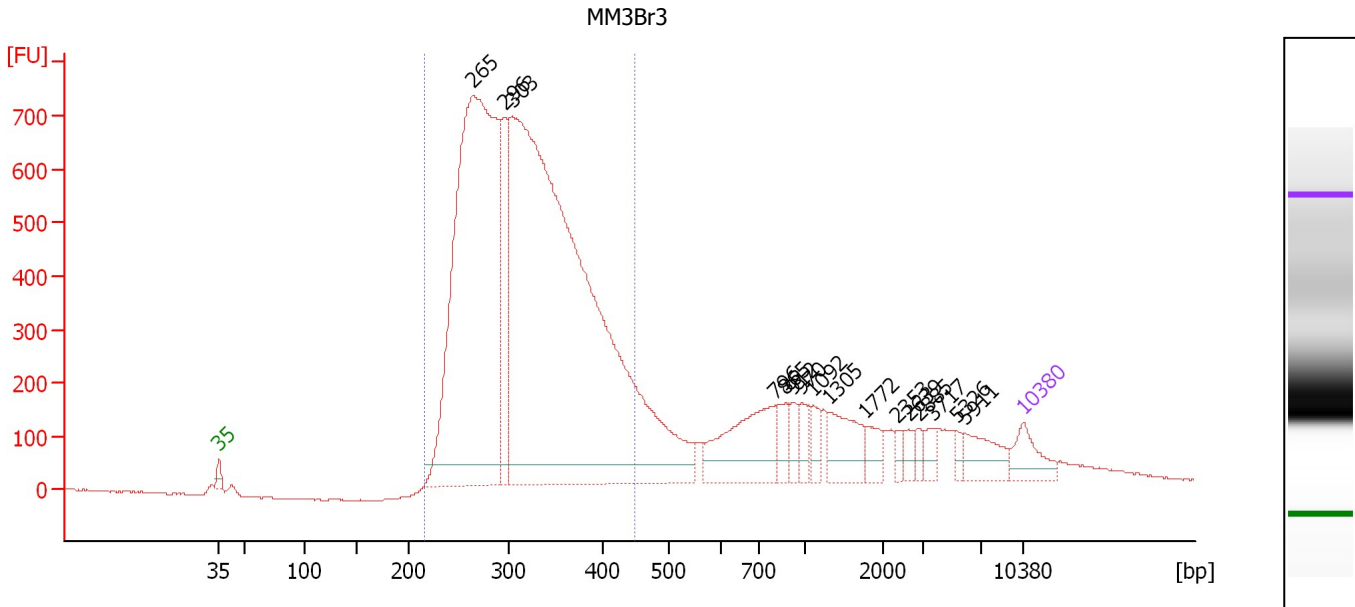
Region table for sample 7 : MM3Br2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
237	63,300.5	322	12,959.78	504	11,763.6	76	17.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : MM3Br3

Height Threshold [FU] : 40

Overall Results for sample 8 : MM3Br3

Number of peaks found: 16 Corr. Area 1: 12,493.5
 Noise: 1.5

Peak table for sample 8 : MM3Br3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	265	2,531.67	14,494.4	
3	296	382.58	1,960.7	
4	303	4,157.37	20,770.8	
5	796	319.65	608.2	
6	865	64.72	113.4	
7	912	51.80	86.0	
8	970	57.66	90.0	
9	1,092	53.78	74.6	
10	1,305	144.05	167.3	
11	1,772	53.18	45.5	
12	2,353	24.62	15.9	
13	2,639	30.35	17.4	
14	2,885	21.66	11.4	
15	3,717	36.02	14.7	
16	5,326	21.55	6.1	
17	5,911	95.61	24.5	
18	10,380	75.00	10.9	Upper Marker

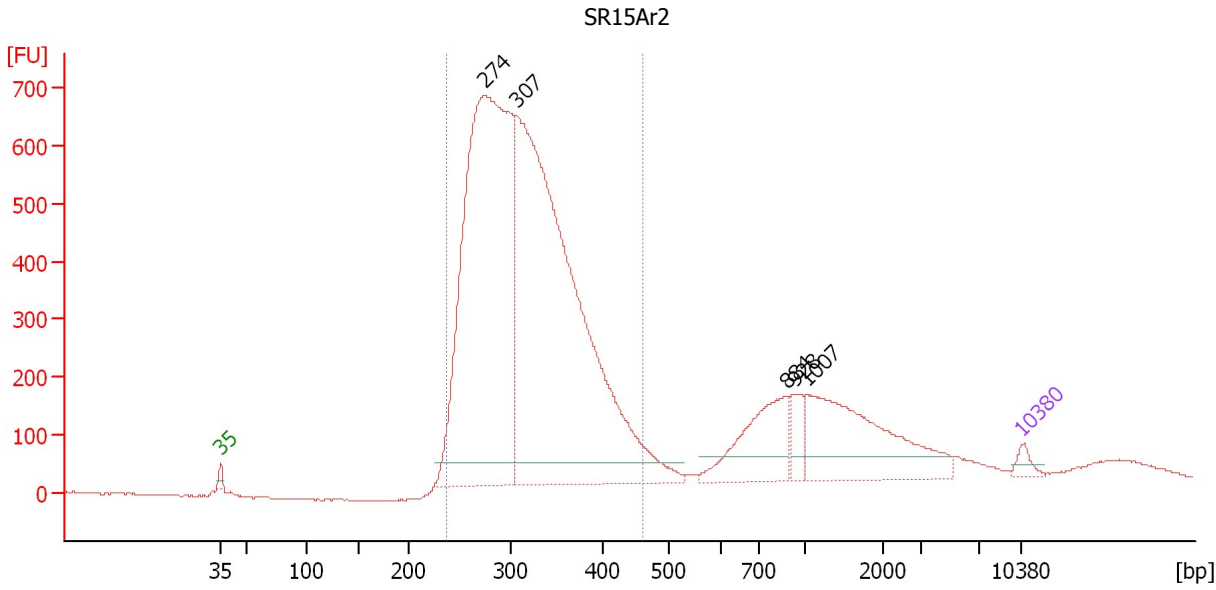
Region table for sample 8 : MM3Br3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
216	30,752.4	318	6,236.45	450	12,493.5	76	16.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : SR15Ar2

Height Threshold [FU] : 40

Overall Results for sample 9 : SR15Ar2

Number of peaks found: 5 Corr. Area 1: 10,132.2
 Noise: 1.4

Peak table for sample 9 : SR15Ar2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	274	8,341.17	46,050.7	
3	307	9,065.97	44,801.1	
4	884	911.69	1,563.4	
5	928	247.96	404.8	
6	1,007	1,534.38	2,308.8	
7	10,380	75.00	10.9	Upper Marker

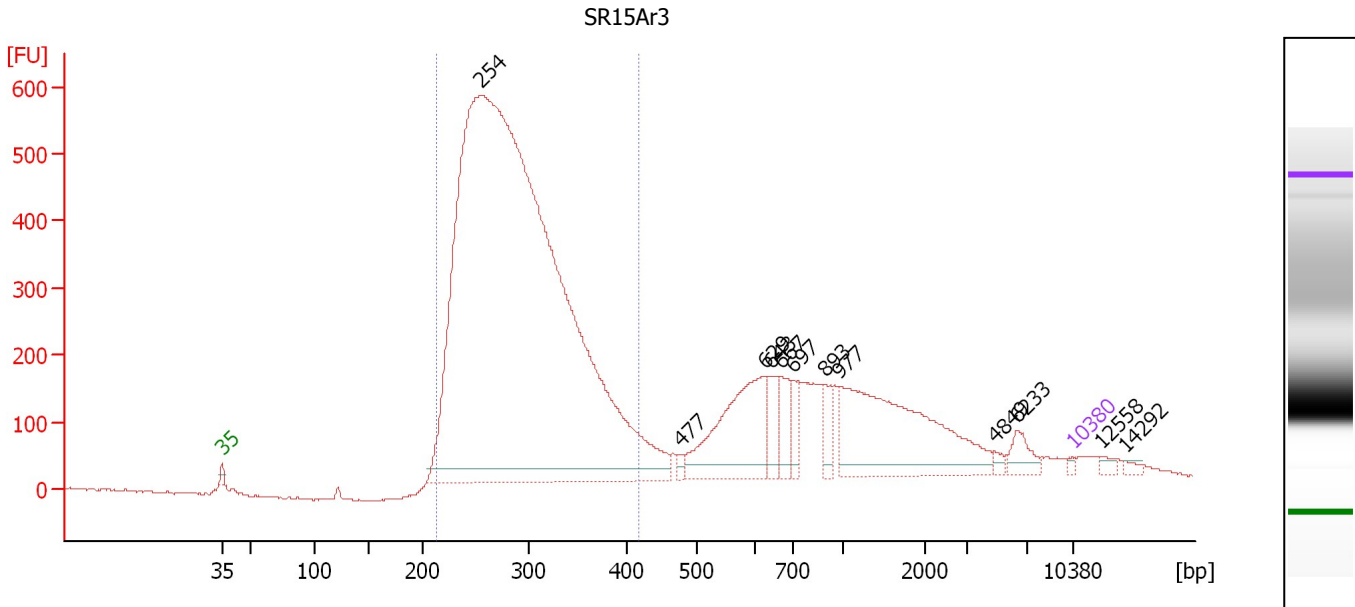
Region table for sample 9 : SR15Ar2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
236	80,011.9	318	16,292.37	462	10,132.2	79	15.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : SR15Ar3

Height Threshold [FU] : 20

Overall Results for sample 10 : SR15Ar3

Number of peaks found: 12 Corr. Area 1: 8,587.0
 Noise: 1.5

Peak table for sample 10 : SR15Ar3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	254	67,721.77	403,254.2	
3	477	167.87	533.2	
4	629	4,455.59	10,729.1	
5	643	1,028.96	2,425.5	
6	667	964.74	2,191.0	
7	697	559.17	1,215.6	
8	893	580.77	985.4	
9	977	6,641.83	10,300.9	
10	4,849	157.44	49.2	
11	6,233	540.15	131.3	
12	10,380	75.00	10.9	Upper Marker
13	12,558	0.00	0.0	
14	14,292	0.00	0.0	

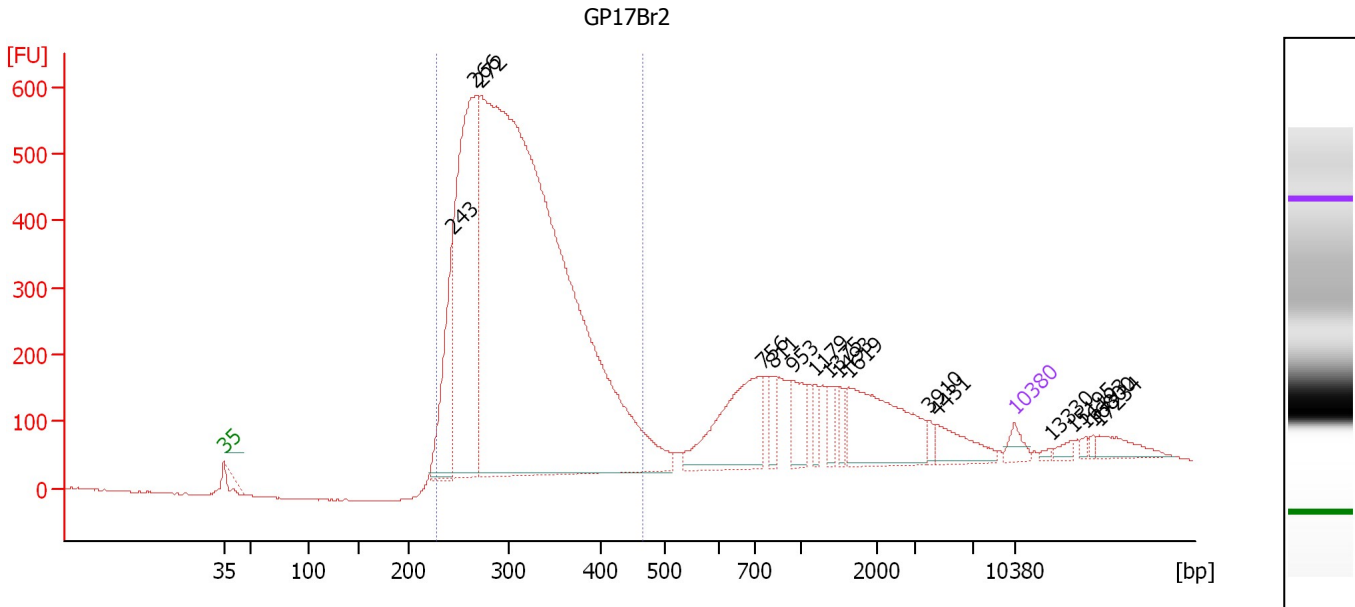
Region table for sample 10 : SR15Ar3

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
215	327,957.9	290	61,133.27	415	8,587.0	70	15.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : GP17Br2

Number of peaks found: 18 Corr. Area 1: 9,001.4
 Noise: 1.1

Peak table for sample 11 : GP17Br2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	266	3,837.54	21,842.6	
4	243	817.24	5,102.1	
5	272	12,304.33	68,656.1	
6	756	900.48	1,805.8	
7	811	118.68	221.7	
8	953	225.46	358.3	
9	1,179	91.84	118.0	
10	1,375	120.55	132.9	
11	1,493	90.06	91.4	
12	1,619	746.34	698.5	
13	3,910	38.80	15.0	
14	4,431	210.38	71.9	
15	10,380	75.00	10.9	Upper Marker
16	13,330	0.00	0.0	
17	15,195	0.00	0.0	
18	16,193	0.00	0.0	
19	16,800	0.00	0.0	
20	17,234	0.00	0.0	

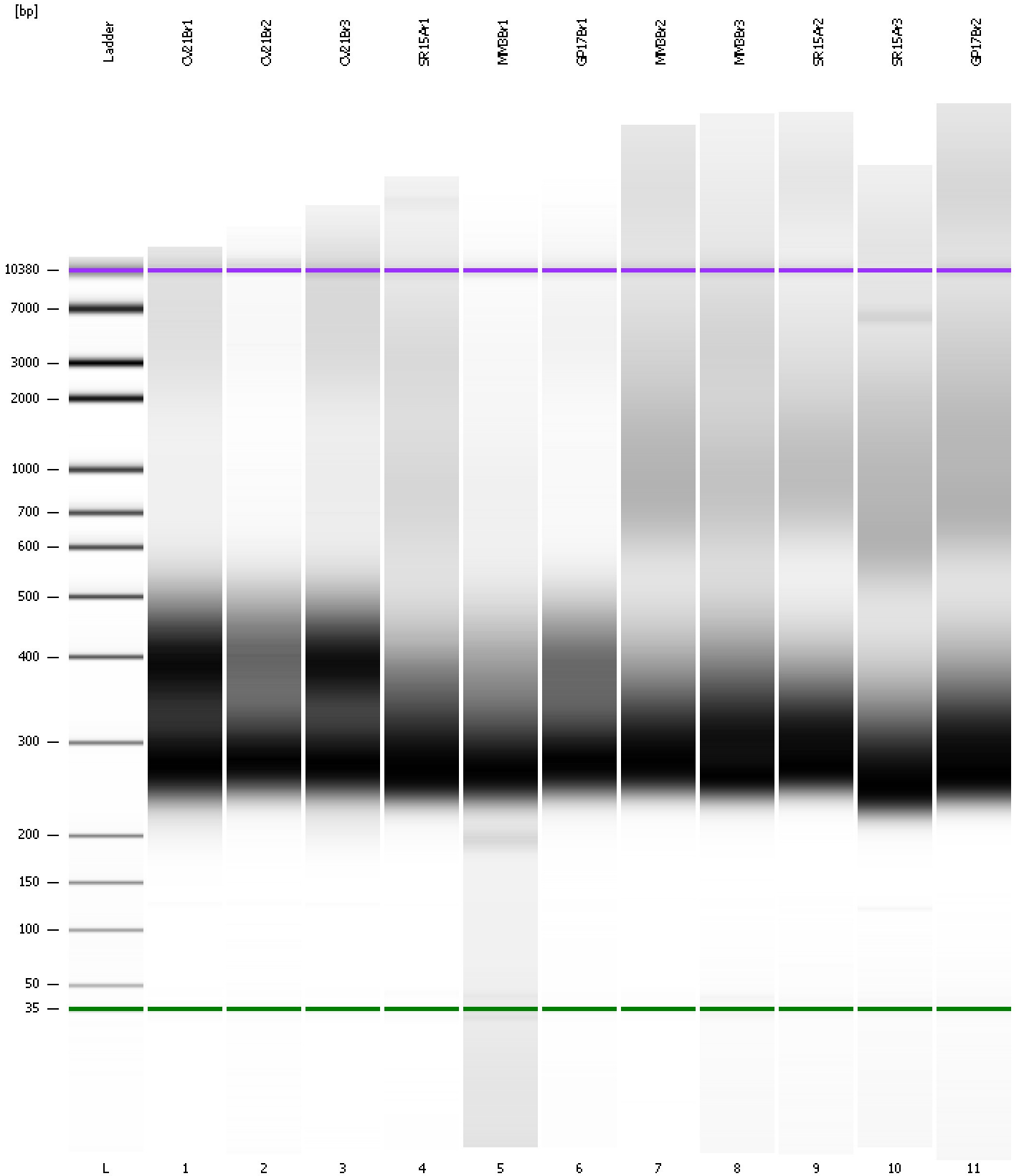
Region table for sample 11 : GP17Br2

From [bp]	Molarity [pmol/l]	Average Size [bp]	Conc. [pg/μl]	To [bp]	Corr. Area	% of Total	Size distribution in CV [%]	Color
226	73,314.3	312	14,604.44	464	9,001.4	74	16.4	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
Modified: 3/21/2012 12:57:58 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad

Created: 3/21/2012 12:05:18 PM
 Modified: 3/21/2012 12:57:58 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		3/21/2012 12:46:36 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-21\2012-03-21_002.xad)		Instrument	Run		3/21/2012 12:05:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/21/2012 12:05:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/21/2012 12:05:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/21/2012 12:05:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/21/2012 12:05:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/21/2012 12:05:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/21/2012 12:05:24 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1